

TPI COMPOSITES, INC

FORM 10-K (Annual Report)

Filed 03/05/19 for the Period Ending 12/31/18

Address	8501 N SCOTTSDALE ROAD GAINEY CENTER II, SUITE 100 SCOTTSDALE, AZ, 85253
Telephone	480-305-8910
CIK	0001455684
Symbol	TPIC
SIC Code	3510 - Engines And Turbines
Industry	Renewable Energy Equipment & Services
Sector	Energy

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)
 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____
Commission File Number 001-37839



TPI Composites, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-1590775
(I.R.S. Employer
Identification Number)

8501 N. Scottsdale Rd.
Gainey Center II, Suite 100
Scottsdale, AZ 85253

(480) 305-8910

(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class
Common Stock, par value \$0.01

Name of each exchange on which registered
NASDAQ Global Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Small reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the shares of common stock held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on June 29, 2018 as reported by the NASDAQ Global Market on such date was approximately \$589 million. Shares of the Registrant's common stock held by each executive officer, director and holder of 5% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This calculation does not reflect a determination that certain persons are affiliates of the Registrant for any other purpose.

As of January 31, 2019, the Registrant had 34,914,385 shares of common stock outstanding.

Documents Incorporated by Reference

Portions of the Registrant's Definitive Proxy Statement relating to the Annual Meeting of Stockholders, scheduled to be held on May 14, 2019, are incorporated by reference into Part III of this Report.

Table of Contents

	<u>Page</u>
PART I	
Item 1. Business	3
Item 1A. Risk Factors	15
Item 1B. Unresolved Staff Comments	42
Item 2. Properties	42
Item 3. Legal Proceedings	42
Item 4. Mine Safety Disclosures	43
PART II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	44
Item 6. Selected Financial Data	46
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	49
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	74
Item 8. Financial Statements and Supplementary Data	75
Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	75
Item 9A. Controls and Procedures	75
Item 9B. Other Information	76
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	77
Item 11. Executive Compensation	77
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	77
Item 13. Certain Relationships and Related Transactions, and Director Independence	77
Item 14. Principal Accounting Fees and Services	77
PART IV	
Item 15. Exhibits, Financial Statement Schedules	78
Item 16. Form 10-K Summary	78

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities law. All statements other than statements of historical facts contained in this Annual Report on Form 10-K, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. In many cases, you can identify forward-looking statements by terms such as “may,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar words. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- growth of the wind energy market and our addressable market;
- the potential impact of the increasing prevalence of auction-based tenders in the wind energy market and increased competition from solar energy on our gross margins and overall financial performance;
- our future financial performance, including our net sales, cost of goods sold, gross profit or gross margin, operating expenses, ability to generate positive cash flow, and ability to achieve or maintain profitability;
- changes in domestic or international government or regulatory policy, including without limitation, changes in trade policy;
- the sufficiency of our cash and cash equivalents to meet our liquidity needs;
- our ability to attract and retain customers for our products, and to optimize product pricing;
- our ability to effectively manage our growth strategy and future expenses, including our startup and transition costs;
- competition from other wind blade and wind blade turbine manufacturers;
- the discovery of defects in our products;
- our ability to successfully expand in our existing wind energy markets and into new international wind energy markets;
- our ability to successfully expand our transportation business and execute upon our strategy of entering new markets outside of wind energy;
- worldwide economic conditions and their impact on customer demand;
- our ability to maintain, protect and enhance our intellectual property;
- our ability to comply with existing, modified or new laws and regulations applying to our business, including the imposition of new taxes, duties or similar assessments on our products;
- the attraction and retention of qualified employees and key personnel;
- our ability to maintain good working relationships with our employees, and avoid labor disruptions, strikes and other disputes with labor unions that represent certain of our employees; and
- our ability to procure adequate supplies of raw materials and components to fulfill our wind blade volume commitments to our customers.

These forward-looking statements are only predictions. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to materially differ from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. We have described under the heading “Risk Factors” included in Part 1, Item 1A of this Annual Report on Form 10-K the principal risks and uncertainties that we believe could cause actual results to differ from these forward-looking statements. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as guarantees of future events.

The forward-looking statements in this Annual Report on Form 10-K represent our views as of the date of this Annual Report on Form 10-K. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we undertake no obligation to update any forward-looking statement to reflect events or developments after the date on which the statement is made or to reflect the occurrence of unanticipated events except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date after the date of this Annual Report on Form 10-K. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments we may make.

PART I

Item 1. Business

Description of Business

TPI Composites, Inc. is the holding company that conducts substantially all of its business operations through its direct and indirect subsidiaries (collectively, the Company or we). The Company was founded in 1968 and has been producing composite wind blades since 2001. The Company's knowledge and experience of composite materials and manufacturing originates with its predecessor company, Tillotson Pearson Inc., a leading manufacturer of high-performance sail and powerboats along with a wide range of composite structures used in other industrial applications. Following the separation from the boat building business in 2004, the Company reorganized in Delaware as LCS Holding, Inc. and then changed its corporate name to TPI Composites, Inc. in 2008.

Overview

We are the largest and only independent manufacturer of composite wind blades for the wind energy market with a global manufacturing footprint. We enable many of the industry's leading wind turbine original equipment manufacturers (OEM), who have historically relied on in-house production, to outsource the manufacturing of some of their wind blades through our global footprint of advanced manufacturing facilities strategically located to serve large and growing wind markets in a cost-effective manner. Given the importance of wind energy capture, turbine reliability and cost to power producers, the size, quality and performance of wind blades have become highly strategic to our OEM customers. As a result, we have become a key supplier to our OEM customers in the manufacture of wind blades and related precision molding and assembly systems. We have entered into long-term supply agreements pursuant to which we dedicate capacity at our facilities to our customers in exchange for their commitment to purchase minimum annual volumes of wind blade sets, which consist of three wind blades. This collaborative dedicated supplier model provides us with contracted volumes that generate significant revenue visibility, drive capital efficiency and allow us to produce wind blades at a lower total delivered cost, while ensuring critical dedicated capacity for our customers. For a further discussion regarding our wind blade and precision molding and assembly system businesses, refer to the discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations" included in Part II, Item 7 of this Annual Report on Form 10-K.

We also leverage our advanced composite technology and history of innovation to supply high strength, lightweight and durable composite products to the transportation market. In November 2017, we signed a five- year supply agreement with Proterra Inc. (Proterra) to continue to supply Proterra Catalyst® composite bus bodies from our existing Rhode Island facility and also from a new manufacturing facility in Newton, Iowa which commenced operations in the second quarter of 2018. In February 2018, we entered into an agreement with Navistar, Inc. (Navistar) to design and develop a Class 8 truck comprised of a composite tractor, trailer and frame rails. This collaborative development project was entered into in connection with Navistar's recent award under the Department of Energy's (DOE) Super Truck II investment program, which is designed to promote fuel efficiency in commercial vehicles. In November 2018, we announced a capital investment of approximately \$11.5 million in 2019 to develop a highly automated pilot manufacturing line for the electric vehicle market. We plan to locate this pilot line adjacent to our second Newton, Iowa location where we manufacture composite bus bodies for Proterra. We expect this investment will enable us to further develop our technology, create defensible product and process IP and demonstrate our capability to manufacture composite components cost effectively at automotive volume rates. We also expect this pilot line will also help our current and potential customers to de-risk the decision-making process to commit to TPI for high-volume manufacturing programs in the future.

Our wind blade and precision molding and assembly systems manufacturing businesses accounted for approximately 95%, 96%, and 97% of our total net sales for each of the years ended December 31, 2018, 2017 and 2016, respectively. As of February 28, 2019, our long-term wind and transportation supply agreements provide for minimum aggregate volume commitments from our customers of approximately \$4.0 billion and encourage our customers to purchase additional volume up to, in the aggregate, a total contract value of approximately \$6.8 billion through the end of 2023.

Public Offerings and Stock Split

In July 2016, we completed an initial public offering (IPO) of 7,187,500 shares of our common stock at a price of \$11.00 per share, which included 937,500 shares issued pursuant to the underwriters' over-allotment option. Certain of our existing stockholders, a non-employee director and executive officers purchased an aggregate of 1,250,000 shares of our common stock in the IPO included in the total issuance above. The net proceeds from the IPO were \$67.2 million after deducting underwriting discounts and offering expenses. Immediately prior to the closing of the IPO, all shares of the then-outstanding redeemable preferred shares converted into an aggregate of 21,110,204 shares of our common stock and the redeemable preferred share warrants converted on a net issuance basis into 120,923 shares of our common stock. In addition, concurrent with the closing of the IPO, certain subordinated convertible promissory notes in the aggregate principal and interest amount of \$11.9 million were converted into 1,079,749 shares of our common stock at the public offering price of \$11.00 per share.

Prior to the IPO, in July 2016 we amended our amended and restated certificate of incorporation to effect a 360-for-1 forward stock split of our common stock. As a result of the stock split, we have adjusted the share amounts authorized and issuable under the share-based compensation plans. All share and per share common stock information (including the share-based compensation plans) referenced throughout the consolidated financial statements and notes thereto have been retroactively adjusted to reflect this stock split. The stock split did not cause an adjustment to the par value of the authorized shares of our common stock.

In May 2017, we completed a secondary public offering of 5,075,000 shares of our common stock at a price of \$16.35 per share, which included 575,000 shares issued pursuant to the underwriters' option to purchase additional shares. All of the shares were sold by existing stockholders and certain of our executive officers. The selling stockholders received all of the net proceeds of \$78.8 million from the secondary public offering. We did not sell any shares and did not receive any of the proceeds from the offering and the costs paid by us in connection with the offering of \$0.8 million were recorded in general and administrative costs in the accompanying consolidated income statement.

Financial Information about Segments and Geographic Areas

We divide our business operations into four geographic operating segments—the United States (U.S.), Asia, Mexico, Europe, the Middle East, Africa and India (EMEA) as follows:

- Our U.S. segment includes (1) the manufacturing of wind blades at our Newton, Iowa plant, (2) the manufacturing of precision molding and assembly systems used for the manufacture of wind blades at our Warren, Rhode Island facility, (3) the manufacturing of composite solutions for the transportation industry, which we also conduct at our existing Rhode Island facility as well as at our Fall River, Massachusetts facility and at a second manufacturing facility in Newton, Iowa which commenced operations in the second quarter of 2018, (4) wind blade inspection and repair services in North America, (5) our advanced engineering center in Kolding, Denmark, which provides technical and engineering resources to our manufacturing facilities and (6) our corporate headquarters, the costs of which are included in general and administrative expenses.
- Our Asia segment includes (1) the manufacturing of wind blades at our facilities in Taicang Port, China; Dafeng, China and Yangzhou, China, the latter of which we expect to commence operations in the first quarter of 2019, (2) the manufacturing of precision molding and assembly systems at our Taicang City, China facility and (3) wind blade inspection and repair services.

- Our Mexico segment manufactures wind blades from three facilities in Juárez, Mexico and a facility in Matamoros, Mexico, at which we commenced operations in the third quarter of 2018. In November 2018, we entered into a new lease agreement with a third party for a new precision molding and assembly systems manufacturing facility in Juárez, Mexico and we expect to commence operations at this facility in the first quarter of 2019. This segment also performs wind blade inspection and repair services.
- Our EMEA segment manufactures wind blades from two facilities in Izmir, Turkey and also performs wind blade inspection and repair services. In February 2019, we entered into a new lease agreement with a third party for the construction of a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020.

For additional information regarding our operating segments and geographic areas, see Note 17 – Segment Reporting of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Business Strategy

Our long-term success will be driven by our business strategy. The key elements of our business strategy are as follows:

- ***Grow our existing relationships and develop new relationships with leading industry OEMs.*** We plan to continue growing and expanding our relationships with existing customers who, according to data from Wood Mackenzie (WoodMac), represented approximately 54% of the global onshore wind energy market, approximately 90% of that market excluding China, and 99.8% of the U.S. onshore wind turbine market over the three years ended December 31, 2017, based on megawatts (MWs) of energy capacity installed, as well as developing new relationships with other leading industry OEMs. We expect to be presented with opportunities to expand our existing relationships and develop new relationships with industry OEMs as they seek to capitalize on the benefits of outsourced wind blade manufacturing while maintaining high quality customization and dedicated capacity. In March 2018, we entered into a multiyear supply agreement with Vestas Wind Systems A/S (Vestas) to supply wind blades from a new manufacturing facility in the Yangzhou Economic & Technical Development Zone in Yangzhou, China and we expect to commence operations at this facility in the first quarter of 2019. In May and July 2018, Vestas exercised its option for a total of four additional wind blade manufacturing lines under an existing multiyear supply agreement at our Matamoros, Mexico location and we commenced operations in the third quarter of 2018. In May 2018, we entered into a multiyear supply agreement with ENERCON GmbH (ENERCON) to supply wind blades from our second manufacturing facility in Izmir, Turkey and we commenced operations in the fourth quarter of 2018. In August 2018, General Electric International, Inc. and its affiliates (GE Wind) agreed to extend our existing multiyear supply agreement in one of our Mexico plants by two years to 2022 and increased the number of wind blade manufacturing lines in that facility from three to five. In addition, GE Wind has agreed to transition to a larger blade model in our Newton, Iowa plant in early 2019 and to eliminate its option to terminate their supply agreement at this location prior to its December 2020 expiration. In December 2018, we entered into a multiyear supply agreement with Vestas to supply wind blades from a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020.
- ***Expand our footprint in large and growing wind markets, capitalize on the continuing outsourcing trend, evaluate building wind turbine blades for the offshore market and evaluate strategic acquisitions.*** As the wind energy market continues to expand globally and many wind turbine OEMs continue to shift towards increased outsourcing of wind blade manufacturing, we believe we are well-positioned to continue the expansion of our global footprint. We utilize our strengths in composites technology and manufacturing, combined with our collaborative dedicated supplier model to provide our customers with an efficient solution for their expansion in large and growing wind markets. Our quality, reliability and total delivered cost reduce sourcing risk for our customers. In addition, our demonstrated ability to expand into new markets and the strength of our manufacturing capabilities afford us the optionality to build new factories or grow through strategic acquisitions.

- ***Continue to drive down costs of wind energy***. We continue to work with our customers on larger size wind blade models that maximize the capture of wind energy and drive down the levelized cost of energy (LCOE). We also continue to utilize our advanced technology, regional manufacturing facilities strategically located to cost effectively serve large and growing wind markets and ability to source materials globally at competitive costs to deliver high-performing, composite wind blades. Our collaborative engineering approach and our advanced precision molding and assembly systems allow us to integrate our customer’s design requirements with cost-efficient, replicable and scalable manufacturing processes. This collaborative engineering approach with our customers also allows us to reduce manufacturing cycle times and new blade model transition times. We also continue to work with our customers to drive down the cost of materials and production, the benefit of which we typically share with our customers contractually in a manner that reduces LCOE for customers, further strengthens our customer relationships and improves our margins.
- ***Expand our transportation business and expand into other strategic markets***. We leverage our advanced composite technology and history of innovation to supply high strength, lightweight and durable composite products to the transportation market. As the vehicle electrification trend continues, reducing the weight of these vehicles is critical to expanding range and/or providing more room for additional batteries or reducing the number of batteries. As a result, we believe there is an increasing demand for composites products for electric vehicles. In addition, we believe there is a potential demand in other strategic markets for composites as to replace aluminum or other more expensive composite materials such as carbon.
- ***Focus on continuing innovation***. We have a history of innovation in advanced composite technologies and production techniques and use several proprietary technologies related to wind blade manufacturing. With this culture of innovation and a collaborative “design for manufacturability” approach, we continue to address increasing physical dimensions, demanding technical specifications and strict quality control requirements for our customers’ most advanced wind blades. We also invest in ongoing simplification and selective automation of production processes for increased efficiency and precision. In addition, we plan to leverage our history of composite industry-first innovations to grow our business in the transportation market, in which we believe there is a demand for high precision, structural composites manufacturing.

Wind Blade Manufacturing Operations and Process

We have developed significant expertise in advanced composite technology and use high performance composite materials, precision molding and assembly systems including modular tooling, and advanced process technology, as well as sophisticated measurement, inspection, testing and quality assurance tools, allowing us to produce over 45,000 wind blades since 2001 with an excellent field performance record in a market where reliability is critical to our customers’ success. We manufacture or have manufactured wind blades ranging from 30 meters to over 70 meters across our global facilities, and have the capability to manufacture wind blades of greater lengths as required by existing or new customers. In combination with our advanced technologies, we seek to create manufacturing processes that are replicable and scalable in our manufacturing facilities located worldwide, regardless of cultural or language barriers. Our integrated manufacturing process, the TPI Integrated Production System (TIPS) allows us to customize each manufacturing step, from raw materials to finished products. TIPS also allows us to systematically design for the entire manufacturing process so that we can achieve better quality control and increase production efficiencies. We believe that our focus on simplifying and, where feasible, automating production processes is critical to manufacturing high-precision, lightweight and durable products at a reasonable cost to our customers. We produce high unit volumes of near-aerospace grade products at industrial costs.

Raw Materials

The key raw materials for the wind blades we manufacture include highly advanced fiberglass fabrics, select carbon reinforcements, foam, balsa wood, resin, adhesives for assembly of molded components, gel coat or paint for preparation of cosmetic surfaces and attachment hardware including steel components. Most of these materials are available in multiple geographic regions and in reasonably close proximity to our manufacturing facilities. Our agreements for the supply of raw materials are designed to guarantee volumes that we believe will be required to

fulfill our customers' wind blade commitments. A portion of our raw materials are subject to price volatility, such as the resins used in our manufacturing processes. Although the majority of materials incorporated into our products are available from a number of sources, certain materials are available only from a relatively limited number of suppliers. We seek multiple suppliers for our raw materials and continually evaluate potential new supplier relationships.

Precision Molding and Assembly Systems

Over the last decade, we have produced hundreds of precision molding and assembly systems, ranging from 30 meters to over 70 meters in length, to support our global operations. We began these operations in our tooling technology center in Warren, Rhode Island. In 2013, we expanded our precision molding and assembly system production capabilities to a facility in Taicang City, China, which serves customers around the globe. While capable of cost-effectively delivering precision molding and assembly systems across all of our facilities, our Rhode Island tooling technology center primarily serves the North American market. We are currently in the process of transitioning our North American precision molding and assembly system production capabilities from Warren, Rhode Island to a new facility in Juárez, Mexico, which can serve customers globally. We expect this transition to be completed by the end of 2019. Our precision molding and assembly systems have been used to build tens of thousands of wind blades worldwide.

Our tooling solutions include precision wind blade patterns, precision molding and assembly systems, including modular tooling techniques. We believe that our technological and production expertise are key factors in our continued competitiveness, as we address continually increasing physical dimensions, demanding technical specifications, and strict quality control requirements for wind blades.

Wind Blade Production Process

Production of wind blades requires adherence to the unique specifications of our customers, who design their wind turbines and wind blades to optimize performance, reliability and total delivered cost. With our culture of innovation and a collaborative "design for manufacturability" approach, we have the capability and expertise to manufacture wind blades of different designs, utilizing fiberglass, carbon or other advanced composite materials to meet unique customer specifications. We also have the flexibility to quickly transition our manufacturing facilities to produce different wind blade models and sizes using our precision molding and assembly systems, including modular tooling techniques.

We have developed a highly dependable method for making high-quality wind blades. In conjunction with our TIPS process, we design our proprietary manufacturing processes to be replicable, scalable and transferable to each of our advanced manufacturing facilities worldwide. As a result, we can repeatedly move a product from its design phase to volume production while maintaining quality, even in developing regions of the world. Similarly, we have developed the manual portions of our manufacturing processes based on proven technologies and production methods that can be learned and implemented rapidly by line personnel. We focus on consistency and quality control across our facilities, using hands-on training methods and employing repeatable manufacturing processes.

We use an advanced form of vacuum-assisted resin transfer tooling process to pull liquid resin into a dry lay-up, resulting in light, strong, and reliable composite structures. In our manufacturing process, fiber reinforcements and core materials are laid up in a mold while dry, followed by a vacuum bag that is placed over the layup and sealed to the mold. The wind blade component is then placed under vacuum. The resin is introduced into the wind blade component via resin inlet ports and then distributed through the reinforcement and core materials via a flow medium and a series of channels, saturating the wind blade component. The vacuum removes air and gases during processing, thereby eliminating voids. Pressure differentials drive resin uniformly throughout the wind blade component, providing a consistent laminate. By using a variety of reinforcement and core materials, the structural characteristics of the wind blade can be highly engineered to suit the custom specifications of our customers. Although only occasionally required by our customers, we are also capable of employing additional composite fabrication processes, such as pre-impregnated laminates, in addition to our vacuum infusion process.

Wind Blade Long-Term Supply Agreements

Our current wind blade customers, which include GE Wind, Vestas, Siemens Gamesa Renewable Energy S.A. (Siemens Gamesa), Nordex SE (Nordex), Senvion S.A. (Senvion) and ENERCON, are some of the world's largest wind turbine manufacturers. According to data from WoodMac, our customers represented approximately 54% of the global onshore wind energy market, approximately 90% of that market excluding China, and 99.8% of the U.S. onshore wind turbine market over the three years ended December 31, 2017, based on MWs of energy capacity installed. In our collaborative dedicated supplier model, our customers are incentivized to maximize the volume of wind blades purchased through lower pricing at higher purchase volumes. As of February 28, 2019, our existing wind blade supply agreements provide for minimum aggregate volume commitments from our customers of approximately \$4.0 billion and encourage our customers to purchase additional volume up to, in the aggregate, a total contract value of approximately \$6.8 billion through the end of 2023, which we believe provides us with significant future revenue visibility and helps to insulate us from potential short-term fluctuations or legislative changes in any one market. Our supply agreements generally contain liquidated damages provisions in the event of late delivery, however, we generally do not bear the responsibility for transporting the wind blades we manufacture to our customers.

GE Wind

In 2007, we entered into multiple supply agreements to build two facilities and manufacture wind blades for GE Wind in Taicang Port, China and Newton, Iowa. Based on the success of these manufacturing arrangements, we expanded our relationship with GE Wind through additional supply agreements for a manufacturing facility in Turkey and two manufacturing facilities in Mexico. Each of the supply agreements with GE Wind provide for a minimum number of wind blade sets to be purchased by GE Wind each year during the term, the schedule for which is established at the outset of the agreement. In return, we commit to dedicate a specific number of manufacturing lines to GE Wind for each of the years under the supply agreements. Additionally, we create model-specific tooling for GE Wind. For the year ended December 31, 2017, we recorded sales under these supply agreements with GE Wind of \$426.1 million, \$198.6 million of which was for the portion of 2017 that GE Wind was considered a related party. In 2017, GE Wind announced that they would not renew or extend the Turkey and Taicang Port, China supply agreements, which both expired on December 31, 2017. In August 2018, GE Wind did agree to extend our existing supply agreement in one of our Mexico plants by two years to 2022 and increased the number of wind blade manufacturing lines in that facility from three to five. In addition, GE Wind has agreed to transition to a larger blade model in our Newton, Iowa plant in early 2019 and to eliminate its option to terminate their supply agreement at this location prior to its December 2020 expiration. Unless otherwise terminated or renewed, our supply agreements with GE Wind are in effect until the end of 2020 for our Iowa and one of our Mexico facilities and until the end of 2022 for our other Mexico facility. GE Wind may terminate the Mexico supply agreements with no advance notice and paying us termination fees as set forth in the applicable agreement. In addition, either party may terminate these supply agreements upon a material breach by the other party which goes uncured for 30 days after written notice has been provided.

In 2017, General Electric Company (GE) completed its acquisition of LM Wind Power (LM), our largest competitor. We expect that GE Wind will utilize LM for a substantial percentage of its wind blade production in the future and may reduce the volumes of wind blades it purchases from us or not extend any of our supply agreements beyond 2022, which may materially harm our business, financial condition and results of operations. See "Risk Factors—Risks Related to Our Wind Blade Business—GE's acquisition of LM Wind Power, our largest competitor, may materially harm our business, financial condition and results of operations and may cause the price of our common stock to decline" included in Part I, Item 1A of this Annual Report on Form 10-K for further discuss on the GE's acquisition of LM and its potential effects on us.

See Note 4 – Related Party Transactions of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information regarding our related party transactions with GE Wind.

Other Long-Term Supply Agreements

We have entered into other long-term supply agreements in China, Mexico, Turkey and India. With respect to these supply agreements, we agree to dedicate capacity for a set number of wind blades for each calendar year during the term of the agreement in exchange for commitments to purchase minimum annual volumes of wind blade sets. Unless otherwise terminated, these supply agreements generally remain in effect for a period of five years and either party may terminate their respective supply agreements upon a material breach by the other party which goes uncured. Some of these supply agreements contain provisions that allow for our customers to purchase less volume in later years of these supply agreements, reduce the number of dedicated manufacturing lines or to terminate the supply agreement upon notice for reasons such as our failure to deliver the contracted wind blade volumes or our failure to meet certain mutually agreed upon cost reduction targets. See “Risk Factors—Risks Related to Our Wind Blade Business—Our long-term supply agreements with our customers are subject to termination on short notice and our failure to perform our obligations under such agreements, and termination of a significant number of these agreements would materially harm our business” included in Part I, Item 1A of this Annual Report on Form 10-K.

Research and Development

We have a long history of developing composite products as well as the development of new and advanced materials, tooling, manufacturing processes and inspection methods. Our knowledge and experience of composite materials and manufacturing originates with our predecessor company, Tillotson Pearson Inc., a leading manufacturer of high-performance recreational sail and powerboats along with a wide range of composite structures used in other industrial applications. Leveraging our knowledge and experience, we realized the opportunity to specialize in wind energy and other industrial end-markets where there was a demand for high precision composite manufacturing capabilities.

We conduct extensive research and development in close collaboration with our customers on the design, development and deployment of innovative manufacturing processes, including automation, advanced materials and sophisticated product quality inspection tools. We have partnered with the U.S. Department of Energy (DOE), government laboratories, universities and our customers to innovate through cost sharing Advanced Manufacturing Innovation Initiative programs. In 2015, we received a \$3.0 million award from the DOE’s Office of Energy Efficiency & Renewable Energy to lead a team of industry and academic participants to design, develop and demonstrate an ultra-light composite vehicle door for high volume manufacturing production in conjunction with other industry and university participants. In February 2018, we entered into an agreement with Navistar to design and develop a Class 8 truck comprised of a composite tractor, trailer and frame rails. This collaborative development project was entered into in connection with Navistar’s recent award under the DOE’s Super Truck II investment program, which is designed to promote fuel efficiency in commercial vehicles. Incorporating composite materials into a Class 8 truck offers multiple potential performance and efficiency advantages compared to traditional metals in terms of weight savings, reduced part counts, and non-corrosion.

We employ a highly experienced workforce of engineers in various facets of our business, from discrete research and development projects, to the ongoing, real-time development and implementation of incremental manufacturing and material improvements. Our research and development effort places a priority on improving quality through process and procedure improvement, in addition to reducing cost through specification changes and sourcing of more cost-effective suppliers. Other areas of emphasis include composite design, in-house fabrication of precision molding and assembly systems, prototyping, testing, optimization and volume production capabilities. We also encourage our employees to invent and develop new technologies to maintain our competitiveness in the marketplace. In addition to our internal research and development activities, from time to time, we also conduct research and development activities pursuant to funded development arrangements with our customers and other third parties, and intend to continue to seek opportunities for product development programs that could create recurring revenue and increase our overall profitability over the long term.

For financial statement purposes, research and development performed is reflected in general and administrative expenses in our consolidated income statements.

Competition

The wind blade market is highly concentrated, competitive and subject to evolving customer needs and expectations. In 2017, GE Wind, our largest customer, completed its acquisition of LM, our largest competitor. We also compete primarily with other independent wind blade manufacturers such as Sinoma Science & Technology Co. Ltd., Shanghai Aeolon Wind Energy Technology Development (Group) Co., Ltd., Aeris Industria E Comercio De Equipamentos Para Geracao De Energia S.A. and ZhongFu Lianzhong Composites Group Co., Ltd., as well as regional wind blade suppliers in geographic areas where our current or prospective manufacturing facilities are located.

We also compete with, and in a number of cases supplement, vertically integrated wind turbine OEMs that manufacture their wind blades. We believe that a number of other established companies are manufacturing wind blades that will compete directly with our offerings, and some of our competitors, including LM, Sinoma Science & Technology Co. Ltd., Aeris Industria E Comercio De Equipamentos Para Geracao De Energia S.A. and ZhongFu Lianzhong Composites Group Co., Ltd. may have significant financial and institutional resources.

The principal competitive factors in the wind blade market include reliability, total delivered cost, manufacturing capability, product quality, engineering capability and timely completion of wind blades. We believe we compete favorably with our competitors on the basis of the foregoing factors. Our ability to remain competitive will depend to a great extent upon our ongoing performance in the areas of manufacturing capability, timely completion and product quality.

Transportation Products

We seek to create additional recurring revenue opportunities through the supply of other composite structures outside the wind energy market. We believe transportation products, including buses, trucks, electric vehicles and high performance automotive products, are ideally suited for our advanced composite technology because of the benefits derived from weight reduction, corrosion resistance, strength and durability. These benefits should allow us to develop structural composite solutions to assist our customers in developing electric vehicles as well as buses with clean propulsion systems or in meeting new and developing fuel economy standards including the 2025 U.S. Government Corporate Average Fuel Economy standards that are pushing automakers to develop lighter, more fuel efficient vehicles with lower emissions. President Trump, however, issued an executive order in March 2017 requiring the U.S. Environmental Protection Agency (EPA) to review the implementation timing and mileage targets of these standards.

In addition, by producing a range of composite structures, we are able to leverage the materials and manufacturing process technology and expertise developed through one project to maximize production quality, improve performance and minimize costs across our other manufacturing efforts, including our wind blade business. Our projects for customers in the transportation market have historically generated project-related revenues for a specific duration. We intend to seek collaborations with additional customers in these markets that will provide recurring revenue and business opportunities for us, in addition to the opportunities provided by our existing customers and relationships, and contribute to our overall profitability over the long term.

Our facilities in Warren, Rhode Island and Newton, Iowa manufacture products for customers in the transportation market using a similar proprietary and replicable manufacturing processes that we use to produce wind blades. Our projects for customers in the transportation market include, or have included, the supply of all-composite bodies for electric buses and automated people mover systems for airports.

Our current principal competitors in the transportation market include suppliers of conventional steel and aluminum products and non-structural automotive fiberglass and other advanced composites-based manufacturers for transportation applications.

Intellectual Property

We have a variety of intellectual property rights, including patents (filed and applied-for in a number of jurisdictions, including the United States, the European Union and China), trademarks and copyrights, but we believe that our continued success and competitive position depend, in large part, on our proprietary materials, tooling, process and inspection technologies and our ability to innovate. Accordingly, we take measures to protect the confidentiality and control the disclosure of our proprietary technology. We rely primarily on a combination of patents, know-how and trade secrets to establish and protect our proprietary rights and preserve our competitive position. We also seek to protect our proprietary technology, in part, by confidentiality agreements with our customers, employees, consultants and other contractors. Trade secrets, however, are difficult to protect. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our customers, employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Backlog

As of December 31, 2018 and 2017, our backlog for wind blades and related products totaled \$514.8 million and \$555.8 million, respectively. Our backlog includes purchase orders issued in connection with our long-term supply agreements. We generally record a purchase order into backlog when the following requirements have been met: a signed long-term supply agreement or other contractual agreement has been executed with our customer, a purchase order has been issued by our customer and we expect to ship wind blades to or produce the related products for such customer in satisfaction of any purchase order within 12 months. Backlog as of any particular date should not be relied upon as indicative of our revenue for any future period.

Regulation

Wind Energy

Our operations are subject to various foreign, federal, state and local regulations related to environmental protection, health and safety, labor relationships, general business practices and other matters. These regulations are administered by various foreign, federal, state and local environmental agencies and authorities, including the EPA, the Occupational Safety and Health Administration of the U.S. Department of Labor and comparable agencies in China, Mexico, Turkey, India and individual U.S. states. In addition, our manufacturing operations in China, Mexico, Turkey and India are subject to those countries' wage and price controls, currency exchange control regulations, investment and tax laws, laws restricting our ability to repatriate profits, trade restrictions and laws that may restrict foreign investment in certain industries. Some of these laws have only been recently adopted or are subject to further rulemaking or interpretation, and their impact on our operations, including the cost of complying with these laws, is uncertain. We believe that our operations currently comply, in all material respects, with applicable laws and regulations. Further, as a U.S. corporation, we are subject to The Foreign Corrupt Practices Act of 1977 (FCPA), which generally prohibits U.S. companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or keeping business.

In addition, our business has been and will continue to be affected by subsidization of the wind turbine industry with its influence declining over time as wind energy reaches grid parity with traditional sources of energy. In the United States, the federal government has encouraged capital investment in renewable energy primarily through tax incentives. Production tax credits for new renewable energy projects were first established in 1992. The Production Tax Credit for Renewable Energy (PTC) provided the owner of a wind turbine placed in operation before January 1, 2015 with a 10-year credit against its U.S. federal income tax obligations based on the amount of electricity generated by the wind turbine.

The PTC was extended in 2015 for wind power projects through December 31, 2019, and is currently contemplated to be phased down over the term of the PTC extension. Specifically, the PTC will be kept at the same rate in effect at the end of 2014 for wind power projects that either commenced construction or met certain safe harbor requirements by the end of 2016, and thereafter will be reduced by 20% per year in 2017, 2018 and 2019, respectively.

In 2015, the EPA announced a final rule adopted pursuant to the Clean Air Act, known as the Clean Power Plan, which establishes national standards for states to reduce carbon emissions from power plants. Specifically, the Clean Power Plan requires states to reduce carbon emissions from power plants 32% below 2005 levels by 2030. The Clean Power Plan also provides for interim state-level compliance reduction targets beginning in 2022 through 2030 based on individualized targets for each of the states utilizing 2012 historical carbon emissions data and three building blocks for emissions reduction including: increasing generation from new zero-emitting renewable energy sources such as wind. In 2016, the U.S. Supreme Court issued a stay of the EPA's implementation of the Clean Power Plan until the D.C. Circuit of the United States Court of Appeals decides upon the merits of multiple lawsuits challenging the legality of the Clean Power Plan. In 2017, President Trump signed an executive order that requires, among other things, that the EPA review the Clean Power Plan and publish a rule to either suspend, revise or rescind it.

At the state level, as of December 31, 2018, 29 states, the District of Columbia and Puerto Rico have implemented renewable portfolio standard (RPS) programs that generally require that, by a specified date, a certain percentage of a utility's electricity supplied to consumers within such state is to be from renewable sources (ranging from 10% to 100% and from between the present and 2045).

In addition, there are also increasing regulatory efforts to promote renewable power. China is implementing its 13th 5-Year Plan with a goal of 15% total primary energy from non-fossil fuel sources and targeting 210 gigawatts (GWs) of grid-connected wind capacity by 2020 according to its National Development and Reform Commission, and employs preferential feed-in tariff schemes, in addition to local tax-based incentives. Mexico has established strict targets, aiming for 35% renewable energy by 2024 and 50% by 2050, according to WoodMac, which it is facilitating through tax incentives. Large European Union members have renewable energy targets for 2020 of between 13% and 49% of all energy use derived from renewable energy sources, according to WoodMac. Additionally, Turkey enacted Law No. 5346 in 2005 to promote renewable-based electricity generation within their domestic electricity market by introducing tariffs and purchase obligations for distribution companies requiring purchases from certified renewable energy producers. The World Bank also provided Turkey with an aggregate of \$600 million of loan proceeds to encourage investors to construct generation plants with renewable energy resources.

Employees

As of December 31, 2018, we employed over 10,600 full-time employees, approximately 1,300 of whom were located in the United States, 2,400 in China, 4,100 in Mexico and 2,800 in Turkey. Certain of our employees in Turkey and at our manufacturing facility in Matamoros, Mexico are represented by a labor union. We believe that our relations with our employees are generally good.

In January 2019, thousands of workers employed in dozens of manufacturing facilities in Matamoros, Mexico, went on strike. In general, these workers, who were represented by several different labor unions, demanded a twenty percent increase in their wage rate and an annual bonus of approximately \$1,700. On February 15, 2019, our manufacturing production employees in Matamoros, Mexico, who are represented by a labor union, went on strike also demanding a 20 percent increase in their hourly wage rate and the payment of an annual bonus of approximately \$1,700 even though our collective bargaining agreement does not provide for an annual bonus. During this strike, our Matamoros manufacturing facility stopped production from February 15, 2019 until March 2, 2019. On March 2, 2019, we reached an agreement with the labor union to end the strike and we reopened our Matamoros manufacturing facility on March 3, 2019.

Available Information

Our website address is www.tpicomposites.com. All of our filings with the Securities and Exchange Commission (SEC), including this Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, statements of changes in beneficial ownership and amendments to those reports, are available free of charge on our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained on our website is neither a part of, nor incorporated by reference into, this Annual Report on Form 10-K. The SEC also maintains an Internet website that contains reports, proxy and information

statements, and other information regarding issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

Our investor relations website address is www.tpicomposites.com/investors and includes key information about our corporate governance initiatives, including our Nominating and Corporate Governance Committee charter, charters of the Audit and Compensation committees and our Code of Business Conduct and Ethics.

Executive Officers

The following table sets forth certain information regarding our Executive Officers as of February 28, 2019:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Steven C. Lockard	57	President, Chief Executive Officer and Director
Joseph G. Kishkill	54	Chief Commercial Officer
William E. Siwek	56	Chief Financial Officer
Thomas J. Castle	47	Senior Vice President—U.S. and Transportation Operations
Steven G. Fishbach	49	General Counsel and Secretary

Steven C. Lockard. Mr. Lockard became our President and Chief Executive Officer in 2004 and has served as a member of our board of directors since 2004. Prior to joining us in 1999, Mr. Lockard was Vice President of Satloc, Inc., a supplier of precision GPS equipment, from 1997 to 1999. Prior to that, Mr. Lockard was Vice President of marketing and business development and a founding officer of ADFlex Solutions, Inc., a NASDAQ-listed international manufacturer of interconnect products for the electronics industry, from 1993 to 1997. Prior to that, Mr. Lockard held several marketing and management positions including Business Unit Manager, Corporate Market Development Manager and Marketing/Applications Engineer at Rogers Corporation from 1982 to 1993. Mr. Lockard serves as the Chairman of the board of directors for the American Wind Energy Association. Mr. Lockard holds a B.S. degree in Electrical Engineering from Arizona State University.

Joseph G. Kishkill. Mr. Kishkill joined us as our Chief Commercial Officer in August 2017. Prior to joining us, Mr. Kishkill provided general consulting services to various clients in the solar and oil and gas industries from July 2016 to July 2017. Prior to that, Mr. Kishkill served as President, International of First Solar, Inc. from July 2015 until June 2016, and as Chief Commercial Officer from August 2013 to June 2015, where he had responsibility for global business development, sales and international public affairs. Prior to joining First Solar, Inc., Mr. Kishkill was President, Eastern Hemisphere Operations, for Exterran Energy Solutions, L.P. and Senior Vice President of Exterran Holdings, Inc., a global provider of natural gas, petroleum and water treatment production services from 2009 to 2013. Prior to that, he led Exterran's business in the Latin America region. Prior to joining Exterran's predecessor company in 2002, Mr. Kishkill held positions of increasing responsibility with Enron Corporation from 1990 to 2001, advancing to Chief Executive Officer for South America. Mr. Kishkill holds an M.B.A. degree from the Harvard Graduate School of Business Administration and a B.S. degree in Electrical Engineering from Brown University.

William E. Siwek. Mr. Siwek joined us as our Chief Financial Officer in August 2013. Prior to joining us, Mr. Siwek previously served as the Chief Financial Officer for T.W. Lewis Company, an Arizona-based real estate investment company, from September 2012 to September 2013. From May 2010 until September 2012, he was an independent consultant assisting companies in the real estate, construction, insurance and renewable energy industries. Prior to that, Mr. Siwek was Executive Vice President and Chief Financial Officer of Talisker Mountain, Inc., from January 2009 to April 2010. Prior to that, he was President and Chief Financial Officer of the Lyle Anderson Company from December 2002 to December 2008. Prior to that, Mr. Siwek spent 18 years, from September 1984 to May 2002, with Arthur Andersen where he became a Partner in both Audit and Business Consulting Divisions. Mr. Siwek holds B.S. degrees in Accounting and Economics from University of Redlands and is a Certified Public Accountant.

Thomas J. Castle. Mr. Castle joined us in November 2015 as our Senior Vice President—North American Wind Operations and Global Operational Excellence. In February 2019, Mr. Castle was named our Senior Vice President—U.S. and Transportation Operations. Prior to joining us, Mr. Castle was with Honeywell Aerospace from 2007 to 2015. Mr. Castle served as the Vice President of Integrated Supply Chain, Americas Electronics Operations Center from 2014 to 2015. From 2012 to 2014, he was the Global Vice President of the Honeywell Operating System for Aerospace. Prior to that, Mr. Castle held various positions at the Americas Services Organization from

2007 to 2012. From 1996 to 2007, Mr. Castle was with GE Aviation in roles of increasing responsibility, most recently as the Managing Director of a manufacturing facility in Thailand from 2005 to 2007. Mr. Castle holds a B.S. degree in Aeronautics from St. Louis University.

Steven G. Fishbach. Mr. Fishbach has served as our General Counsel since January 2015. Prior to joining us, Mr. Fishbach served as Deputy General Counsel of Global Cash Access Holdings, Inc. from 2011 to 2015 and Associate General Counsel from 2009 to 2011. Prior to that, Mr. Fishbach served in various senior roles in the legal department of Fidelity National Information Services, Inc./eFunds Corporation from 2005 to 2008. Mr. Fishbach also practiced corporate and securities law at Squire Sanders (now Squire Patton Boggs) from 2000 to 2005. Mr. Fishbach holds a B.A. degree in American Studies from Georgetown University and a J.D. degree from William & Mary Law School.

Item 1A. Risk Factors

You should carefully consider the following risk factors. If any of the events contemplated by the following discussion of risks should occur, our business, results of operations, financial condition, growth prospects and cash flows could suffer significantly. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business. Certain statements below are forward-looking statements. See “Special Note Regarding Forward-Looking Statements” in this Annual Report on Form 10-K.

Risks Related to Our Wind Blade Business

A significant portion of our business is derived from a small number of customers, and two wind blade customers in particular, therefore any loss of or reduction in purchase orders, failure of these customers to fulfill their obligations or our failure to secure long-term supply agreement renewals from these customers could materially harm our business.

Substantially all of our revenues are derived from four wind blade customers. Two customers, GE Wind and Vestas, accounted for 31.7% and 32.0%, respectively, of our total net sales for the year ended December 31, 2018, 44.6% and 27.9%, respectively, of our total net sales for the year ended December 31, 2017, and 48.4% and 22.2%, respectively, of our total net sales for the year ended December 31, 2016. In addition, two customers, Nordex and Siemens Gamesa accounted for 19.0% and 11.2%, respectively, of our net sales for the year ended December 31, 2018, 16.0% and 9.7%, respectively, of our net sales for the year ended December 31, 2017, and 18.0% and 10.2%, respectively, of our net sales for the year ended December 31, 2016. Accordingly, we are substantially dependent on continued business from our current wind blade customers, and GE Wind and Vestas in particular. If one or more of our wind blade customers were to reduce or delay wind blade orders, file for bankruptcy or become insolvent, fail to pay amounts due or satisfactorily perform their respective contractual obligations with us or otherwise terminate or fail to renew their long-term supply agreements with us, our business, financial condition and results of operations could be materially harmed.

Defects in materials and workmanship or wind blade failures could harm our reputation, expose us to product warranty or other liability claims, decrease demand for wind blades we manufacture, or materially harm existing or prospective customer relationships.

Defects in the wind blades we manufacture, whether caused by a design, engineering, materials, manufacturing or component failure or deficiencies in our manufacturing processes, are unpredictable and an inherent risk in manufacturing technically advanced products. Under our supply agreements, we warranty the materials and workmanship of the wind blades while our customers are responsible for the fitness of use and design of the wind blades. We have, in the past, experienced wind blade testing failures and defects at some of our facilities during the startup manufacturing phase of new products, and we may experience failures or defects in the future. We have also experienced wind blade failures in the field. Any such customer qualification and wind blade testing failures or other product defects in the future could materially harm our existing and prospective customer relationships. Specifically, negative publicity about the quality of the wind blades we manufacture or defects in the wind blades supplied to our customers could result in a reduction in wind blade orders, increased warranty claims, product liability claims and other damages or termination of our long-term supply agreements or business relationships with current or new customers. In addition, we have recently started wind blade production at a new facility in Mexico and plan to start wind blade production at a new facility in Yangzhou, China in the first quarter of 2019 and at a new facility near Chennai, India in the first half of 2020 which may expose us to greater risk of warranty claims as these facilities ramp up to serial production levels.

We may determine that resolving potential warranty claims through a negotiated settlement may be in the best interest of the business and long-term customer relationships. Wind blades may also fail due to lightning strikes or other extreme weather, which could also result in negative publicity regarding our wind blades and wind energy in general. In addition, product defects may require costly repairs or replacement components, a change in our manufacturing processes or recall of previously manufactured wind blades, which could result in significant expense and materially harm our existing or prospective customer relationships. Further, defects or product liability claims, with or without merit, may result in negative publicity that could harm our future sales and our reputation in the industry. Any of the foregoing could materially harm our business, operating results and financial condition.

We have experienced, and could in the future experience, quality or operational issues in connection with plant construction or expansion, wind blade model transitions and wind blade manufacturing, which could result in losses and cause delays in our ability to complete our projects and may therefore materially harm our business, financial condition and results of operations.

We dedicate most of the capacity of our current wind blade manufacturing facilities to existing customers and, as a result, we may need to build additional manufacturing capacity or facilities to serve the needs of new customers or expanded needs of existing customers. Since the third quarter of 2016, we have commenced operations at three new manufacturing facilities in Mexico, one in Turkey and one in Iowa. In March 2018, we signed a lease for the construction of a new manufacturing facility in the Yangzhou Economic & Technical Development Zone in Yangzhou, China and we expect to commence operations at this facility in the first quarter of 2019. Also, in February 2019, we signed a lease for a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020. The construction of new plants and the expansion of existing plants involves significant time, cost and other risks. We expect our plants to generate losses in their first 12 to 24 months of operations related to production startup costs. Additionally, numerous factors can contribute, and have in the past contributed, to delays or difficulties in the startup of, or the adoption of our manufacturing lines to produce larger wind blade models, which we refer to as model transitions, in our manufacturing facilities. These factors include permitting, construction or renovation delays, the engineering and fabrication of specialized equipment, the modification of our general production know-how and customer-specific manufacturing processes to address the specific wind blades to be tested and built, changing and evolving customer specifications and expectations and the hiring and training of plant personnel. If our production or the delivery by any third-party suppliers of any custom equipment is delayed, the construction or renovation of the facility, or the addition of a production line would be delayed. Any delays or difficulties in plant startup or expansion may result in cost overruns, production delays, contractual penalties, loss of revenues, reduced margins and impairment of customer relationships, which could materially harm our business, financial condition and results of operations.

Some of our long-term supply agreements with our customers are subject to early termination and our failure to perform our obligations under these agreements or the termination of these agreements would materially harm our business, financial condition and results of operation.

Our current long-term supply agreements expire between the end of the second quarter of 2020 and the end of 2023. Some of our long-term supply agreements contain provisions that allow for the early termination of these agreements upon the customer providing us with advance written notice and paying an early termination fee. Additionally, our long-term supply agreements contain provisions allowing our customers to terminate these agreements upon our failure to deliver the contracted wind blade volumes or our failure to meet certain mutually agreed upon cost reductions. Our customers may not continue to maintain long-term supply agreements with us in the future. If one or more of our customers terminate, or reduce the number of lines or fail to renew their long-term supply agreements with us, it would materially harm our business, financial condition and results of operations.

Our long-term supply agreements and our backlog are subject to reduction within contractual parameters and we may not realize all of the expected revenue.

Our current long-term wind blade supply agreements generally establish annual purchase requirements on which we rely for our future production and financial forecasts. However, the timing and volume of purchases, within certain parameters, may be subject to change by our customers. In addition, the amount of the annual purchase requirements typically decline in the later years of our long-term supply agreements. In some instances, our customers have the contractual right to require us to reduce the number of manufacturing lines committed to them and correspondingly reduce their minimum annual purchase requirements. Additionally, our minimum annual purchase commitments could potentially understate the forecasted net sales that we are likely to generate in a given period or periods if all of our long-term supply agreements remain in place and pricing remains materially unchanged. Such minimum annual purchase requirements could also potentially overstate the forecasted net sales that we are likely to generate in a given period or periods if one or more of our long-term supply agreements were to be terminated by our customers for any reason. As a result, we may not realize the forecasted net sales we expect under our long-term supply agreements or pursuant to our backlog, which we define as the value of purchase orders received less the revenue recognized to date on those purchase orders. In addition, fulfillment of our backlog may not result in profits.

Many of our long-term supply agreements contain liquidated damages provisions, which may require us to make unanticipated payments to our customers.

Many of our long-term supply agreements contain liquidated damages provisions in the event that we fail to perform our obligations thereunder in a timely manner or in accordance with the agreed terms, conditions and standards. Our liquidated damages provisions generally require us to make a payment to the customer if we fail to deliver a product or service on time. We generally try to limit our exposure under any individual long-term supply agreement to a maximum penalty. Nevertheless, if we incur liquidated damages, they may materially harm our business, operating results and financial condition.

Our wind turbine OEM customers are facing increasing competition and pricing pressure due to the increasing prevalence of auction-based tenders in wind energy markets, and correspondingly our margins and results of operations may be adversely affected.

Many governments are shifting from feed-in tariffs to auction-based tenders as a means of promoting the development and growth of renewable energy sources such as wind energy. As a result of this shift, our wind turbine OEM customers are experiencing intense pricing pressure with respect to the sale of their turbines. As a result of this pricing pressure, we will be required to further reduce the costs we incur to manufacture wind blades to remain competitive. We typically share the benefit of cost reductions related to manufacturing wind blades with our customers pursuant to the terms of our long-term supply agreements. If these pricing pressures continue, we may choose to reduce our margins or pass on a greater percentage of the savings to our OEM customers obtained from manufacturing cost reductions than required under our supply agreements to remain competitive, each of which may materially harm our business, financial condition and results of operations.

Although a majority of our manufacturing facilities are located outside the United States, our business is still heavily dependent upon the demand for wind energy in the United States and any downturn in demand for wind energy in the United States could materially harm our business.

We have developed a global footprint to serve the growing wind energy market worldwide and have wind blade manufacturing facilities in the United States, China, Mexico, Turkey and India. Although a majority of our manufacturing facilities are located outside of the United States, historically more than half of the wind blades that we produced were deployed in wind farms located within the United States. Our Iowa and Mexico manufacturing facilities manufacture wind blades that are generally deployed within the United States. In addition, we export wind blades from our China and Turkey manufacturing facilities to the United States and wind blades that will be produced at our India manufacturing facility could be exported by our customers to the United States as well. Consequently, demand for wind energy and our wind blade sales in the United States could be adversely affected by a variety of reasons and factors, and any downturn in demand for wind energy and our wind blade sales in the United States could materially harm our business.

We could experience shortages of raw materials or components critical to our manufacturing needs, which may hinder our ability to perform under our supply agreements.

We rely upon third parties for raw materials, such as fiberglass, carbon, resins, foam core and balsa wood, and various components for the wind blades we manufacture. Some of these raw materials and components may only be purchased from a limited number of suppliers. For example, balsa wood is only grown and produced in a limited number of geographies and is only available from a limited number of suppliers. Additionally, our ability to purchase the appropriate quantities of raw materials is constrained by our customers' transitioning wind blade designs and specifications. As a result, we maintain relatively low inventory and acquire raw materials and components as needed. Due to significant international demand for these raw materials from many industries, we may be unable to acquire sufficient quantities or secure a stable supply for our manufacturing needs. If shortages or delays occur, we may be unable to provide our products to our customers on time, or at all. In some instances, our customers directly control the purchase of certain key raw materials and components and if they are unable to procure and provide us with such raw materials and components, it could cause delays and disruptions with respect to our business and operations. In addition, a disruption in any aspect of our global supply chain caused by transportation delays, customs delays, cost issues or other factors could result in a shortage of raw materials or components critical to our manufacturing needs. Any supply shortages, delays in the shipment of materials or components from third party suppliers, or changes in the terms on which they are available could disrupt or materially harm our business, operating results and financial condition.

We operate in an industry characterized by changing customer demands and associated transition costs, which could materially harm our business.

The wind energy industry is competitive and is characterized by evolving customer demands. As a result, we must adapt quickly to customer requests for changes to wind blade specifications, which increases our costs and can provide periods of reduced revenue and margins. For instance, during 2018 and into 2019, we have undertaken and will undertake model transitions at several of our facilities for various customer demands. In 2018 we had 15 manufacturing lines in transition which impacted our revenue growth. We currently expect to have 10 manufacturing lines in transition during 2019 which could adversely affect our revenue growth and profitability in 2019. We are generally able to share transition costs with the customer in connection with these changing customer demands, but any sharing is the subject of negotiation and the amount is not always contractually defined. If we do not receive transition payments from our customers sufficient to cover our transition costs or lost margins, our business, financial condition and results of operations could be materially harmed.

The concentration of customers in our wind business could enable one or more of our customers to attempt to substantially influence our policies, business and affairs going forward, or adversely affect our business, financial condition or results of operations if one or more of our customers experience financial difficulties, become insolvent or file for bankruptcy.

Our dependence on six wind blade customers for substantially all of our revenues could encourage these customers to attempt to impose new or additional requirements on us that reduce the profitability of our long-term supply agreements with them or otherwise influence our policies, choice of and arrangements with raw material suppliers and other aspects of our business. Our customers could also attempt to influence the outcome of a corporate transaction if the transaction benefits a customer's competitor or is otherwise perceived as not advantageous to a customer, which could have the effect of delaying, deterring, or preventing a transaction that could benefit us. In addition, consolidation of some of our customers may result in increased customer concentration and the potential loss of customers. For example, Nordex completed its acquisition of Acciona in 2016 and Gamesa completed the merger of Siemens' Wind Power with Gamesa in 2017. Although we are not constrained by any exclusivity agreements with any of our existing wind blade customers, they may resist our development of new customer relationships, which could affect our relationships with them or our ability to secure new customers.

In addition, if one or more of our customers experience financial difficulties, demand for the wind blades we manufacture could decline significantly. In such a circumstance, we could also be at risk of collecting accounts receivable amounts owed from such customers as well as realizing the value of inventory balances for such customers. Similarly, if one or more of our customers becomes insolvent or files for bankruptcy, the demand for the wind blades we manufacture from the affected customers could be eliminated altogether. If any of our customers experience financial difficulties, they also may seek pricing concessions, extended payment terms, reduced minimum purchase commitments and other changes to the key terms of our supply agreements that could adversely affect our business, financial condition and results of operations.

Demand for the wind blades we manufacture may fluctuate for a variety of reasons, including the growth of the wind industry, and decreases in demand could materially harm our business and may not be sufficient to support our growth strategy.

Our revenues, business prospects and growth strategy heavily depend on the continued growth of the wind industry and our customers' continuing demand for wind blades. Customer demand could decrease from anticipated levels due to numerous factors outside of our control that may affect the development of the wind energy market generally, portions of the market or individual wind project developments, including:

- general economic conditions;
- the general availability and demand for electricity;
- wind energy market volatility;
- cost-effectiveness, availability and reliability of alternative sources of energy and competing methods of producing electricity, including solar and non-renewable sources such as natural gas;

- foreign, federal and state governmental subsidies and tax or regulatory policies;
- delays or cancellations of government tenders or auctions for wind energy projects;
- the availability of financing for wind development projects;
- the development of electrical transmission infrastructure and the ability to implement a proper grid connection for wind development projects;
- foreign, federal and state laws and regulations regarding avian protection plans, noise or turbine setback requirements and other environmental laws and regulations;
- administrative and legal challenges to proposed wind development projects; and
- public perception and localized community responses to wind energy projects.

In addition to factors affecting the wind energy market generally, our customers' demand may also fluctuate based on other factors beyond our control. Any decline in customer demand below anticipated levels could materially harm our revenues and operating results and could delay or impede our growth strategy.

Changes in customers' business focus and strategy could materially harm our business and results of operations.

Changes in our customers' business focus could significantly reduce their demand for wind blades. For instance, GE, the parent corporation of GE Wind, is a highly diversified company that operates in a number of different industries and could decide to devote more resources to operations outside of wind energy or cease selling wind turbines altogether. In addition, we expect that GE Wind will utilize LM for a substantial percentage of its wind blade production in the future. If any of our customers change their business focus, including a strategic shift to insource a material portion of its wind blade production requirements, it could materially harm our business and results of operations.

We have experienced in the past, and our future wind blade production could be affected by, operating problems at our facilities, which may materially harm our operating results and financial condition.

Our wind blade manufacturing processes and production capacity have in the past been, and could in the future be, disrupted by a variety of issues, including:

- production outages to conduct maintenance activities that cannot be performed safely during operations;
- prolonged power failures or reductions;
- breakdowns, failures or substandard performance of machinery and equipment;
- our inability to comply with material environmental requirements or permits;
- inadequate transportation infrastructure, including problems with railroad tracks, bridges, tunnels or roads;
- supply shortages of key raw materials and components;
- damage or production delays caused by earthquakes, fires, floods, tornadoes, hurricanes, extreme weather conditions such as windstorms, hailstorms, drought, temperature extremes, typhoons or other natural disasters or terrorism; and
- labor unrest.

The cost of repeated or prolonged interruptions, reductions in production capacity, or the repair or replacement of complex and sophisticated tooling and equipment may be considerable and could result in damages under or the termination of our long-term supply agreements or penalties for regulatory non-compliance, any of which could materially harm our business, operating results and financial condition.

We operate a substantial portion of our business in international markets and we may be unable to effectively manage a variety of currency, legal, regulatory, economic, social and political risks associated with our global operations and those in developing markets.

We currently operate manufacturing facilities in the United States, China, Mexico and Turkey, and we are expanding our operations to India to meet customer demand in India. Since 2016, we have commenced operations at three new manufacturing facilities in Mexico, one in Turkey and one in Iowa. In March 2018, we signed a lease to construct a new manufacturing facility in the Yangzhou Economic & Technical Development Zone in Yangzhou, China and we expect to commence operations at this facility in the first quarter of 2019. Also, in February 2019, we signed a lease to construct a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020. For the years ended December 31, 2018, 2017 and 2016, approximately 84%, 80% and 75%, respectively, of our net sales were derived from our international operations and we expect that a substantial portion of our projected revenue growth will be derived from those operations. Our overall success depends, in part, upon our ability to succeed in differing legal, regulatory, economic, social and political conditions. The global nature of our operations is subject to a variety of risks, including:

- difficulties in staffing and managing multiple international locations;
- increased exposure to foreign currency exchange rate risk or currency exchange controls imposed by foreign countries;
- the risk of import, export and transportation regulations and tariffs on foreign trade and investment, including boycotts and embargoes;
- taxation and revenue policies or other restrictions, including royalty and tax increases, retroactive tax claims and the imposition of unexpected taxes;
- the imposition of, or rapid or unexpected adverse changes in, foreign laws, regulatory requirements or trade policies;
- restrictions on repatriation of earnings or capital or transfers of funds into or out of foreign countries;
- limited protection for intellectual property rights in some jurisdictions;
- inability to obtain adequate insurance;
- difficulty administering internal controls and legal and compliance practices in countries with different cultural norms and business practices;
- the possibility of being subjected to the jurisdiction of foreign courts in connection with legal disputes and the possible inability to subject foreign persons to the jurisdiction of courts in the United States;
- the misinterpretation of local contractual terms, renegotiation or modification of existing long-term supply agreements and enforcement of contractual terms in disputes before local courts;
- the inability to maintain or enforce legal rights and remedies at a reasonable cost or at all; and
- the potential for political unrest, expropriation, nationalization, revolution, war or acts of terrorism in countries in which we operate.

In particular, our operations in China are subject to a variety of specific risks, which may adversely affect our business, including:

- the recent imposition by the United States of proposed tariffs on wind turbines and certain wind turbine components, including wind turbine blades, being imported into the United States;
- the deterioration of the diplomatic and political relationships between the United States and China resulting from such factors as the opposition of the United States to censorship and other policies of the Chinese government, China's growing trade surpluses with the United States and the introduction by the United States of trade restrictions that would impact Chinese imports and any retaliatory measures that could ensue;

- the uncertainty of the Chinese legal regime generally, and in particular in protecting intellectual property and contractual rights, in securing future land use rights, and the recent adoption of new labor, environmental and tax laws, the impacts of which are not yet fully understood; and
- various restrictions on our ability to repatriate profits from China to other jurisdictions. See “Risk Factors—Risks Related to our Business as a Whole—We may have difficulty making distributions and repatriating earnings from our Chinese manufacturing operations, which may also occur in some of our other locations.”

We also operate in developing markets, which have, in the past, experienced, and may in the future experience, social and political unrest. For example, Turkey has experienced problems with domestic terrorist and ethnic separatist groups and attempted military coups. The issue of civil rights for Kurdish citizens remains a potential source of political instability, which may be exacerbated by continuing instability in the Middle East.

In addition, the locations of our manufacturing facilities in Juárez, Mexico and Matamoros, Mexico are, and have been in the past, subject to violence related to drug trafficking, including kidnappings and killings. This could negatively impact our ability to hire and retain personnel, especially senior U.S. managers, to continue to work at these facilities, or disrupt our operation in other ways, which could materially harm our business.

As we continue to operate our business globally, our success will depend, in part, on our ability to anticipate and effectively manage these and other related risks. We may be unsuccessful in developing and implementing policies and strategies that will be effective in managing these risks in each country where we do business or conduct operations. Our failure to manage these risks successfully could materially harm our business, operating results and financial condition.

We may not achieve the long-term growth we anticipate if wind turbine OEMs do not continue to shift from in-house production of wind blades to outsourced wind blade suppliers and if we do not expand our customer relationships and add new customers.

Many wind turbine OEMs rely on in-house production of wind blades for some or all of their wind turbines. Our growth strategy depends in large part on the continued expansion of our relationships with our current wind blade customers, and the addition of new key customers. All of our customers possess the financial, engineering and technical capabilities to produce their own wind blades and many source wind blades from multiple suppliers. Our existing customers may not expand their wind energy operations or, if they do, they may not choose us to supply them with new or additional quantities of wind blades. Our collaborative dedicated supplier model for the manufacture of wind blades is a significant departure from traditional vertically integrated methods. As is typical for rapidly evolving industries, customer demand for new business models is highly uncertain. Although we have entered into long-term supply agreements with customers that also produce wind blades for their wind turbines in-house, we may not be able to maintain these customer relationships or enter into similar arrangements with new customers that produce wind blades in-house in the future. In addition, although GE Wind historically outsourced all of their wind blade production requirements prior to its acquisition of LM, we expect that GE Wind will utilize LM for a substantial percentage of its wind blade production in the future. Our business and growth strategies depend in large part on the continuation of the trend toward outsourcing manufacturing. If that trend does not continue or we are unsuccessful in persuading wind turbine OEMs to shift from in-house production to the outsourcing of their wind blade manufacturing, we may not achieve the long-term growth we anticipate and our market share could be limited.

A drop in the price of energy sources other than wind energy, or our inability to deliver wind blades that compete with the price of other energy sources, may materially harm our business, financial condition and results of operations.

We believe that the decision to purchase wind energy is, to a significant degree, driven by the relative cost of electricity generated by wind turbines compared to the applicable price of electricity from the utility grid and the cost of traditional and other renewable energy sources. Decreases in the prices of electricity from the relevant utility grid or from renewable energy sources other than wind energy, such as solar, would harm the market for wind energy. In particular, a drop in natural gas prices could lessen the appeal of wind-generated electricity.

Technological advancements or the construction of a significant number of power generation plants, including nuclear, coal, natural gas or power plants utilizing other renewable energy technologies, government support for other forms of renewable energy or construction of additional electric transmission and distribution lines could reduce the price of electricity produced by competing methods, thereby making the purchase of wind energy less attractive. For example, in 2017, President Trump signed an executive order that is intended to promote the domestic coal industry, which may make the cost of electricity generated from coal more cost competitive. The ability of energy conservation technologies, public initiatives and government incentives to reduce electricity consumption or support other forms of renewable energy could also lead to a reduction in the price of electricity, which would undermine the attractiveness of wind energy and thus wind turbines, and, ultimately wind blades. If prices for electricity generated by wind turbines are not competitive, our business, financial condition and results of operations may be materially harmed.

If any precision molding and assembly systems needed for our manufacturing process contains a defect or is not fabricated and delivered in a timely manner, our ongoing manufacturing operations, business, financial condition and results of operation may be materially harmed.

We custom fabricate many of the precision molding and assembly systems used in our facilities. Our customers also have the option of using third-party manufacturers to produce their custom tooling. If any piece of equipment fails, is determined to produce nonconforming or defective products or is not fabricated and delivered in a timely manner, whether produced by us or a third party, our wind blade production could be interrupted and we could be subject to contractual penalties, warranty claims, loss of revenues and damage to our customer relationships, among other consequences.

The long sales cycle involved in attracting new customers may make the timing of our revenue difficult to predict and may cause our operating results to fluctuate.

The complexity, expense and long-term nature of our supply agreements generally require a lengthy customer education, evaluation and approval process. It can take us from several months to years to identify and attract new customers, if we are successful at all. This long sales cycle for attracting and retaining new customers subjects us to a number of significant risks that may materially harm our business, results of operation and financial condition over which we have limited control, including fluctuations in our quarterly operating results. In addition, we may incur substantial expenses and devote significant management effort to develop potential relationships that do not result in agreements or revenue and may prevent us from pursuing other opportunities.

We encounter intense competition for limited customers from other wind blade manufacturers, as well as in-house production by wind turbine OEMs, which may make it difficult to enter into long-term supply agreements, keep existing customers and potentially get new customers.

We face significant competition from other wind blade manufacturers, and this competition may intensify in the future. The wind turbine market is characterized by a relatively small number of large OEMs. In addition, a significant percentage of wind turbine OEMs, including most of our current customers, produce some of their own wind blades in-house. As a result, we compete for business from a limited number of customers that outsource the production of wind blades. We also compete with a number of wind blade manufacturers in China, who are growing in terms of their technical capability and aspire to expand outside of China. Many of our competitors have more experience in the wind energy industry, as well as greater financial, technical or human resources than we do, which may limit our ability to compete effectively with them and maintain or improve our market share. Additionally, our long-term supply agreements dedicate capacity at our facilities to our customers, which may also limit our ability to compete if our facilities cannot accommodate additional capacity. If we are unable to compete effectively for the limited number of customers that outsource production of wind blades, our ability to enter into long-term supply agreements with potential new and existing customers may be materially harmed.

We could be affected by increasing competition from new and existing industry participants and industry consolidation.

The markets in which we operate are increasingly competitive and any failure on our part to compete effectively on an ongoing basis could materially harm our business, results of operations or financial condition. The key factors affecting competition in the wind energy industry are the capacity and quality of products, technology, price, the ability to fulfill local market requirements and the scope, cost and location of manufacturing facilities.

Competition in the wind energy industry has intensified in recent years as a result of a number of factors, including international expansion by existing industry participants exploiting new markets, particularly as political will around the issues of global warming and the environment become more prominent to the political agenda in those new markets. There has also been increasing pressure from Asian manufacturers improving the quality and reliability of their technologies, and considering moving out of their local markets and into international cross border transactions. Western wind turbine OEMs have now started using Asian manufacturers for a portion of their wind blades. Market entry by certain large industrial groups, including those previously unconnected to the wind energy market, through acquisitions and license agreements and numerous greenfield establishments in certain markets, also poses a competition risk.

The competitive environment in the wind energy industry may become more challenging in the years ahead, particularly in the event of greater consolidation in the industry, leading to greater market power and “economies of scale” by such market players which translate into being able to offer greater “cost of energy” savings to wind power plant customers. For example, GE completed its acquisition of LM in 2017 and also acquired Alstom S.A.’s power business in 2015; Nordex completed its acquisition of Acciona in 2016 and Gamesa merged with Siemens’ Wind Power in 2017. These transactions or further consolidation in the wind energy industry may have an adverse impact on our business in the future, including, without limitation, reduced demand for our products and services, product innovation, changes in pricing and similar factors, including any competitor’s attempt to duplicate our collaborative dedicated supplier model. Such events could materially harm our business, results of operations, financial condition or prospects.

Significant increases in the prices of raw materials or components that cannot be reflected in the price of our products could negatively affect our operating margins.

The prices of our raw materials and components are subject to price fluctuations resulting from volatility of supply and demand in world markets. Under our long-term supply agreements, our customers generally commit to purchase minimum annual volumes and prices for wind blades are generally set as of the date of our supply agreements and adjusted quarterly, for the cost of raw material and our operating expenses in certain cases. As a result, the competitive nature of the wind blade market and our long-term supply agreements with our customers may delay or prevent us from passing cost increases in raw materials and components on to our customers. Significant increases in the price of raw materials or components used in our manufactured wind blades that cannot be reflected in the price of our products, could negatively affect our operating margins and materially harm our business, operating results or financial condition.

GE’s acquisition of LM Wind Power, our largest competitor, may materially harm our business, financial condition and results of operations and may cause the price of our common stock to decline.

In 2017, GE completed its acquisition of LM Wind Power, our largest competitor. By the end of 2016, we had entered into five supply agreements with GE Wind providing for the supply of wind blades from our Iowa, Mexico, Turkey and our Taicang Port, China facilities. In 2016, we entered into (i) an amended and restated supply agreement for the continued supply of wind blades from our Iowa facility through December 31, 2020, (ii) an amendment to our existing supply agreement for the continued supply of wind blades from our original Juárez, Mexico facility through December 31, 2020 and (iii) a new supply agreement with GE Wind for the supply of incremental wind blades from our second manufacturing facility in Juárez, Mexico through December 31, 2020. GE Wind elected not to renew or extend the Turkey and Taicang Port, China supply agreements, which both expired on December 31, 2017. We expect that GE Wind will utilize LM for a substantial percentage of its wind blade production in the future. As such, GE Wind may not continue to purchase wind blades from us at similar volumes or on as favorable terms in the future. In August 2018, GE Wind did agree to extend our existing supply agreement in

one of our Mexico plants by two years to 2022 and increased the number of wind blade manufacturing lines in that facility from three to five. In addition, GE Wind has agreed to transition to a larger blade model in our Newton, Iowa plant in early 2019 and to eliminate its option to terminate their supply agreement at this location prior to its December 2020 expiration. Unless otherwise terminated or renewed, our supply agreements with GE Wind are in effect until the end of 2020 for our Iowa and one of our Mexico facilities and until the end of 2022 for our other Mexico facility. GE Wind may terminate the Mexico supply agreements with no advance notice and paying us termination fees as set forth in the applicable agreement. In addition, either party may terminate these supply agreements upon a material breach by the other party which goes uncured for 30 days after written notice has been provided. If GE Wind elects to utilize LM or another supplier for more of its wind blade production, reduce the volumes of wind blades it purchases from us or terminates any of our supply agreements, it may materially harm our business, financial condition and results of operations.

Certain of our long-term supply agreements are highly dependent upon a limited number of suppliers of raw materials.

Our ability to perform under certain of our long-term supply agreements is currently, and may continue to be in the future, highly dependent on a limited number of suppliers of raw materials. For instance, our agreements with certain customers require us or our customers to purchase raw materials from a single supplier unless additional suppliers are evaluated and found to satisfy the requirements set out in those agreements. In 2015, for example, our ability to supply wind blades to one of our customers was constrained because our customer, who under our agreement was required to procure a sufficient supply of a specific type of material, was unable to procure the material from a single source supplier. Should any of these suppliers of raw materials experience production delays or shortages, have their operations interrupted or otherwise cease or curtail their operations, this may disrupt or materially harm our business, operating results and financial condition.

Significant increases in the cost of transporting the wind blades we manufacture could negatively affect the demand for our products.

A significant portion of our customers' costs relate to the costs necessary to transport the wind blades we manufacture to their customers' wind farms. Demand for our products could be negatively affected if the costs our customers bear to transport the wind blades we manufacture materially increase.

The nature of our manufacturing processes and unanticipated changes to those processes could significantly reduce our manufacturing yields and product reliability, which could materially harm our business, operating results and financial condition.

The manufacturing of our wind blades involves highly complex and precise processes which may be dictated by our customers' requests requiring production in highly controlled environments. Changes in our manufacturing processes or that are required by our customers could affect product reliability. Furthermore, many of our processes are manual to facilitate production flexibility and compliance with customer requirements. A manually dependent manufacturing process can limit capacity and increase production costs. In some cases, existing manufacturing techniques may be insufficient to achieve the volume or cost targets of our customers. For example, our manufacturing processes may at times require a quantity of raw materials greater than the quantity for which we have contracted, making it difficult for us to achieve the targeted cost levels negotiated with our customers. In order to achieve targeted volume and cost levels, we may need to increase the quantity of raw materials for which we contract or develop new manufacturing processes and techniques. While we continue to devote substantial efforts to the improvement of our manufacturing techniques and processes, we may not achieve manufacturing volumes and cost levels in our manufacturing activities that will fully satisfy customer demands, which could materially harm our business, operating results and financial condition.

Our reserves for warranty expenses might not be sufficient to cover all future costs.

We provide warranties for all of the wind blades and precision molding and assembly systems we produce, including parts and labor, for periods that typically range from two to five years depending on the product sold. If a wind blade is found to be defective during the warranty period as a result of a defect in workmanship or materials, or if we are required to cover remediation expenses or other potential remedies, in addition to our regular warranty

coverage we may need to repair or replace the wind blade (which could include significant transportation, installation and erection costs) at our sole expense. Our estimate of warranty expense requires us to make assumptions about matters that are highly uncertain, including future rates of product failure, repair costs, shipping and handling and de-installation and re-installation costs at customers' sites. Our assumptions could be materially different from the actual performance of our products and these remediation expenses in the future. The expenses associated with wind blade repair and remediation activities can be substantial and may include changes to our manufacturing processes. If our estimates prove materially incorrect, we could incur warranty expenses that exceed our reserves and be required to make material unplanned cash expenditures, which could materially harm our business, operating results and financial condition.

We may not be able to meet our customers' future wind blade supply demands, which may hinder our customer relationships and reputation.

Historically, our existing customers' demand and MW capacity goals have mirrored the anticipated growth of the wind energy industry. Given the importance of wind energy capture, turbine reliability and cost to power producers, the size, quality and performance of wind blades have become highly strategic to our OEM customers. If we are unable to maintain future manufacturing capacity at levels that meet our customers' increasing demands, including with respect to volume, technical specifications, or commercial terms, our existing customers may seek relationships with, or give priority to, other wind blade manufacturers or may use or develop their own internal manufacturing capabilities to meet their increased demand, which could materially harm our business, operating results and financial condition. In addition, our reputation could be materially harmed if we are unable to satisfy the requirements of our customers.

We rely on our research and development efforts to remain competitive, and we may fail to develop on a timely basis new wind blade manufacturing technologies that are commercially attractive or permit us to keep up with customer demands.

The market for wind blades is subject to evolving customer needs and expectations. Our research and development is invested in developing faster and more efficient manufacturing processes in order to build the new wind blades designed by our customers that more effectively capture wind energy and are adaptable to new growth segments of the wind energy market. Research and development activities are inherently uncertain and the results of our in-house research and development may not be successful. In addition, our competition may adopt more advanced technologies or develop wind blades that are more effective or commercially attractive. We believe that our future success will depend in large part upon our ability to be at the forefront of technological innovation in the wind energy industry and to rapidly and cost-effectively adapt our wind blade manufacturing processes to keep pace with changing technologies, new wind blade design and changing customer needs. If we are unable to do so, our business, operating results, financial condition and reputation could be materially harmed.

We depend on third parties for certain construction, maintenance, engineering, transportation, warehousing and logistics services, and failures of those third parties to perform their obligations may in turn impede our ability to perform our obligations.

We contract with third parties for certain services relating to the design, construction and maintenance of various components of our production facilities and other systems. If these third parties fail to comply with their obligations:

- we may experience delays in the completion of new facilities or expansion of existing facilities;
- the facilities may not operate as intended;
- we may be required to recognize impairment charges; or
- we could experience production delays, which could cause us to miss our production capacity targets and breach our long-term supply agreements, which could damage our relationships with our customers and subject us to contractual penalties and contract termination.

Any of these events could have a material adverse effect on our business, operating results or financial condition. Our customers also contract with third parties for the transportation of the products we manufacture. In particular, a significant portion of the goods we manufacture are transported to different countries, which requires customized shipping cradles, sophisticated warehousing, logistics and other resources. If our customers fail to contract with third parties for certain construction, maintenance, engineering, transportation, warehousing and logistics services, or there are any disruptions, delays or failures in these services, this could have a material adverse effect on our business, operating results or financial condition.

Various legislation, regulations and incentives that are expected to support the growth of wind energy in the United States and around the world may not be extended or may be discontinued, phased out or changed, or may not be successfully implemented, which could materially harm wind energy programs and materially decrease demand for the wind blades we manufacture.

The U.S. wind energy industry is dependent in part upon governmental support through certain incentives including federal tax incentives and RPS programs and may not be economically viable absent such incentives. Government-sponsored tax incentive programs including the PTC, and to a lesser extent, the Investment Tax Credit, are expected to support the U.S. growth of wind energy. The PTC provided the owner of a wind turbine placed in operation before January 1, 2015 with a ten year credit against its U.S. federal income tax obligations based on the amount of electricity generated by the wind turbine.

Although the PTC was extended in December 2015 for wind power projects through December 31, 2019, as currently contemplated, the PTC rate is being phased out over the term of the PTC extension. Specifically, as currently contemplated, the PTC will remain at the same rate in effect at the end of 2014 for wind power projects that commence construction by the end of 2016, and thereafter will be reduced by 20% per year in 2017, 2018 and 2019, respectively. The Tax Cuts and Jobs Act (Tax Reform) legislation preserved the PTC, which was a positive outcome for the wind industry. However, while the tax equity market continues to function, Tax Reform has created some near-term uncertainty around the amount of available tax equity financing as financial institutions fully evaluate the impacts of the new tax law.

In 2015, the EPA enacted the Clean Power Plan, which is also intended to promote the growth of renewable energy. However, in 2016, the U. S. Supreme Court issued a stay of the EPA's implementation of the Clean Power Plan until the D.C. Circuit of the U.S. Court of Appeals reviews the merits of multiple lawsuits challenging the legality of the Clean Power Plan. If the Clean Power Plan is not successfully implemented, demand for the wind blades we manufacture may be materially decreased. In addition, in 2017, President Trump signed an executive order that requires, among other things, that the EPA review the Clean Power Plan and publish a rule to either suspend, revise or rescind it.

In addition, many state governments have adopted measures designed to promote wind energy. For example, according to the American Wind Energy Association (AWEA), at the state level, as of December 31, 2018, 29 states, as well as the District of Columbia and Puerto Rico, have implemented RPS programs that mandate that a specific percentage of electricity sales in a state come from renewable energy within a specified period. However, some RPS programs have been challenged and all of them may not continue going forward. These programs have spurred significant growth in the wind energy industry in the United States and a corresponding increase in the demand for our manufactured wind blades. However, although the U.S. government and several state governments have adopted these various programs that are expected to help drive the growth of wind energy, they may approve new or additional programs that might hinder the wind energy industry and therefore negatively impact our business, operating results or financial condition.

China is implementing its 13th 5-Year Plan with a goal of 15% energy from non-fossil fuel sources and targeting 210 GWs of grid-connected wind capacity by 2020, according to its National Development and Reform Commission, and employs preferential feed-in tariff schemes, in addition to local tax-based incentives. Mexico has established strict targets, aiming for 35% renewable energy by 2024 and 50% by 2050, according to WoodMac, which it is facilitating through tax incentives. Large European Union members have renewable energy targets for 2020 of between 13% and 49% of all energy use derived from renewable energy sources, according to WoodMac. Turkey enacted Law No. 5346 in 2005 to promote renewable-based electricity generation within its domestic electricity market by introducing tariffs and purchase obligations for distribution companies requiring purchases

from certified renewable energy producers. The World Bank also provided to Turkey an aggregate of \$600 million of loan proceeds to encourage investors to construct generation plants with renewable energy resources. These programs have spurred significant growth in the wind energy industry internationally and a corresponding increase in the demand for our manufactured wind blades. However, although foreign governments have adopted various programs that are expected to drive the growth of wind energy, they may approve new or additional programs going forward that might hinder the wind energy industry and therefore negatively impact our business as a result. For example, foreign governments may decide to reduce or eliminate these economic incentives for political, financial or other reasons. They may also favor other forms of energy, including current and new sources of energy such as solar, nuclear and hydropower. Foreign governments may also cancel or delay scheduled tender offers or auctions for wind energy projects. For example, the Mexican government recently canceled the country's fourth energy tender which was in the final stages to contract a minimum 5% of national power by 2021.

Because of the long lead times necessary to develop wind energy projects, any uncertainty or delay in adopting, extending or renewing these incentives beyond their current or future expiration dates could negatively impact potential wind energy installations and result in industry volatility. There can be no assurance that the PTC, the Clean Power Plan, tender offers, auctions or other governmental programs or subsidies for renewable energy will remain in effect in their present form or at all, and the elimination, reduction, or modification of these programs or subsidies could materially harm wind energy programs in the United States and international markets and materially decrease demand for the wind blades we manufacture and, in turn, materially harm our business, operating results and financial condition.

We may not be able to obtain, or agree on acceptable terms and conditions for, government tax credits, grants, loans and other incentives for which we have in the past applied or may in the future apply, which may materially harm our business, operating results and financial condition.

We have in the past and may in the future rely, in part, on tax credits, grants, loans and other incentives under U.S. and foreign governmental programs to support the construction of new plants and expansion of existing manufacturing facilities. We may not be successful in obtaining these tax credits, grants, loans and other incentives, and the tax and other incentives that have already been approved may not be continued in the future. Our ability to obtain funds or incentives from government sources is subject to the availability of funds under applicable governmental programs and approval of our applications to participate in these programs. The application process for these funds and other incentives is and will be highly competitive. We may not be able to satisfy the requirements and milestones imposed by the granting authority as conditions to receipt of the funds or other incentives, the timing of the receipt of the funds may not meet our needs, and, even if obtained, we may be unable to successfully execute on our business plan. Moreover, not all of the terms and conditions associated with these incentive funds have been disclosed to us, and once disclosed, there may be terms and conditions with which we are unable to comply or that are commercially unacceptable to us. Further, participation in certain programs may require us to notify the federal government of certain intellectual property we develop and comply with applicable regulations in order to protect our interests in that intellectual property. In addition, these federal governmental programs may require us to spend a portion of our own funds for every incentive dollar we receive or are permitted to borrow from the government and may impose time limits during which we must use the funds awarded to us that we may be unable to achieve. If we are unable to obtain or comply with the terms of these tax credits, grants, loans or other incentives, our business, operating results and financial condition may be harmed.

Adverse weather conditions could impact the wind energy industry in some regions and could materially harm our business, operating results and financial condition.

Our business may be subject to fluctuations in sales volumes due to adverse weather conditions that could delay the erection of wind turbines, the installation of wind blades and the ability of wind turbines to generate electricity efficiently. Moreover, any remediation efforts we could be required to undertake pursuant to wind blade warranties could be delayed or otherwise adversely impacted by poor weather. Although our customer base and manufacturing footprint is geographically diversified, enduring weather patterns or seasonal variations may impact the expansion of the wind energy industry in certain regions. A resulting reduction or delay in demand for the wind blades we manufacture for our customers could materially harm our business, operating results and financial condition.

Our long-term growth and success is dependent upon retaining our senior management and attracting and retaining qualified personnel.

Our growth and success depends to a significant extent on our ability to attract and retain highly qualified research and development, management, manufacturing, marketing and other key personnel including engineers in our various locations. In addition, we rely heavily on our management team, including Steven C. Lockard, our Chief Executive Officer; Joseph G. Kishkill, our Chief Commercial Officer; William E. Siwek, our Chief Financial Officer; and other senior management. The inability to recruit and retain key personnel or the unexpected loss of key personnel may materially harm our business, operating results and financial condition. Hiring those persons may be especially difficult because of the specialized nature of our business and our international operations. If we cannot attract and retain qualified personnel, or if we lose the services of Messrs. Lockard, Kishkill or Siwek, other key members of senior management or other key personnel, our ability to successfully execute our business plan, market and develop our products and serve our customers could be materially and adversely affected. In addition, because of our reliance on our management team, our future success depends, in part, on its ability to identify and develop talent to succeed its senior management. The retention of key personnel and appropriate senior management succession planning will continue to be critical to the successful implementation of our future strategies.

Risks Related to our Transportation Business

Our efforts to expand our transportation business and enter into other strategic markets may not be successful.

While our primary focus has been to manufacture composite wind blades, our strategy is to expand our transportation business and to enter into other strategic markets. In 2018, we expanded our relationship with Proterra and began supplying bus bodies from a new manufacturing facility in Newton, Iowa in addition to our manufacturing facility in Warren, Rhode Island. We experienced start up challenges in connection with the supply of bus bodies to Proterra from our Newton, Iowa manufacturing facility. The expansion of our transportation business and our entry into other strategic markets will require improved execution in terms of our start up activity and ongoing manufacturing performance as well as significant levels of investment. There can be no assurance that our transportation business or other strategic markets will develop as anticipated or that we will have success in any such markets, and if we do not, we may be unable to recover our investment, which could adversely impact our business, financial condition and results of operations, including potentially impairing the value of our goodwill.

We may incur material losses and costs as a result of product liability and warranty claims, litigation and other disputes and claims.

We are exposed to warranty and product liability claims if our transportation products fail to perform as expected. We may in the future be required to participate in a recall of these products or the vehicles incorporating our products. If public safety concerns are raised, we may have to participate in a recall even if our products are ultimately found not to be defective. Vehicle manufacturers have experienced increasing recall campaigns in recent years. Our customers may look to us for contribution when faced with recalls and product liability claims. If our customers demand higher warranty-related cost recoveries, or if our transportation products fail to perform as expected, our business, financial condition and results of operations could materially suffer.

We may also be exposed to product liability claims, warranty claims and damage to our reputation if our transportation products actually or allegedly fail to perform as expected or the use of our products results, or is alleged to result, in bodily injury or property damage. Recalls may also cause us to lose additional business from our customers. Material product defect issues may subject us to recalls of those products and restrictions on bidding on new customer programs.

Risks Related to Our Business as a Whole

We may not be able to manage our future growth effectively, which may materially harm our business, operating results and financial condition.

We expect to continue to expand our business significantly to meet our current and expected future contractual obligations and to satisfy anticipated increased demand for our products. To manage our anticipated expansion, we believe we must scale our internal infrastructure, including establishing additional facilities, improve our operational systems and procedures and manufacturing capabilities, continue to enhance our compliance and quality assurance systems, train and manage our growing employee base, and retain and add to our current executives and

management personnel. Rapid expansion of our operations could place a significant strain on our senior management team, support teams, manufacturing lines, information technology platforms and other resources. Difficulties in effectively managing the budgeting, forecasting and other process control issues presented by any rapid expansion could materially harm our business, prospects, results of operations or financial condition. Our inability to implement operational improvements, generate and sustain increased revenue and manage and control our cost of goods sold and operating expenses could impede our future growth and materially harm our business, operating results and financial condition.

Our financial position, revenue, operating results and profitability are difficult to predict and may vary from quarter to quarter, which could cause our share price to decline significantly.

Our quarterly revenue, operating results and profitability have varied in the past and are likely to vary significantly from quarter to quarter in the future. For example, our quarterly results have ranged from an operating profit of \$21.0 million for the three months ended September 30, 2017 to an operating loss of \$3.6 million for the three months ended December 31, 2018. The factors that are likely to cause these variations include:

- operating and startup costs of new manufacturing facilities;
- wind blade model transitions;
- differing quantities of wind blade production;
- unanticipated contract or project delays or terminations;
- changes in the costs of raw materials or disruptions in raw material supply;
- scrap of defective products;
- warranty expense;
- availability of qualified personnel;
- employee wage levels;
- costs incurred in the expansion of our existing manufacturing capacity;
- volume reduction requests from our customers pursuant to our customer agreements;
- general economic conditions; and
- the complexity of the financial assumptions we must use for forecasting our revenue, profitability and operating results under ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606), the recently enacted new accounting standard for revenue recognition and the impact that unanticipated blade transitions have on those estimates.

As a result, our revenue, operating results and profitability for a particular period are difficult to predict and may decline in comparison to corresponding prior periods regardless of the strength of our business. It is also possible that in some future periods our revenue, operating results and profitability may not meet the expectations of securities analysts or investors. If this occurs, the trading price of our common stock could fall substantially, either suddenly or over time, and our business, operating results and financial condition would be materially harmed.

The fluctuation of foreign currency exchange rates could materially harm our financial results.

Since we conduct a significant portion of our operations internationally, our business is subject to foreign currency risks, including currency exchange rate fluctuations. The exchange rates are affected by, among other things, changes in political and economic conditions. For example, an increase in our Turkey sales and operations will result in a larger portion of our net sales and expenditures being denominated in the Euro and Turkish Lira. Significant fluctuations in the exchange rate between the Turkish Lira and the U.S. dollar, the Turkish Lira and the Euro or the Euro and the U.S. dollar may adversely affect our revenue, expenses, as well as the value of our assets and liabilities. Similarly, an increase in our sales within China may result in a larger portion of our net sales and expenditures being denominated in Chinese Renminbi. The Chinese government controls the procedures by which

the Chinese Renminbi is converted into other currencies, and conversion of the Chinese Renminbi generally requires government consent. As a result, the Chinese Renminbi may not be freely convertible into other currencies at all times. If the Chinese government institutes changes in currency conversion procedures, or imposes restrictions on currency conversion, those actions may materially harm our business, liquidity, financial condition and operating results. In addition, significant fluctuations in the exchange rate between the Chinese Renminbi and U.S. dollars may adversely affect our revenues, expenses as well as the value of our assets and liabilities. However, in Mexico, since all of our net sales and some of our expenditures are denominated in U.S. dollars, an increase in our Mexico sales and operations will result in a larger portion of our cost of goods sold being denominated in the Mexican Peso. Significant fluctuations in the exchange rate between the Mexican Peso and the U.S. dollar may adversely affect our expenses, as well as the value of our assets and liabilities. To the extent our future revenues and expenses are generated outside of the United States in currencies other than the U.S. dollar, including the Euro, the Turkish Lira, the Chinese Renminbi, Mexican Peso or India Rupee, among others, we will be subject to increased risks relating to foreign currency exchange rate fluctuations which could materially harm our business, financial condition and operating results.

Our manufacturing operations and future growth are dependent upon the availability of capital, which may be insufficient to support our capital expenditures.

Our current wind blade manufacturing activities and future growth will require substantial capital investment. For the years ended December 31, 2018 and 2017, our capital expenditures were \$74.7 million and \$51.0 million, respectively, including assets acquired under capital lease in 2018 and 2017 of \$22.0 million and \$6.2 million, respectively. We have recently entered into lease agreements with third parties to lease new manufacturing facilities in China, India and Mexico. Major projects expected to be undertaken include purchasing equipment for our new manufacturing facilities in Yangzhou, China, Chennai, India, Matamoros, Mexico and Juarez, Mexico, and the expansion of our Mexico and Turkey facilities as well as costs to enhance our information technology systems. Our ability to grow our business is predicated upon us making significant additional capital investments to expand our existing manufacturing facilities and build and operate new manufacturing facilities in existing and new markets. We generally estimate that the startup of a new six-line manufacturing facility requires cash for net operating expenses and working capital of between \$20 million to \$25 million and additional capital expenditures primarily for machinery and equipment of between \$30 million to \$35 million. In addition, we estimate our annual maintenance capital expenditures to be between \$1.0 million to \$2.0 million per facility. We may not have the capital to undertake these capital investments. In addition, our capital expenditures may be significantly higher if our estimates of future capital investments are incorrect and may increase substantially if we are required to undertake actions to comply with new regulatory requirements or compete with new technologies. The cost of some projects may also be affected by foreign exchange rates if any raw materials or other goods must be paid for in foreign currency. We cannot assure you that we will be able to raise funds on favorable terms, if at all, or that future financings would not be dilutive to holders of our capital stock. We also cannot assure you that completed capital expenditures will yield the anticipated results. If we raise additional funds by obtaining loans from third parties, the terms of those financing arrangements may include negative covenants, or other restrictions on our business that could impair our operational flexibility, and would require us to fund additional interest expense. If we are unable to obtain sufficient capital at a reasonable cost or at all, we may not be able to expand production sufficiently to take advantage of changes in the marketplace or may be required to delay, reduce or eliminate some or all of our current operations, which could materially harm our business, operating results and financial condition.

As a U.S. corporation with international operations, we are subject to the U.S. Foreign Corrupt Practices Act of 1977, which could impact our ability to compete in certain jurisdictions.

As a U.S. corporation, we are subject to the FCPA, which generally prohibits U.S. companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or keeping business. We have or will soon have manufacturing facilities in China, Mexico, Turkey and India, countries with a fairly high risk of corruption. Those facilities are subject to routine government oversight. In addition, a number of our raw materials and components suppliers are state-owned in China. Moreover, due to our need to import raw materials across international borders, we also routinely have interactions, directly or indirectly, with customs officials. In many foreign countries, under local custom, businesses engage in practices that may be prohibited by the FCPA or other similar laws and regulations. Additionally, we continue to hire employees around the world as we continue to expand. Although we have implemented certain procedures and controls designed to ensure compliance with the

FCPA and similar laws, there can be no guarantee that all of our employees and agents, as well as those companies to which we outsource certain of our business operations, have not taken and will not take actions that violate our policies and the FCPA, which could subject us to fines, penalties, disgorgement, and loss of business, harm our reputation and impact our ability to compete in certain jurisdictions. In addition, these laws are complex and far-reaching in nature, and, as a result, we may be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or the interpretation thereof. Moreover, our competitors may not be subject to the FCPA or comparable legislation, which could provide them with a competitive advantage in some jurisdictions.

We may have difficulty making distributions and repatriating earnings from our Chinese manufacturing operations, which may also occur in some of our other locations.

A material portion of our business is conducted in China. As of December 31, 2018, our China operations had unrestricted cash of \$28.9 million, most of which will be used to fund our future operations in China. Our ability to repatriate funds from China to the United States is subject to a number of restrictions imposed by the Chinese government. We repatriate funds through several technology license contracts and corporate/administrative service agreements. We are compensated quarterly based on agreed upon royalty rates for such intellectual property licenses and quarterly fees for those services. Certain of our subsidiaries are limited in their ability to declare dividends without first meeting statutory restrictions of the People's Republic of China, including retained earnings as determined under Chinese-statutory accounting requirements. Until 50% (\$21.6 million) of registered capital is contributed to a surplus reserve, our Chinese operations can only pay dividends equal to 90% of after-tax profits (10% must be contributed to the surplus reserve). Once the surplus reserve fund requirement is met, we can pay dividends equal to 100% of after-tax profit assuming other conditions are met. At December 31, 2018, the amount of the surplus reserve fund was \$6.5 million. Any inability to make distributions, repatriate earnings or otherwise access funds from our manufacturing operations in China, if and when needed for use outside of China, could materially harm our liquidity and our business.

Effective internal controls are necessary for us to provide reliable financial reports and effectively address fraud risks.

We maintain a system of internal controls to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles (GAAP). The process of designing and implementing effective internal controls is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to establish and maintain a system of internal controls that will be adequate to satisfy the reporting obligations of a public company. The effectiveness of our internal controls depends in part on the cooperation of senior managers worldwide.

Any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met. Any failure to maintain that system, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and harm our business, and lead to our becoming subject to litigation, sanctions or investigations by The NASDAQ Global Market (NASDAQ), the SEC or other regulatory governmental agencies and bodies. Furthermore, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements on a timely basis may harm our stock price.

We have in the past experienced material weaknesses. While we have successfully remediated those material weaknesses, we could experience control deficiencies in the future or identify areas requiring improvement in our internal control over financial reporting.

The state of financial markets and the economy may materially harm our sources of liquidity and capital.

There has been significant recent turmoil and volatility in worldwide financial markets. These conditions have resulted in a disruption in the liquidity of financial markets, and could directly impact us to the extent we need to access capital markets to raise funds to support our business and overall liquidity position. This situation could affect the cost of such funds or our ability to raise such funds. If we were unable to access any of these funding sources when needed, it could materially harm our business, operating results and financial condition.

Our ability to use our net operating loss carry forwards may be subject to limitation and may result in increased future tax liability.

Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the Code), contain rules that limit the ability of a company that undergoes an “ownership change” to utilize its net operating loss and tax credit carry forwards and certain built-in losses recognized in years after the “ownership change”. An “ownership change” is generally defined as any change in ownership of more than 50% of a corporation’s stock over a rolling three-year period by stockholders that own (directly or indirectly) 5% or more of the stock of a corporation, or arising from a new issuance of stock by a corporation. If an ownership change occurs, Section 382 generally imposes an annual limitation on the use of pre-ownership change net operating losses (NOLs), credits and certain other tax attributes to offset taxable income earned after the ownership change. The annual limitation is equal to the product of the applicable long-term tax exempt rate and the value of our common stock immediately before the ownership change. This annual limitation may be adjusted to reflect any unused annual limitation for prior years and certain recognized built-in gains and losses for the year. In addition, Section 383 generally limits the amount of tax liability in any post-ownership change year that can be reduced by pre-ownership change tax credit carryforwards. This could result in increased U.S. federal income tax liability for us if we generate taxable income in a future period. Limitations on the use of NOLs and other tax attributes could also increase our state tax liability. The use of our tax attributes will also be limited to the extent that we do not generate positive taxable income in future tax periods. As a result of these limitations, we may be unable to offset future taxable income (if any) with losses, or our tax liability with credits, before such losses and credits expire. Accordingly, these limitations may increase our federal income tax liability.

We experienced an “ownership change” in June 2018, and it remains possible that future transactions may cause us to undergo one or more ownership changes. As of December 31, 2018, we have U.S. federal NOLs of approximately \$25.8 million and state NOLs of approximately \$118.5 million. The pre-ownership change NOLs existing at the date of change of \$47.7 million are subject to annual limitation. We do not believe that the Section 382 and 383 annual limitation will materially impact our ability to utilize the tax attributes that existed as of the date of the ownership change.

We have U.S. federal and state NOLs. In general, NOLs in one country cannot be used to offset income in any other country and NOLs in one state cannot be used to offset income in any other state. Accordingly, we may be subject to tax in certain jurisdictions even if we have unused NOLs in other jurisdictions. Also, each jurisdiction in which we operate may have its own limitations on our ability to utilize NOLs or tax credit carryovers generated in that jurisdiction. These limitations may increase our federal, state, and/or foreign income tax liability.

Comprehensive tax reform legislation could adversely affect our business, operating results and financial condition.

On December 22, 2017, President Trump signed into law Tax Reform, which significantly revised U.S. tax law by, among other things, lowering the statutory federal corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017, eliminating certain deductions, imposing a mandatory one-time transition tax on certain accumulated earnings and profits of foreign corporate subsidiaries (the Transition Tax), introducing new tax regimes, and changing how foreign earnings are subject to U.S. tax. Tax Reform also includes many new provisions, such as changes to bonus depreciation, changes to deductions for executive compensation, interest expense limitations, net operating loss deduction limitations, a tax on global intangible low-taxed income (GILTI) earned by foreign corporate subsidiaries, a base erosion anti-abuse tax (BEAT), and a deduction for foreign-derived intangible income (FDII).

At December 31, 2018, we completed the accounting for the enactment-date income tax effects of Tax Reform, which resulted in an immaterial impact to our financial statements. Upon further analyses of certain aspects of Tax Reform, and refinement of calculations during 2018, we increased our provisional amount of previously untaxed foreign earnings by \$13.8 million to \$88.1 million. This resulted in no change to U.S. federal income tax expense due to the impact of foreign tax credits. In addition, the provisional net tax expense, which was estimated to be approximately \$ 0.1 million, primarily attributable to the reduction in the federal tax rate, was unchanged. In addition, we have made a policy election to account for any impacts of GILTI tax in the period in which it is incurred.

Our current revolving credit facility with JPMorgan Chase Bank, N.A. Wells Fargo Bank, N.A., Capital One, N.A. and Bank of America N.A. contains, and any future loan agreements we may enter into may contain, operating and financial covenants that may restrict our business and financing activities.

We have a \$150.0 million revolving credit facility (the Credit Facility) with JPMorgan Chase Bank, N.A. Wells Fargo Bank, N.A., Capital One, N.A. and Bank of America N.A., consisting of a \$125.0 million revolving credit facility and a \$25.0 million letter of credit sub-facility. As of December 31, 2018, the aggregate outstanding balance under the Credit Facility was \$90.4 million. The Credit Facility is secured by substantially all of our assets. In addition, from time to time, we enter into various loan, working capital and accounts receivable financing facilities to finance the construction and ongoing operations of our advanced manufacturing facilities and other capital expenditures. The Credit Facility contains various financial covenants and restrictions on our and our operating subsidiaries' excess cash flows and ability to make capital expenditures, incur additional indebtedness and pay dividends or make distributions on, or repurchase, our stock. The operating and financial restrictions and covenants of the Credit Facility, as well as our other existing and any future financing agreements that we may enter into, may restrict our ability to finance our operations, engage in business activities or expand or fully pursue our business strategies. Our ability to comply with these covenants may be affected by events beyond our control, and we may not be able to maintain appropriate minimum leverage ratio and fixed charge coverage ratio requirements in the future. A breach of any of these covenants could result in a default under the applicable loan facility, which could cause all of the outstanding indebtedness under such facility to become immediately due and payable by us and/or enable the lender to terminate all commitments to extend further credit. In addition, if we were unable to repay the outstanding indebtedness upon a default, our lenders could proceed against the assets pledged as collateral to secure that indebtedness.

Our indebtedness may adversely affect our business, results of operations and financial condition.

Our indebtedness could adversely affect our business, results of operations and financial condition by, among other things:

- requiring us to dedicate a substantial portion of our cash flow from operations to pay principal and interest on our debt, which would reduce the availability of our cash flow to fund working capital, capital expenditures, acquisitions, execution of our growth strategy and other general corporate purposes;
- limiting our ability to borrow additional amounts to fund debt service requirements, working capital, capital expenditures, acquisitions, execution of our growth strategy and other general corporate purposes;
- making us more vulnerable to adverse changes in general economic, industry and regulatory conditions and in our business by limiting our flexibility in planning for, and making it more difficult to react quickly to, changing conditions;
- placing us at a competitive disadvantage compared with those of our competitors that have less debt and lower debt service requirements;
- making us more vulnerable to increases in interest rates since some of our indebtedness is subject to variable rates of interest; and
- making it more difficult for us to satisfy our financial obligations.

In addition, we may not be able to generate sufficient cash flow from our operations to repay our outstanding indebtedness when it becomes due and to meet our other cash needs or to comply with the financial covenants set forth therein. If we are not able to pay our debts as they become due, we could be in default of the Credit Facility or other indebtedness. We might also be required to pursue one or more alternative strategies to repay indebtedness, such as selling assets, refinancing or restructuring our indebtedness or selling additional debt or equity securities. We may not be able to refinance our debt or sell additional debt or equity securities or our assets on favorable terms, if at all, and if we must sell assets, it may negatively affect our ability to generate revenues.

Much of our intellectual property consists of trade secrets and know-how that is very difficult to protect. If we experience loss of protection for our trade secrets or know-how, our business would be substantially harmed.

We have a variety of intellectual property rights, including patents, trademarks and copyrights, but much of our most important intellectual property rights consists of trade secrets and know-how and effective intellectual property protection may be unavailable, limited or outside the scope of the intellectual property rights we pursue in the United States and in foreign countries such as China where we operate. Although we strive to protect our intellectual property rights, there is always a risk that our trade secrets or know-how will be compromised or that a competitor could lawfully reverse-engineer our technology or independently develop similar or more efficient technology. We have confidentiality agreements with each of our customers, suppliers, key employees and independent contractors in place to protect our intellectual property rights, but it is possible that a customer, supplier, employee or contractor might breach the agreement, intentionally or unintentionally. For example, we believe a key former employee may have shared some of our intellectual property with a competitor in China and this former employee or the competitor may use this intellectual property to compete with us in the future. It is also possible that our confidentiality agreements with customers, suppliers, employees and contractors will not be effective in preserving the confidential nature of our intellectual property rights. The patents we own could be challenged, invalidated, narrowed or circumvented by others and may not be of sufficient scope or strength to provide us with any meaningful protection or commercial advantage. Once our patents expire, or if they are invalidated, narrowed or circumvented, our competitors may be able to utilize the inventions protected by our patents. Additionally, the existence of our intellectual property rights does not guarantee that we will be successful in any attempt to enforce these rights against third parties in the event of infringement, misappropriation or other misuse, which may materially and adversely affect our business. Because our ability to effectively compete in our industry depends upon our ability to protect our proprietary technology, we might lose business to competitors and our business, revenue, operating results and prospects could be materially harmed if we suffer loss of trade secret and know-how protection or breach of our confidentiality agreements.

If the transfer pricing arrangements we have among our subsidiaries are determined to be inappropriate in one or more jurisdictions, our tax liability may increase.

In many countries, including the United States, we are subject to transfer pricing and other tax regulations designed to ensure that appropriate levels of income are reported as earned in each jurisdiction in which we operate. These regulations require that any international transaction involving associated enterprises be on substantially the same basis as a transaction between unrelated companies dealing at arms' length and that contemporaneous documentation be maintained to support the transfer prices. We have transfer pricing arrangements among our subsidiaries in relation to various aspects of our business. We consider the transactions among our subsidiaries to be substantially on arm's-length terms. If, however, a tax authority in any jurisdiction reviews any of our tax returns and determines that the transfer prices and terms we have applied are not appropriate, or that other income of our affiliates should be taxed in that jurisdiction, we may incur increased tax liability, including accrued interest and penalties, which would cause our tax provision to increase, possibly materially. In addition, if the jurisdiction from which the income is reallocated does not agree with the reallocation, both jurisdictions could tax the same income, resulting in double taxation. If tax authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation, or assess interest and penalties, it would increase our consolidated tax liability, which could materially harm our business, operating results and financial condition.

Our insurance coverage may not cover all risks we face and insurance premiums may increase, which may hinder our ability to maintain sufficient coverage to cover losses we may incur.

We are exposed to risks inherent in the manufacturing of wind blades and other composite structures as well as the construction of our facilities, such as natural disasters, breakdowns and manufacturing defects that could harm persons and damage property. We maintain insurance coverage with licensed insurance carriers that limits our aggregate exposure to certain types of catastrophic losses. In addition, we self-insure for a portion of our claims exposure resulting from workers' compensation and certain events of general liability. We accrue currently for estimated incurred losses and expenses, and periodically evaluate and adjust our claims accrued liability amount to reflect our experience. However, our insurance coverage may not be sufficient to cover the full amount of potential losses. In addition, there are some types of losses such as from warranty, hurricanes, terrorism, wars, or earthquakes where insurance is limited and/or not economically justifiable. If we were to sustain a serious uninsured loss or a loss exceeding the limits of our insurance policies, the resulting costs could have a material adverse effect on our business prospects, results of operations and financial condition. Further, our insurance policies provide for our premiums to be adjusted annually. If the premiums we pay for our policies increase significantly, we may be unable to maintain the same level of coverage we currently carry, or we will incur significantly greater costs to maintain the same level of coverage, including through higher deductibles.

We may be subject to significant liabilities and costs relating to environmental and health and safety requirements.

We are subject to various environmental, health and safety laws, regulations and permit requirements in the jurisdictions in which we operate governing, among other things, health, safety, pollution and protection of the environment and natural resources, the handling and use of hazardous substances, the generation, storage, treatment and disposal of wastes, and the cleanup of any contaminated sites. In June 2018, Iowa OSHA, a division of the Iowa Department of Labor, issued a citation and notification of penalty to us alleging that certain of our workplace practices and conditions at our Newton, Iowa wind blade manufacturing facility had violated the Iowa Occupational Safety and Health Act. Specifically, the citation cited us for multiple alleged violations and proposed that we pay an aggregate penalty of \$0.2 million. In June 2018, we notified Iowa OSHA that we were contesting all of the alleged violations and proposed penalties. In June 2018, the Labor Commissioner of the Iowa Department of Labor subsequently filed a complaint with the State of Iowa Employment Appeal Board, petitioning the appeal board to affirm the citation and notification of penalty that Iowa OSHA issued to us. In July 2018, we then filed a response with the appeal board denying the substantive allegations of the complaint. A hearing date has been set for June 2019 and the matter remains pending.

We have incurred, and expect to continue to incur, capital and operating expenditures to comply with such laws, regulations and permit requirements. While we believe that we currently are in material compliance with all such laws, regulations and permit requirements, any noncompliance may subject us to a range of enforcement measures, including the imposition of monetary fines and penalties, other civil or criminal sanctions, remedial obligations, and the issuance of compliance requirements restricting our operations. In addition, the future adoption of more stringent laws, regulations and permit requirements may require us to make additional capital and operating expenditures. Under certain environmental laws and regulations, liabilities also can be imposed for cleanup of currently and formerly owned, leased or operated properties, or properties to which we sent hazardous substances or wastes, regardless of whether we directly caused the contamination or violated any law. For example, we could have future liability relating to any contamination that remains from historic industrial operations by others at our properties. Additionally, some of our facilities have a long history of industrial operations and, in the past, contaminants have been detected and remediated at one of our facilities in Izmir, Turkey.

There can be no assurance that we will not in the future become subject to compliance requirements, obligations to undertake cleanup or related activities, or claims or proceedings relating to environmental, health or safety matters, hazardous substances or wastes, contaminated sites, or other environmental or natural resource damages, that could impose significant liabilities and costs on us and materially harm our business, operating results or financial condition.

Claims that we infringe, misappropriate or otherwise misuse the intellectual property rights of others could subject us to significant liability and disrupt our business.

Our competitors and third party suppliers of components and raw materials used in our products protect their intellectual property rights by means such as trade secrets and patents. In the future we may be sued for violations of other parties' intellectual property rights, and the risk of this type of lawsuit will likely increase as our size, geographic presence and market share expand and as the number of competitors in our market increases. Any such claims or litigation, whether meritorious or not, could:

- be time-consuming and expensive to defend;
- divert the attention of our technical and managerial resources;
- adversely affect our relationships with current or future customers;
- require us to enter into royalty or licensing agreements with third parties, which may not be available on terms that we deem acceptable;
- prevent us from operating all or a portion of our business or force us to redesign our manufacturing processes or products, which could be difficult, time-consuming and expensive;
- limit the supply or increase the cost of key raw materials and components used in our products;
- subject us to significant liability for damages or result in significant settlement payments; and
- require us to indemnify our customers or suppliers.

Any of the foregoing could disrupt our business and materially harm our operating results and financial condition. In addition, intellectual property disputes have in the past arisen between our customers which negatively affected such customers' demand for wind blades manufactured by us. If such intellectual property disputes involving, or between, one or more of our customers should arise in the future, our business could be materially harmed.

We may form joint ventures, or acquire businesses or assets, in the future, and we may not realize the benefits of those transactions.

We have, in the past, entered into joint ventures with third parties for the manufacture of wind blades. For example, we entered into joint ventures with third parties in both our Mexico and Turkey locations. We may create new or additional joint ventures with third parties, or acquire businesses or assets, in the future that we believe will complement or augment our existing business. We cannot assure you that, following any such joint venture or acquisition, we will achieve the expected synergies to justify the transaction. We may encounter numerous difficulties in manufacturing any new products resulting from a joint venture or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. If we enter into joint ventures or acquire businesses or assets with respect to promising markets, we may not be able to realize the benefit of those joint ventures or acquired businesses assets if we are unable to successfully integrate them with our existing operations and company culture.

Work disruptions resulting from our collective bargaining agreements could result in increased operating costs and materially harm our business, operating results and financial condition.

Certain of our employees in Turkey and Matamoros, Mexico, which in the aggregate represented approximately 35% of our workforce as of December 31, 2018, are covered by collective bargaining arrangements. In 2016, we entered into a three-year collective bargaining agreement with certain of our Turkish employees at our first Turkey facility. The agreement resulted in an average increase in pay of approximately 20% for employees covered by the agreement. In addition, beginning in 2017, these collective bargaining arrangements also covered similarly situated employees at our second Turkey facility. In March 2018, we entered into a collective bargaining agreement with a labor union for certain of our employees in our Matamoros, Mexico facility. In January 2019, thousands of workers employed in dozens of manufacturing facilities in Matamoros, Mexico, went on strike. In general, these workers, who were represented by several different labor unions, demanded a twenty percent increase

in their wage rate and an annual bonus of approximately \$1,700. On February 15, 2019, our manufacturing production employees in Matamoros, Mexico, who are represented by a labor union, went on strike also demanding a 20% increase in their hourly wage rate and the payment of an annual bonus of approximately \$1,700 even though our collective bargaining agreement does not provide for an annual bonus. During this strike, our Matamoros manufacturing facility stopped production from February 15, 2019 until March 2, 2019. On March 2, 2019, we reached an agreement with the labor union to end the strike and we reopened our Matamoros manufacturing facility on March 3, 2019.

Additionally, our other employees working at other manufacturing facilities may vote to be represented by a labor union in the future. There can be no assurance that we will not experience labor disruptions such as work stoppages or other slowdowns by workers at any of our facilities. Should significant industrial action, threats of strikes or related disturbances occur, we could experience further disruptions of operations and increased labor costs in Turkey, Mexico or other locations, which could materially harm our business, operating results or financial condition. Any such work stoppage or slow-down at any of our facilities could also result in additional expenses and possible loss of revenue for us.

Our information technology infrastructure could experience serious failures or disruptions, the failure of which could materially harm our business, operating results and financial condition.

Information technology is part of our business strategy and operations. It enables us to streamline operation processes, facilitate the collection and reporting of business data, and provide for internal and external communications. There are risks that information technology system failures, network disruptions and breaches of data security could disrupt our operations. Any significant disruption or breach may materially harm our business, operating results or financial condition.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and NASDAQ, impose various requirements on public companies, including requiring establishment and maintenance of effective disclosure controls and internal control over financial reporting and changes in corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance. We estimate that we will incur approximately \$3.0 million to \$4.0 million in expenses annually in response to these requirements.

Section 404(a) of the Sarbanes-Oxley Act requires annual management assessments of the effectiveness of our internal control over financial reporting, starting with the second annual report that we file with the SEC. However, as long as we remain an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act), we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act. We will take advantage of these reporting exemptions until we are no longer an emerging growth company and will incur additional expense and time related to these efforts at that time. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of our IPO; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a “large accelerated filer” under SEC rules.

Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives, diverting their attention away from the day-to-day management of our business, and we may not successfully or efficiently manage our transition into a public company. We may also need to upgrade our financial and operating

systems, implement additional financial and management controls, reporting systems and procedures, and add additional accounting, auditing and financial staff with appropriate public company experience and technical accounting knowledge. We have or will soon have operations in China, Mexico, Turkey and India and may have difficulty hiring and retaining employees in these countries who have the experience necessary to implement the kind of management and financial controls that are expected of a U.S. public company. In this regard, for example, China has only recently begun to adopt management and financial reporting concepts and practices like those in the United States. If we are not able to comply with these requirements in a timely manner or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline, and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities, which would require additional financial and management resources.

We are faced with increasingly complex tax issues in many jurisdictions, and we could be obligated to pay additional taxes in various jurisdictions.

We may be subject to taxation in many jurisdictions in the United States and around the world with increasingly complex tax laws, the application of which can be uncertain. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax laws, including increased tax rates or revised interpretations of existing tax laws and precedents, which could harm our liquidity and operating results. In addition, the taxing authorities in these jurisdictions could review our tax returns, or authorities in jurisdictions in which we do not file tax returns could assert that we are subject to tax in those jurisdictions, and in either case could impose additional tax, interest and penalties. Further, the authorities could claim that various withholding requirements apply to us or our subsidiaries or assert that benefits of tax treaties are not available to us or our subsidiaries, any of which could have a material adverse impact on us and the results of our operations.

Risks Related to Ownership of Our Common Stock

The price of our common stock may fluctuate substantially and your investment may decline in value.

The market price of our common stock is likely to be highly volatile and may fluctuate substantially due to many factors, including:

- actual or anticipated fluctuations in our results of operations;
- our ability to provide products due to shipments subject to delayed delivery and deferred revenue arrangements;
- loss of or changes in our relationship with one or more of our customers;
- failure to meet our earnings estimates;
- conditions and trends in the energy and manufacturing markets in which we operate and changes in estimates of the size and growth rate of these markets;
- announcements by us or our competitors of significant contracts, developments, acquisitions, strategic partnerships or divestitures;
- availability of equipment, labor and other items required for the manufacture of wind blades;
- changes in governmental policies;
- additions or departures of members of our senior management or other key personnel;
- changes in market valuation or earnings of our competitors;
- sales of our common stock, including sales of our common stock by our directors and officers or by our other principal stockholders;
- the trading volume of our common stock; and
- general market and economic conditions.

In addition, the stock market in general, including NASDAQ, as well as the market for broader energy and renewable energy companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of particular companies affected. These broad market and industry factors may materially harm the market price of our common stock, regardless of our operating performance. In the past, securities class-action litigation has often been instituted against a company following periods of volatility in the market price of that company's securities. Securities class-action litigation, if instituted against us, could result in substantial costs or damages and a diversion of management's attention and resources, which could materially harm our business and operating results.

A significant portion of our total outstanding shares may be sold into the public market in future sales, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market can occur at any time. These sales, or the market perception that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. As of December 31, 2018, we had 34,678,084 shares of common stock outstanding. All shares can now be sold, subject to any applicable volume limitations under federal securities laws.

In addition, as of December 31, 2018, there were: (i) 2,600,694 shares subject to outstanding options, or 7.5% of our outstanding shares; (ii) 425,876 restricted stock units, or 1.2% of our outstanding shares; (iii) 249,249 performance stock units, or 0.7% of our outstanding shares; and (iv) 5,980,605 shares reserved for future issuance, or 17.2% of our outstanding shares under the Amended and Restated 2015 Stock Option and Incentive Plan (the 2015 Plan) that will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements and Rules 144 and 701 under the Securities Act. We also filed a shelf registration statement in September 2017 for the resale of up to 19,774,751 shares of common stock by certain of our common stockholders. We also have registered all shares of common stock that we may issue under our employee equity incentive plans. These shares can be freely sold in the public market upon issuance and subject to the restrictions imposed on our affiliates under Rule 144.

In the future, we may also issue our securities in connection with investments or acquisitions. The amount of shares of our common stock issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding shares of our common stock. Any issuance of additional securities in connection with investments or acquisitions may result in additional dilution to you and may cause the market price of our common stock to drop significantly.

The exercise of options and warrants and other issuances of shares of common stock or securities convertible into common stock under our equity compensation plans will dilute your interest.

Under our existing equity compensation plans, as of December 31, 2018, we had outstanding options to purchase 2,600,694 shares of our common stock, 425,876 restricted stock units and 249,249 performance stock units to our employees and non-employee directors. From time to time, we expect to grant additional options and other stock awards in accordance with the 2015 Plan. The exercise of options and warrants at prices below the market price of our common stock could adversely affect the price of shares of our common stock. Additionally, any issuance of our common stock that is not made solely to then-existing stockholders proportionate to their interests, such as in the case of a stock dividend or stock split, will result in dilution to each stockholder by reducing their percentage ownership of the total outstanding shares. If we issue options or warrants to purchase our common stock in the future and those options or warrants are exercised or we issue stock, stockholders may experience further dilution.

Our executive officers, directors and their affiliated entities may be able to exercise substantial control over us and could limit the ability of other stockholders to influence the outcome of key transactions, including changes of control.

Our executive officers, directors and their affiliated entities, in the aggregate, beneficially own approximately 24% of the outstanding common stock, based on 34,914,385 shares of common stock outstanding as of January 31, 2019. Our executive officers, directors and their affiliated entities, if acting together, may be able to control or significantly influence all matters requiring approval by our stockholders, including the election of directors and the

approval of mergers or other significant corporate transactions. The concentration of common stock ownership could have the effect of delaying, preventing, or deterring a change of control of our company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company, and could negatively affect the market price of the common stock.

If equity research analysts issue unfavorable commentary or downgrade our common stock, the price of our common stock could decline.

The trading market for our common stock relies in part on the research and reports that equity research analysts publish about us and our business. We do not control the work performed by these analysts. The demand for our common stock could decline if one or more equity analysts downgrade our stock or if those analysts issue unfavorable or inaccurate commentary. If such analysts cease publishing reports about us or our business, we could lose visibility in the market, which in turn could cause our share price and trading volume to decline.

We do not currently intend to pay dividends on the common stock, which may hinder your ability to achieve a return on your investment.

We have never declared or paid any cash dividends on our common stock. The continued operation and expansion of our business will require substantial funding and thus we currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Accordingly, you are not likely to receive any dividends on common stock in the foreseeable future, and your ability to achieve a return on your investment will therefore depend on appreciation in the price of the common stock.

Provisions of Delaware law or our charter documents could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders, and could make it more difficult for you to change management.

Provisions of Delaware law and our amended and restated certificate of incorporation and amended and restated by-laws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions may also prevent or delay attempts by stockholders to replace or remove our current management or members of our board of directors. These provisions include:

- a classified board of directors;
- limitations on the removal of directors;
- advance notice requirements for stockholder proposals and nominations;
- the inability of stockholders to act by written consent or to call special meetings;
- the ability of our board of directors to make, alter or repeal our amended and restated by-laws; and
- the authority of our board of directors to issue preferred stock with such terms as our board of directors may determine.

The affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class, is necessary to amend or repeal the above provisions that are contained in our amended and restated certificate of incorporation. In addition, absent approval of our board of directors, our amended and restated by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which limits business combination transactions with stockholders of 15% or more of our outstanding voting stock that our board of directors has not approved. These provisions and other similar provisions make it more difficult for stockholders or potential acquirers to acquire us without negotiation. These provisions may apply even if some stockholders may consider the transaction beneficial to them.

As a result, these provisions could limit the price that investors are willing to pay in the future for shares of our common stock. These provisions might also discourage a potential acquisition proposal or tender offer, even if the acquisition proposal or tender offer is at a premium over the then current market price for our common stock.

We are an “emerging growth company” and will be able to avail ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict whether investors will find our common stock less attractive because we may rely on these exemptions. If they do, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of our IPO; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a “large accelerated filer” under the rules of the SEC.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we are subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties

Our headquarters is located in Scottsdale, Arizona, and we own or lease various other facilities in the United States, China, Mexico, Turkey, India and Denmark. We believe that our properties are generally in good condition, are well maintained and are generally suitable and adequate to carry out our business at expected capacity for the foreseeable future. The table below lists the locations and square footage for our facilities as of February 28, 2019:

Location	Year Commenced	Leased or Owned	Approximate Square Footage	Description of Use
Newton, IA, United States	2008	Leased	337,922	Wind Blade Manufacturing Facility
Newton, IA, United States	2018	Leased	106,121	Transportation Manufacturing Facility
Dafeng, China	2013	Leased	392,000	Wind Blade Manufacturing Facility
Dafeng, China	2015	Leased	446,034	Wind Blade Manufacturing Facility
Taicang Port, China	2007	Owned	226,542	Wind Blade Manufacturing Facility
Yangzhou, China	2018	Leased	934,133	Wind Blade Manufacturing Facility
Juárez, Mexico	2013	Leased	345,984	Wind Blade Manufacturing Facility
Juárez, Mexico	2016	Leased	358,796	Wind Blade Manufacturing Facility
Juárez, Mexico	2017	Leased	339,386	Wind Blade Manufacturing Facility
Juárez, Mexico	2018	Leased	150,000	Precision Molding Manufacturing Facility
Matamoros, Mexico	2017	Leased	527,442	Wind Blade Manufacturing Facility
Izmir, Turkey	2012	Leased	343,000	Wind Blade Manufacturing Facility
Izmir, Turkey	2015	Leased	397,931	Wind Blade Manufacturing Facility
Fall River, MA, United States	2008	Leased	70,000	Composite Solution Manufacturing and Research and Development Facility
Warren, RI, United States	2004	Leased	91,387	Precision Molding Development and Manufacturing and Research and Development Facility
Santa Teresa, NM, United States	2014	Leased	503,710	Wind Blade Storage Facility
Scottsdale, AZ, United States	2015	Leased	22,508	Corporate Headquarters
Kolding, Denmark	2018	Leased	2,583	Advanced Engineering Center
Taicang City, China	2013	Leased	69,750	Precision Molding Manufacturing Facility
Chennai, India	2019	Leased	776,280	Wind Blade Manufacturing Facility

Item 3. Legal Proceedings

From time to time, we may be involved in disputes or litigation relating to claims arising out of our operations.

In March 2015, a complaint was filed against us in the Superior Court of the State of Arizona (Maricopa County) by a former employee, alleging that we had agreed to compensate the employee upon any future sale of the Company. We filed a motion to dismiss the complaint in April 2015, which was denied. We subsequently filed an answer to the complaint in July 2015 denying the substantive allegations of the complaint. The parties completed court-ordered mediation in December 2015 but were not able to reach a settlement. We filed a motion for summary judgment to dismiss the complaint in April 2016 and the court denied the motion in August 2016. The court has set a trial date for June 2019. We continue to deny the substantive allegations of the complaint and intend to vigorously defend this lawsuit; however, we are currently unable to determine the ultimate outcome of this case.

In August 2015, we entered into a transition agreement with our former Senior Vice President – Asia, pursuant to which that individual transitioned out of this role at the end of 2015 and was to serve in a consulting capacity in 2016 and 2017. In January 2016, following our discovery that the individual had materially violated the terms of the transition agreement, we terminated the consultancy for cause. In April 2016, an arbitration claim was filed in China by the individual with the Taicang Labor and Personnel Dispute Arbitration Committee alleging that we improperly terminated the transition agreement. The individual is demanding that we honor the terms of the transition agreement and pay compensation and fees under the transition agreement, which in the aggregate totals approximately \$2.6 million. In addition, the individual is also challenging the validity of our termination of an option to purchase 164,880 shares of our common stock and 77,760 restricted stock units awarded under the 2015 Plan, which were canceled in January 2016 when the consultancy was terminated. The Taicang Labor and Personnel Dispute Arbitration Committee awarded damages to the individual of approximately \$1.2 million but rejected the claims regarding the termination of the stock option and restricted stock unit awards. We subsequently appealed the arbitration award in favor of the individual to the Taicang Municipal People’s Court, which affirmed the arbitration award in June 2018. We appealed this judgment to an appellate level court in the Jiangsu Province and the appellate court affirmed the judgment of the Taicang Municipal People’s court and we paid the judgement award in the fourth quarter of 2018. We currently are evaluating whether to further appeal this matter.

In June 2018, Iowa OSHA, a division of the Iowa Department of Labor, issued a citation and notification of penalty to us alleging that certain of our workplace practices and conditions at our Newton, Iowa wind blade manufacturing facility had violated the Iowa Occupational Safety and Health Act. Specifically, the citation cited us for multiple alleged violations and proposed that we pay an aggregate penalty of \$0.2 million. In June 2018, we notified Iowa OSHA that we were contesting all of the alleged violations and proposed penalties. In June 2018, the Labor Commissioner of the Iowa Department of Labor subsequently filed a complaint with the State of Iowa Employment Appeal Board, petitioning the appeal board to affirm the citation and notification of penalty that Iowa OSHA issued to us. In July 2018, we then filed a response with the appeal board denying the substantive allegations of the complaint. A hearing date has been set for June 2019 and the matter remains pending.

From time to time, we are party to various lawsuits, claims, and other legal proceedings that arise in the ordinary course of business, some of which are covered by insurance. Upon resolution of any pending legal matters, we may incur charges in excess of presently established reserves. Our management does not believe that any such charges would, individually or in the aggregate, have a material adverse effect on our financial condition, results of operations or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

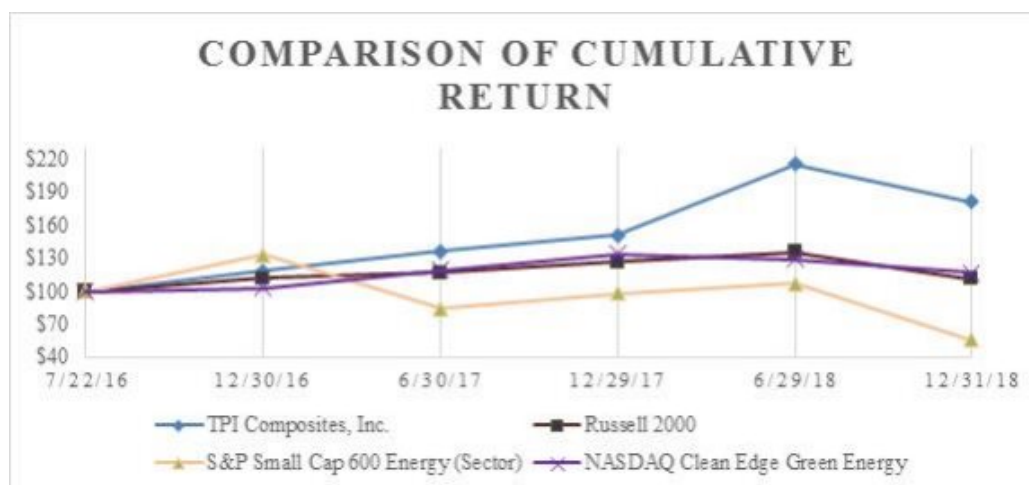
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

On July 22, 2016, our common stock began trading on the NASDAQ Global Market under the symbol “TPIC.” Prior to that time, there was no public market for our stock.

Stock Performance Graph

The following graph and table illustrate the total stockholder return from July 22, 2016 through December 31, 2018, on our common stock, the Russell 2000 Index, the S&P Small Cap 600 Energy (Sector) Index and the NASDAQ Clean Edge Green Energy Index, assuming an investment of \$100.00 on July 22, 2016 including the reinvestment of dividends.



	Base Period					
	7/22/16	12/30/16	6/30/17	12/29/17	6/29/18	12/31/18
TPI Composites, Inc.	\$ 100.00	\$ 118.29	\$ 136.28	\$ 150.88	\$ 215.63	\$ 181.27
Russell 2000	\$ 100.00	\$ 111.89	\$ 116.69	\$ 126.60	\$ 135.47	\$ 111.19
S&P Small Cap 600 Energy (Sector)	\$ 100.00	\$ 133.11	\$ 84.00	\$ 97.60	\$ 107.35	\$ 55.64
NASDAQ Clean Edge Green Energy	\$ 100.00	\$ 102.59	\$ 119.52	\$ 134.16	\$ 128.63	\$ 116.50

Holders

As of January 31, 2019, there were five stockholders of record of our common stock, although there is a much larger number of beneficial owners.

Dividends

We have never declared or paid any cash dividends on shares of our capital stock. We currently intend to retain earnings, if any, to finance the development and growth of our business and do not anticipate paying cash dividends on the common stock in the future. Any payment of any future dividends will be at the discretion of the board of directors, subject to compliance with certain covenants in our loan agreements, after taking into account various factors, including our financial condition, operating results, capital requirements, restrictions contained in

any future financing instruments, growth plans and other factors the board deems relevant. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources” included in Part II, Item 7.

Certain of our subsidiaries are limited in their ability to declare dividends without first meeting statutory restrictions of the People’s Republic of China, including retained earnings as determined under Chinese-statutory accounting requirements. Until 50% (\$21.6 million) of registered capital is contributed to a surplus reserve, our Chinese operations can only pay dividends equal to 90% of after-tax profits (10% must be contributed to the surplus reserve). Once the surplus reserve fund requirement is met, we can pay dividends equal to 100% of after-tax profit assuming other conditions are met. At December 31, 2018, the amount of the surplus reserve fund was \$6.5 million. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations— Liquidity and Capital Resources” included in Part II, Item 7.

Securities Authorized for Issuance under Equity Compensation Plans

The information required in response to Item 201(d) of Regulation S-K is set forth in Part III, Item 12 of this Annual Report on Form 10-K which is incorporated herein by reference.

Recent Sales of Unregistered Securities

None

Use of Proceeds from Registered Securities

On July 21, 2016, our Registration Statement on Form S-1 (File No. 333-212093) was declared effective by the SEC for our IPO whereby we registered an aggregate of 7,187,500 shares of our common stock, including 937,500 shares of our common stock registered for sale by us upon the full exercise of the underwriters’ option to purchase additional shares. On July 27, 2016, we completed our IPO and sold 7,187,500 shares of our common stock at a price to the public of \$11.00 per share. J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC acted as the managing underwriters. The total gross proceeds from the offering to us were \$79.1 million. After deducting underwriting discounts and commissions of \$4.6 million and offering expenses of \$7.3 million, we received \$67.2 million in net proceeds. There has been no material change in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on July 22, 2016 pursuant to Rule 424(b) of the Securities Act. We invested the remaining funds received in registered money market funds.

Issuer Purchases of Equity Securities

None

Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with the information contained in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in Part II, Item 7 of this Annual Report on Form 10-K and the consolidated financial statements and related notes included in Part II, Item 8 of this Annual Report on Form 10-K, in order to understand the factors that may affect the comparability of the financial data presented below.

	Year Ended December 31,				
	2018	2017 ⁽¹⁾	2016 ⁽¹⁾	2015	2014
(in thousands, except per share data)					
Consolidated Income Statement Data:					
Net sales	\$ 1,029,624	\$ 955,198	\$ 769,019	\$ 585,852	\$ 320,747
Cost of sales	882,075	804,099	664,026	528,247	289,528
Startup and transition costs	74,708	40,628	18,127	15,860	16,567
Total cost of goods sold	956,783	844,727	682,153	544,107	306,095
Gross profit	72,841	110,471	86,866	41,745	14,652
General and administrative expenses	48,123	40,373	33,892	14,126	9,175
Income from operations	24,718	70,098	52,974	27,619	5,477
Other income (expense):					
Interest income	181	95	344	161	186
Interest expense	(10,417)	(12,381)	(17,614)	(14,565)	(7,236)
Loss on extinguishment of debt	(3,397)	—	(4,487)	—	(2,946)
Realized loss on foreign currency remeasurement	(13,489)	(4,471)	(757)	(1,802)	(1,743)
Miscellaneous income	4,650	1,191	238	246	539
Total other expense	(22,472)	(15,566)	(22,276)	(15,960)	(11,200)
Income (loss) before income taxes	2,246	54,532	30,698	11,659	(5,723)
Income tax benefit (provision)	3,033	(15,798)	(3,654)	(3,977)	(925)
Net income (loss)	5,279	38,734	27,044	7,682	(6,648)
Net income attributable to preferred stockholders (2)	—	—	5,471	9,423	13,930
Net income (loss) attributable to common stockholders	\$ 5,279	\$ 38,734	\$ 21,573	\$ (1,741)	\$ (20,578)
Weighted-average common shares outstanding:					
Basic (3)	34,311	33,844	17,530	4,238	4,238
Diluted (3)	36,002	34,862	17,616	4,238	4,238
Net income (loss) per common share:					
Basic	\$ 0.15	\$ 1.14	\$ 1.23	\$ (0.41)	\$ (4.86)
Diluted	\$ 0.15	\$ 1.11	\$ 1.22	\$ (0.41)	\$ (4.86)

Year Ended December 31,

	2018	2017 ⁽¹⁾	2016 ⁽¹⁾	2015	2014
Other Financial Information:					
	(in thousands, except other operating information)				
Total billings ⁽⁴⁾	\$ 1,006,541	\$ 941,565	\$ 764,424	\$ 600,107	\$ 362,749
EBITDA ⁽⁴⁾	\$ 42,308	\$ 88,516	\$ 65,641	\$ 37,479	\$ 8,768
Adjusted EBITDA ⁽⁴⁾	\$ 68,173	\$ 100,111	\$ 76,300	\$ 39,281	\$ 13,457
Capital expenditures	\$ 52,688	\$ 44,828	\$ 30,507	\$ 26,361	\$ 18,924
Free cash flow ⁽⁴⁾	\$ (55,946)	\$ 29,772	\$ 29,335	\$ 4,932	\$ (52,141)
Total debt, net of debt issuance costs and discount	\$ 137,623	\$ 121,385	\$ 123,155	\$ 129,346	\$ 120,849
Net cash (debt) ⁽⁴⁾	\$ (53,155)	\$ 24,557	\$ (6,379)	\$ (90,667)	\$ (87,547)
Other Operating Information:					
Sets ⁽⁵⁾	2,423	2,736	2,154	1,609	966
Estimated megawatts ⁽⁶⁾	6,560	6,602	4,920	3,595	2,029
Dedicated manufacturing lines ⁽⁷⁾	55	48	44	34	29
Total manufacturing lines installed ⁽⁸⁾	43	41	33	30	22
Manufacturing lines in startup ⁽⁹⁾	16	9	3	10	9
Manufacturing lines in transition ⁽¹⁰⁾	15	—	3	11	8

- (1) Reflects the impact of the adoption of Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, (Topic 606) effective January 1, 2018. See Note 1 - Recently Issued Accounting Pronouncements - Revenue from Contracts with Customers of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for a further discussion. Prior period information for 2015 and 2014 has not been restated and is, therefore, not comparable to the 2018, 2017 and 2016 information.
- (2) Represents the accrual of dividends on our convertible and senior redeemable preferred shares, the accretion to redemption amounts on our convertible preferred shares and warrant fair value adjustments. Immediately prior to the closing of the IPO, all preferred shares were converted into shares of our common stock and as a result, the accrual of dividends ceased.
- (3) For the years ended December 31, 2017 and 2016, the weighted-average diluted shares outstanding include the conversion on a net issuance basis of our common warrants and the stock options issued under the 2015 Plan and the 2008 Stock Option and Grant Plan. For the years ended December 31, 2015 and 2014, the weighted-average common shares outstanding are the same under the basic and diluted per share calculations as we incurred a net loss in those years.
- (4) See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information and the reconciliations of total billings, EBITDA, adjusted EBITDA, free cash flow and net cash (debt) to net sales, net income (loss), net income (loss), net cash provided by operating activities and total debt, net of debt issuance costs and discount, respectively, the most directly comparable financial measures calculated and presented in accordance with GAAP.
- (5) Number of wind blade sets (which consist of three wind blades) invoiced worldwide in the period. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information.

- (6) Estimated megawatts of energy capacity to be generated by wind blade sets invoiced in the period. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information.
- (7) Number of manufacturing lines that are dedicated to our customers under long-term supply agreements at the end of the period. For the year ended December 31, 2017, includes seven manufacturing lines for GE Wind that were not extended beyond 2017. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information. Dedicated manufacturing lines may be greater than total manufacturing line capacity in instances where we have signed new supply agreements for manufacturing facilities that are under construction or have not yet been built.
- (8) Number of manufacturing lines installed and either in operation, startup or transition at the end of the period. For the year ended December 31, 2017, includes four manufacturing lines for GE Wind that were not extended beyond 2017. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information.
- (9) Number of manufacturing lines in a startup phase during the pre-production and production ramp-up period. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information.
- (10) Number of manufacturing lines that were being transitioned to a new wind blade model during the period. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics Used By Management to Measure Performance” included in Part II, Item 7 of this Annual Report on Form 10-K for more information.

	December 31,				
	2018	2017 (1)	2016 (1)	2015	2014
Consolidated Balance Sheet Data:	(in thousands)				
Cash and cash equivalents	\$ 85,346	\$ 148,113	\$ 119,066	\$ 45,917	\$ 43,592
Total assets	604,855	545,737	436,833	329,920	273,704
Total debt, net of debt issuance costs and discount	137,623	121,385	123,155	129,346	120,849
Total liabilities	383,898	325,183	265,433	322,287	271,448
Total convertible and senior redeemable preferred shares and warrants	—	—	—	198,830	189,349
Total stockholders’ equity (deficit)	220,957	220,554	171,400	(191,197)	(187,093)

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes included in Part II, Item 8 of this Annual Report on Form 10-K and other financial information appearing elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those described in or implied by these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this Annual Report on Form 10-K, particularly those under "Risk Factors" included in Part I, Item 1A of this Annual Report on Form 10-K. Dollars in tabular format are presented in thousands, except as otherwise indicated.

OVERVIEW

Our Company

We are the largest and only independent manufacturer of composite wind blades for the wind energy market with a global manufacturing footprint. We enable many of the industry's leading wind turbine original equipment manufacturers (OEM), who have historically relied on in-house production, to outsource the manufacturing of some of their wind blades through our global footprint of advanced manufacturing facilities strategically located to serve large and growing wind markets in a cost-effective manner. Given the importance of wind energy capture, turbine reliability and cost to power producers, the size, quality and performance of wind blades have become highly strategic to our OEM customers. As a result, we have become a key supplier to our OEM customers in the manufacture of wind blades and related precision molding and assembly systems. We have entered into long-term supply agreements pursuant to which we dedicate capacity at our facilities to our customers in exchange for their commitment to purchase minimum annual volumes of wind blade sets, which consist of three wind blades. This collaborative dedicated supplier model provides us with contracted volumes that generate significant revenue visibility, drive capital efficiency and allow us to produce wind blades at a lower total delivered cost, while ensuring critical dedicated capacity for our customers.

We also leverage our advanced composite technology and history of innovation to supply high strength, lightweight and durable composite products to the transportation market. In November 2017, we signed a five-year supply agreement with Proterra Inc. (Proterra) to supply Proterra Catalyst® composite bus bodies from our existing Rhode Island facility and also from a new manufacturing facility in Newton, Iowa which commenced operations in the second quarter of 2018. In February 2018, we entered into an agreement with Navistar, Inc. (Navistar) to design and develop a Class 8 truck comprised of a composite tractor, trailer and frame rails. This collaborative development project was entered into in connection with Navistar's recent award under the Department of Energy's (DOE) Super Truck II investment program, which is designed to promote fuel efficiency in commercial vehicles. In November 2018, we announced a capital investment of approximately \$11.5 million in 2019 to develop a highly automated pilot manufacturing line for the electric vehicle market. We plan to locate this pilot line adjacent to our second Newton, Iowa location where we manufacture composite bus bodies for Proterra. We expect this investment will enable us to further develop our technology, create defensible product and process IP and demonstrate our capability to manufacture composite components cost effectively at automotive volume rates. We also expect this pilot line will also help our current and potential customers to de-risk the decision-making process to commit to TPI for high-volume manufacturing programs in the future.

Our wind blade and precision molding and assembly systems manufacturing businesses accounted for approximately 95%, 96% and 97% of our total net sales for each of the years ended December 31, 2018, 2017 and 2016, respectively. As of February 28, 2019, our long-term wind and transportation supply agreements provide for minimum aggregate volume commitments from our customers of approximately \$4.0 billion and encourage our customers to purchase additional volume up to, in the aggregate, a total contract value of approximately \$6.8 billion through the end of 2023. In recent years, we have experienced significant growth in our OEM customer base, as according to data from WoodMac, our OEM customers collectively accounted for approximately 54% of the global onshore wind energy market and approximately 90% of that market excluding China over the three years ended December 31, 2017, based on MWs of energy capacity installed. Additionally, our customers represented 99.8% of the U.S. onshore wind turbine market over the three years ended December 31, 2017, based on MWs of energy capacity installed. We believe these figures demonstrate the leading position of our existing OEM customers, as well

as our opportunity to develop relationships with new OEM customers as additional OEMs seek ing to capitalize on the benefits of outsourced wind blade manufacturing while maintaining high quality customization and dedicated capacity. We believe that these trends will help us to strengthen our current customer base, grow our business worldwide, increase our revenue and improve our business prospects.

We divide our business operations into four geographic operating segments—the United States (U.S.), Asia, Mexico and Europe, the Middle East, Africa and India (EMEAI), as follows:

- Our U.S. segment includes (1) the manufacturing of wind blades at our Newton, Iowa plant, (2) the manufacturing of precision molding and assembly systems used for the manufacture of wind blades at our Warren, Rhode Island facility, (3) the manufacturing of composite solutions for the transportation industry, which we also conduct at our existing Rhode Island facility as well as at our Fall River, Massachusetts facility and at a second manufacturing facility in Newton, Iowa which commenced operations in the second quarter of 2018, (4) wind blade inspection and repair services in North America, (5) our advanced engineering center in Kolding, Denmark, which provides technical and engineering resources to our manufacturing facilities and (6) our corporate headquarters, the costs of which are included in general and administrative expenses.
- Our Asia segment includes (1) the manufacturing of wind blades at our facilities in Taicang Port, China; Dafeng, China and Yangzhou, China, the latter of which we expect to commence operations in the first quarter of 2019, (2) the manufacturing of precision molding and assembly systems at our Taicang City, China facility and (3) wind blade inspection and repair services.
- Our Mexico segment manufactures wind blades from three facilities in Juárez, Mexico and a facility in Matamoros, Mexico at which we commenced operations in the third quarter of 2018. In November 2018, we entered into a new lease agreement with a third party for a new precision molding and assembly systems manufacturing facility in Juárez, Mexico and we expect to commence operations at this facility in the first quarter of 2019. This segment also performs wind blade inspection and repair services.
- Our EMEAI segment manufactures wind blades from two facilities in Izmir, Turkey and also performs wind blade inspection and repair services. In February 2019, we entered into a new lease agreement with a third party for the construction of a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020.

Key Trends Affecting our Business

We have identified the following material trends affecting our business:

- The wind power generation industry has grown rapidly and expanded worldwide over the last five years to meet global demand for electricity and the expanded use of renewable energy. Our sales of wind blades to our wind turbine customers have grown rapidly over the last several years in response to these trends. We expect our revenue growth rate in 2019 to accelerate considerably due to the full year of operations in our plant in Matamoros, Mexico, the planned opening of our Yangzhou, China manufacturing facility in the first quarter of 2019 and the completion of multiple blade model transitions and startups in 2018. We expect to continue to have a high level of manufacturing lines in transition and startup in 2019. We have entered into long-term supply agreements with customers in the United States, China, Mexico, Turkey and India that expire between 2020 and 2023.
- Many governments are shifting from feed-in tariffs to auction-based tenders as a means of promoting the development and growth of renewable energy sources such as wind energy. As a result of this shift, our wind turbine OEM customers have experienced intense pricing pressure with respect to the sale of their turbines together with increased competitive pricing from solar energy. To date, these pricing pressures have not materially affected our results of operations, however, if these pricing pressures continue, we may be required to reduce our margins or choose to pass on the savings obtained from manufacturing cost reductions and productivity improvements to our OEM customers to remain competitive.

- During the last several years, wind turbine OEMs generally have increasingly outsourced the production of wind blades and other key components to specialized manufacturers to meet this increasing global demand for wind energy in a cost-effective manner in new and growing markets. That shift, together with the overall expansion of the wind power generation industry, has increased our addressable market. Given our growth in production, we have hired several thousand new employees globally in the past two years. In addition, we have expanded our wind turbine OEM customer base from one to six OEM customers since 2013, capitalizing on the growth and expansion of the wind energy generation industry generally as well as the specific trend of most wind turbine OEMs increasing the outsourcing of the manufacturing of wind blades for growth and diversification.
- Despite the trend of wind turbine OEMs increasingly outsourcing their wind blade manufacturing production requirements, we expect GE Wind, our second largest customer, to insource a greater percentage of its wind blade production requirements as a result of its 2017 acquisition of LM, our largest competitor. Although GE Wind did not extend our Turkey and Taicang Port, China supply agreements which expired at the end of 2017, since then we have extended our existing supply agreement in one of our Mexico plants by two years to 2022 and have increased the number of lines under contract with GE Wind by two in that facility. In addition, GE Wind has agreed to transition to a larger blade model in our Newton, Iowa plant in early 2019 and to eliminate its option to terminate their supply agreement at this location prior to its December 2020 expiration.
- Changing customer demands, including shifts to bigger wind turbines with larger wind blades, have driven some of our customers to require us to transition to new wind blade models one or two times during the term of a long-term supply agreement. Although we generally receive transition payments to compensate us for certain costs incurred during these transitions, these payments may not always fully cover the transition costs and lost margin. As a result, these transitions have and may continue to have a short-term, negative impact on our consolidated operating results and cash flows. However, our precision molding and assembly manufacturing business generally increases as we transition to larger wind blade models and larger wind blades generally have a higher average selling price, so that the transition to larger wind blades may increase our net sales over time. As we transition to new wind blade models, we also often extend our existing supply agreements.
- The financial performance of certain of our smaller wind turbine OEM customers has deteriorated over the last twelve months. As a result, we expect that in certain instances overall demand for our wind turbine blades from these customers may decline in 2019 compared to our prior forecasts. However, we expect this decline in demand to be offset by an increase in demand from certain of our other larger OEM customers.
- We expect that a substantial portion of our future revenue growth will be derived from our international operations. We have expanded our manufacturing facilities internationally over the last several years, including opening facilities in Mexico, Turkey and China, to meet the needs of our customers. In February 2019, we entered into a new lease agreement with a third party for the construction of a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020. The portion of our net sales that were derived from our international operations increased to 84% for the year ended December 31, 2018, from 80% for the year ended December 31, 2017 and 75% for the year ended December 31, 2016. We believe we will continue to derive a substantial portion of our future net sales growth from our international operations.
- Our long-term supply agreements with our customers generally encourage our customers to maximize the volume of wind blades they purchase from us, since purchasing less than a specified amount triggers higher pricing, as well as provide downside protection for us through minimum annual volume commitments. Some of our long-term supply agreements also provide for annual sales price reductions reflecting assumptions regarding increases in our manufacturing efficiency and productivity. We work to continue to drive down the cost of materials and production through innovation and global sourcing, a portion of the benefit of which we share with our customers contractually, further strengthening our deep customer relationships. Wind blade pricing is based on annual commitments of volume as established in the customer's contract, with orders less than committed volume resulting in additional costs per wind blade to customers. Orders in excess of annual commitments may but generally do not result in discounts to customers from the contracted price for the committed volume. Customers may utilize early payment discounts, which are reported as a reduction of revenue at the time the discount is taken.

- The long-term supply agreements we sign with our customers provide us with significant visibility of future production demands due in part to the annual minimum purchase commitments of our customers contained in those agreements. These annual minimum purchase commitments generally require our customers to purchase a negotiated percentage of the manufacturing capacity that we have agreed to dedicate to them. Generally, this percentage begins at 100% of the manufacturing capacity that we have dedicated to a particular customer for the first few years of the supply agreement, and the percentage declines over time in subsequent years according to the terms of the agreement, but generally remains above 50%. It is our experience that our customers will generally order wind blades from us in a volume that exceeds (sometimes substantially) the annual minimum purchase commitments contained in our supply agreements, particularly in the later years of a supply agreement when the annual minimum purchase commitment percentage declines. As of February 28, 2019, our long-term wind and transportation supply agreements provide for minimum aggregate volume commitments from our customers of approximately \$ 4.0 billion and encourage our customers to purchase additional volume up to, in the aggregate, a total contract value of approximately \$ 6.8 billion through the end of 2023. As noted elsewhere in this Annual Report on Form 10-K, some of our long-term supply agreements are subject to early termination by our customers if our customers pay an early termination fee. Additionally, some of our contracts allow our customers to reduce the number of lines under contract without penalty, prior to the end of the contract term. We caution investors that the annual minimum purchase commitments in our long-term supply agreements can understate the forecasted net sales that we are likely to generate in a given period or periods if all of our long-term supply agreements remain in place and pricing remains materially unchanged, and they could potentially overstate the forecasted net sales that we are likely to generate in a given period or periods if one or more of our agreements were to be terminated by our customers for any reason or the number of lines under contract are reduced. See “Business—Wind Blade Long-Term Supply Agreements” included in Part 1, Item 1A of this Annual Report on Form 10-K for additional information.
- We expect our new manufacturing facilities to generally generate operating losses in their first 18 months of operations due to production and overhead expenses as they initially operate far below capacity during the pre-production and production ramp up periods. As a result, this generally has a negative impact on our results of operations during these ramp-up periods. In addition, construction of new facilities and expansion of existing facilities, including the fabrication of precision molding and assembly systems to outfit those facilities, is complex and involves inherent risks. For planning purposes, we generally estimate that the startup of a new six-line manufacturing facility requires cash for net operating expenses and working capital of between \$20 million to \$25 million. We also estimate that capital expenditures, primarily for machinery and equipment, of between \$30 million to \$35 million will be required. We expect to incur significant startup costs and expenses during 2019 in connection with the planned opening of our new manufacturing facility in Chennai, India and at our Yangzhou, China; Matamoros, Mexico and Newton, Iowa facilities.
- As a public company, we incur significant legal, accounting and other expenses. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and NASDAQ, impose various requirements on public companies, including requiring establishment and maintenance of effective disclosure controls and internal control over financial reporting and changes in corporate governance practices. We estimate that we will incur approximately \$3.0 million to \$4.0 million in expenses annually in response to these requirements.

COMPONENTS OF RESULTS OF OPERATIONS

Net Sales

We recognize revenue from manufacturing services over time as the customer controls the product as it is produced, and we may not use or sell the product to fulfill other customers' contracts. Net sales include amounts billed to our customers for our products, including wind blades, precision molding and assembly systems and other products and services, as well as the progress towards the completion of the performance obligation for products in progress, which is determined on a ratio of direct costs incurred to date in fulfillment of the contract to the total estimated direct costs required to complete the performance obligation.

Cost of Goods Sold

Cost of goods sold includes the costs we incur at our production facilities to make products saleable on both products invoiced during the period as well as products in progress towards the completion of each performance obligation. Cost of goods sold includes such items as raw materials, direct and indirect labor and facilities costs, including purchasing and receiving costs, plant management, inspection costs, production process improvement activities, product engineering and internal transfer costs. In addition, all depreciation associated with assets used in the production of our products is also included in cost of goods sold. Direct labor costs consist of salaries, benefits and other personnel related costs for employees engaged in the manufacture of our products and services.

Startup costs represent the unallocated overhead related to both new manufacturing facilities as well as new lines in existing manufacturing facilities. Transition costs represent the unallocated overhead related to the transition of wind blade models. The startup and transition costs are primarily fixed overhead costs incurred during the period production facilities are under-utilized while transitioning wind blade models and ramping up manufacturing, which are not allocated to products and are expensed as incurred. The cost of sales for the initial wind blades from a new model manufacturing line is generally higher than when the line is operating at optimal production volume levels due to inefficiencies during ramp-up related to labor hours per blade, cycle times per blade and raw material usage. Additionally, manufacturing overhead as a percentage of net sales is generally higher during the period in which a facility is ramping up to full production capacity due to underutilization of the facility. Manufacturing overhead at each of our facilities includes virtually all indirect costs (including share-based compensation costs) incurred at the plants, including engineering, finance, information technology, human resources and plant management.

General and Administrative Expenses

General and administrative expenses are primarily incurred at our corporate headquarters and our research facilities and include salaries, benefits and other personnel related costs for employees engaged in research and development, engineering, finance, internal audit, information technology, human resources, business development, global operational excellence, global supply chain, in-house legal and executive management. Other costs include outside legal and accounting fees, risk management (insurance), share-based compensation and certain other administrative and global resources costs. In addition, realized losses on the sale of receivables, under supply chain financing arrangements with our customers, and realized gains and losses on the sale of other assets at our manufacturing facilities are also included in general and administrative expenses.

The research and development expenses incurred at our Warren, Rhode Island and Fall River, Massachusetts locations as well as at our Kolding, Denmark advanced engineering center are included in general and administrative expenses. For the years ended December 31, 2018, 2017 and 2016, total research and development expenses totaled \$0.8 million, \$1.6 million and \$1.5 million, respectively.

For the year ended December 31, 2018, the realized loss on the sale of certain receivables, on a non-recourse basis under supply chain financing arrangements with our customers, to financial institutions and the realized loss on the sale of other assets at our manufacturing facilities totaled \$4.6 million. There were no such amounts for the years ended December 31, 2017 and 2016.

Other Income (Expense)

Other income (expense) consists primarily of interest expense on our debt borrowings and the amortization of deferred financing costs on such borrowings. Other income (expense) also includes realized gains and losses on foreign currency remeasurement, interest income, losses on extinguishment of debt and miscellaneous income and expense.

During the year ended December 31, 2018, we expensed \$2.0 million of deferred financing costs and \$1.4 million of prepayment penalties related to the refinancing of our previous credit facility within the caption “Loss on extinguishment of debt” in the accompanying consolidated income statements. During the year ended December 31, 2016, we expensed \$2.4 million of deferred financing costs and \$2.1 million of prepayment penalties related to the refinancing of our previous credit facility with the caption “Loss on extinguishment of debt” in the accompanying consolidated income statements.

Income Tax Benefit (Provision)

Income tax benefit (provision) consists of federal, state, provincial, local and foreign taxes based on income in jurisdictions in which we operate, including in the U.S., China, Mexico and Turkey. The composite income tax rate, tax provisions, deferred tax assets and liabilities vary according to the jurisdiction in which the income or loss arises. Tax laws are complex and subject to different interpretations by management and the respective governmental taxing authorities, and require us to exercise judgment in determining our income tax provision, our deferred tax assets and liabilities and the valuation allowance recorded against our net deferred tax assets

Net Income Attributable to Preferred Stockholders

Net income attributable to preferred stockholders relates to the accrual of dividends on our convertible and senior redeemable preferred shares, the accretion to redemption amounts on our convertible preferred shares and warrant fair value adjustment. Immediately prior to the closing of our IPO, all preferred shares were converted into shares of our common stock and as a result, the accrual of dividends ceased.

KEY METRICS USED BY MANAGEMENT TO MEASURE PERFORMANCE

In addition to measures of financial performance presented in our consolidated financial statements in accordance with GAAP, we use certain other financial measures and operating metrics to analyze our performance. These “non-GAAP” financial measures consist of total billings, EBITDA, adjusted EBITDA, free cash flow and net cash (debt), which help us evaluate growth trends, establish budgets, assess operational efficiencies, oversee our overall liquidity, and evaluate our overall financial performance. The key operating metrics consist of wind blade sets invoiced, estimated megawatts of energy capacity for wind blade sets invoiced, manufacturing lines dedicated to customers under long-term supply agreements, total manufacturing lines installed, manufacturing lines in startup and manufacturing lines in transition, which help us evaluate our operational performance. We believe that these measures are useful to investors in evaluating our performance.

Key Financial Measures

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Net sales	\$ 1,029,624	\$ 955,198	\$ 769,019
Total billings (1)	\$ 1,006,541	\$ 941,565	\$ 764,424
Net income	\$ 5,279	\$ 38,734	\$ 27,044
EBITDA (1)	\$ 42,308	\$ 88,516	\$ 65,641
Adjusted EBITDA (1)	\$ 68,173	\$ 100,111	\$ 76,300
Capital expenditures	\$ 52,688	\$ 44,828	\$ 30,507
Free cash flow (1)	\$ (55,946)	\$ 29,772	\$ 29,335
Total debt, net of debt issuance costs and discount	\$ 137,623	\$ 121,385	\$ 123,155
Net cash (debt) (1)	\$ (53,155)	\$ 24,557	\$ (6,379)

Key Operating Metrics

	<u>Year Ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
Sets (2)	2,423	2,736	2,154
Estimated megawatts (3)	6,560	6,602	4,920
Dedicated manufacturing lines (4)	55	48	44
Total manufacturing lines installed (5)	43	41	33
Manufacturing lines in startup (6)	16	9	3
Manufacturing lines in transition (7)	15	—	3

- (1) See below for more information and a reconciliation of total billings, EBITDA, adjusted EBITDA, free cash flow and net cash (debt) to net sales, net income (loss), net income (loss), net cash provided by operating activities and total debt, net of debt issuance costs and discount, respectively, the most directly comparable financial measures calculated and presented in accordance with GAAP.
- (2) Number of wind blade sets (which consist of three wind blades) invoiced worldwide in the period.
- (3) Estimated megawatts of energy capacity to be generated by wind blade sets invoiced in the period.
- (4) Number of wind blade manufacturing lines that are dedicated to our customers under long-term supply agreements at the end of the period. Dedicated manufacturing lines may be greater than total manufacturing line capacity in instances where we have signed new supply agreements for manufacturing facilities that are under construction or have not yet been built.
- (5) Number of wind blade manufacturing lines installed and either in operation, startup or transition at the end of the period.
- (6) Number of wind blade manufacturing lines in a startup phase during the pre-production and production ramp-up period.
- (7) Number of wind blade manufacturing lines that were being transitioned to a new wind blade model during the period.

Net sales and total billings

We define total billings, a non-GAAP financial measure, as the total amounts we have invoiced our customers for products and services for which we are entitled to payment under the terms of our long-term supply agreements or other contractual agreements. We monitor total billings, and believe it is useful to present to investors as a supplement to our GAAP measures, because we believe it more directly correlates to sales activity and operations based on the timing of actual transactions with our customers, which facilitates comparison of our performance between periods and provides a more timely indication of trends in sales. Under GAAP, total net sales recognized on products in production represents the total amount that we have recognized as revenue under the cost-to-cost method for services performed during the period under our long-term supply agreements. Under our long-term supply agreements with our customers, we invoice our customers for wind blades once the blades pass certain acceptance procedures and title passes to our customers. Our customers generally pay us for the wind blades between 15 to 90 days after receipt of the invoice based on negotiated payment terms. However, in many cases, our customers request that we store their wind blades until they are ready to assemble wind turbines at a particular wind farm project. We have no control over when our customers decide to ship wind blades from our storage sites, and in some cases, our customers have stored large numbers of their wind blades on our sites for six months or more. However, we are contractually entitled to payment for those wind blades and, accordingly, invoice them when the blades are placed in storage.

Our use of total billings has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are:

- Total billings includes wind blades that have not been delivered and for which we are responsible if damage occurs to them while we hold them; and
- Other companies, including companies in our industry, may define total billings differently, which reduces its usefulness as a comparative measure.

EBITDA and adjusted EBITDA

We define EBITDA, a non-GAAP financial measure, as net income or loss plus interest expense (including losses on extinguishment of debt and net of interest income), income taxes and depreciation and amortization. We define adjusted EBITDA as EBITDA plus any share-based compensation expense, plus or minus any realized gains or losses from foreign currency remeasurement, plus or minus any gains or losses from the sale of assets. Adjusted EBITDA is the primary metric used by our management and our board of directors to establish budgets and operational goals for managing our business and evaluating our performance. In addition, the Credit Facility contains minimum EBITDA (as defined in the Credit Facility) covenants with which we must comply. We monitor adjusted EBITDA as a supplement to our GAAP measures, and believe it is useful to present to investors, because we believe that it facilitates evaluation of our period-to-period operating performance by eliminating items that are not operational in nature, allowing comparison of our recurring core business operating results over multiple periods unaffected by differences in capital structure, capital investment cycles and fixed asset base. In addition, we believe adjusted EBITDA and similar measures are widely used by investors, securities analysts, ratings agencies, and other parties in evaluating companies in our industry as a measure of financial performance and debt-service capabilities.

Our use of adjusted EBITDA has limitations as an analytical tool and you should not consider it in isolation or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are:

- adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- adjusted EBITDA does not reflect our cash expenditures for capital equipment or other contractual commitments;
- adjusted EBITDA does not reflect the interest expense or the cash requirements necessary to service interest or principal payments on our indebtedness;
- adjusted EBITDA does not reflect losses on extinguishment of debt relating to prepayment penalties, termination fees and the write off of any remaining debt discount and debt issuance costs upon the repayment or refinancing of our debt;
- adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and adjusted EBITDA does not reflect capital expenditure requirements relating to the future need to augment or replace those assets;
- adjusted EBITDA does not reflect the realized gains or losses from foreign currency remeasurement in our international operations;
- adjusted EBITDA does not reflect share-based compensation expense on equity-based incentive awards to our officers, employees, directors and consultants;
- adjusted EBITDA does not reflect the realized gains or losses on the sale of assets; and
- other companies, including companies in our industry, may calculate EBITDA and adjusted EBITDA differently, which reduces their usefulness as comparative measures.

In evaluating EBITDA and adjusted EBITDA, you should be aware that in the future, we will incur expenses similar to the adjustments noted in this presentation. Our presentations of EBITDA and adjusted EBITDA should not be construed as suggesting that our future results will be unaffected by these expenses or any unusual or non-recurring items. When evaluating our performance, you should consider EBITDA and adjusted EBITDA alongside other financial performance measures, including our net income (loss) and other GAAP measures.

Free cash flow

We define free cash flow as net cash provided by operating activities less capital expenditures. We believe free cash flow is a useful measure for investors because it portrays our ability to generate cash from our business for purposes such as repaying maturing debt and funding business acquisitions.

Net cash (debt)

We define net cash (debt) as total unrestricted cash and cash equivalents less the total principal amount of debt outstanding. The total principal amount of debt outstanding is comprised of the long-term debt and current maturities of long-term debt as presented in our consolidated balance sheets adding back any debt issuance costs and discounts. We believe that the presentation of net cash (debt) provides useful information to investors because our management reviews net cash (debt) as part of our oversight of overall liquidity, financial flexibility and leverage. Net cash (debt) is important when we consider opening new plants and expanding existing plants, as well as for capital expenditure requirements.

The following table reconciles our non-GAAP key financial measures to the most directly comparable GAAP measures:

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Net sales	\$ 1,029,624	\$ 955,198	\$ 769,019
Change in gross contract assets	(15,011)	(13,437)	(10,094)
Foreign exchange impact (1)	(8,072)	(196)	5,499
Total billings	<u>\$ 1,006,541</u>	<u>\$ 941,565</u>	<u>\$ 764,424</u>
Net income	\$ 5,279	\$ 38,734	\$ 27,044
Adjustments:			
Depreciation and amortization	26,429	21,698	13,186
Interest expense (net of interest income)	10,236	12,286	17,270
Loss on extinguishment of debt	3,397	—	4,487
Income tax provision (benefit)	(3,033)	15,798	3,654
EBITDA	42,308	88,516	65,641
Share-based compensation expense	7,795	7,124	9,902
Realized loss on foreign currency remeasurement	13,489	4,471	757
Realized loss on sale of assets	4,581	—	—
Adjusted EBITDA	<u>\$ 68,173</u>	<u>\$ 100,111</u>	<u>\$ 76,300</u>

- (1) Represents the effect of the difference in the exchange rates used by our various foreign subsidiaries when converted to U.S. dollars on the net sales and contract assets as of period-end.

Free cash flow is reconciled as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Net cash provided by (used in) operating activities	\$ (3,258)	\$ 74,600	\$ 59,842
Less capital expenditures	(52,688)	(44,828)	(30,507)
Free cash flow	<u>\$ (55,946)</u>	<u>\$ 29,772</u>	<u>\$ 29,335</u>

Net cash (debt) is reconciled as follows:

	December 31,		
	2018	2017	2016
	(in thousands)		
Cash and cash equivalents	\$ 85,346	\$ 148,113	\$ 119,066
Less total debt, net of debt issuance costs	(137,623)	(121,385)	(123,155)
Less debt issuance costs	(878)	(2,171)	(2,290)
Net cash (debt)	<u>\$ (53,155)</u>	<u>\$ 24,557</u>	<u>\$ (6,379)</u>

Key Operating Metrics

Key operating metrics consist of sets invoiced, estimated megawatts of energy capacity for wind blade sets invoiced, dedicated manufacturing lines, total manufacturing lines installed, manufacturing lines in startup and manufacturing lines in transition.

Sets represents the number of wind blade sets, consisting of three wind blades each, which we invoiced worldwide during the period. We monitor sets and believe that presenting sets to investors is helpful because we believe that it is the most direct measurement of our manufacturing output during the period. Sets primarily impact net sales and total billings

Estimated megawatts are the energy capacity to be generated by wind blade sets invoiced in the period. Our estimate is based solely on name-plate capacity of the wind turbine on which the wind blades we manufacture are expected to be installed. We monitor estimated megawatts and believe that presenting estimated megawatts to investors is helpful because we believe that it is a commonly followed measurement of energy capacity across our industry and provides an indication of our share of the overall wind blade market.

Dedicated manufacturing lines are the number of wind blade manufacturing lines that we have dedicated to our customers pursuant to our long-term supply agreements at the end of the period. We monitor dedicated manufacturing lines and believe that presenting this metric to investors is helpful because we believe that the number of dedicated manufacturing lines is the best indicator of demand for the wind blades we manufacture from customers under our long-term supply agreements in any given period. We believe that dedicated manufacturing lines provide an understanding of additional capacity within an existing facility. Dedicated manufacturing lines primarily impacts our net sales and total billings.

Total manufacturing lines installed represents the number of wind blade manufacturing lines installed and either in operation, startup or transition at the end of the period. We believe that total manufacturing lines installed provides an understanding of the number of manufacturing lines installed and either in operation, startup or transition.

Manufacturing lines in startup is the number of wind blade manufacturing lines that were in a startup phase during the pre-production and production ramp up period, pursuant to the opening of a new manufacturing facility, the expansion of an existing manufacturing facility or the addition of new manufacturing lines in an existing manufacturing facility. We monitor and present this metric because we believe it helps investors to better understand the impact of the startup phase of our new manufacturing facilities on our gross profit and net income.

Manufacturing lines in transition is the number of wind blade manufacturing lines that were being transitioned to a new wind blade model during the period. We monitor and present this metric because we believe it helps investors to better understand the impact of these transitions on our gross profit and net income.

RESULTS OF OPERATIONS

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

The following table summarizes certain information relating to our operating results (in thousands) and related percentage of net sales for the years ended December 31 that have been derived from our consolidated financial statements:

	2018		2017	
Net sales	\$ 1,029,624	100.0%	\$ 955,198	100.0%
Cost of sales	882,075	85.7%	804,099	84.2%
Startup and transition costs	74,708	7.2%	40,628	4.2%
Total cost of goods sold	956,783	92.9%	844,727	88.4%
Gross profit	72,841	7.1%	110,471	11.6%
General and administrative expenses	48,123	4.7%	40,373	4.2%
Income from operations	24,718	2.4%	70,098	7.4%
Other expense	(22,472)	(2.2)%	(15,566)	(1.6)%
Income before income taxes	2,246	0.2%	54,532	5.8%
Income tax benefit (provision)	3,033	0.3%	(15,798)	(1.7)%
Net income	\$ 5,279	0.5%	\$ 38,734	4.1%

Net sales for the year ended December 31, 2018 increased by \$74.4 million or 7.8% to \$1,029.6 million compared to \$955.2 million in the same period in 2017. Net sales of wind blades increased by 4.8% to \$933.3 million for the year ended December 31, 2018 as compared to \$890.5 million in the same period in 2017. The increase was primarily driven by higher average sales prices due to the mix of wind blade models produced during the year ended December 31, 2018 compared to the same period in 2017. This increase was partially offset by a 12% decrease in the number of wind blades produced year over year due to the number of transitions and startups during the 2018 period as well as the loss of volume from two contracts that expired at the end of 2017. Net sales from the manufacturing of precision molding and assembly systems during the year ended December 31, 2018 increased to \$48.9 million from \$27.6 million in the same period in 2017. This increase was primarily the result of our customers requiring more precision molding and assembly systems from our tooling facilities during the year ended December 31, 2018 as compared to the same period in 2017 as a result of the blade transitions and startups during 2018. Additionally, there was a \$10.4 million increase in transportation and other sales during the year ended December 31, 2018 as compared to the same period in 2017. Total billings for the year ended December 31, 2018 increased by \$65.0 million or 6.9% to \$1,006.5 million compared to \$941.6 million in the same period in 2017. The impact of the fluctuating U.S. dollar against the Euro at our Turkey operations and the Chinese Renminbi at our China operations on consolidated net sales and total billings for the year ended December 31, 2018 as compared to 2017 was not significant.

Total cost of goods sold for the year ended December 31, 2018 was \$956.8 million and included \$61.9 million related to startup costs in our new plants in Turkey, Mexico, Iowa and China, the startup costs related to a new customer in Taicang, China and \$12.8 million of transition costs due to the number of transitions during the period. This compares to total cost of goods sold for the year ended December 31, 2017 of \$844.7 million and included \$40.6 million related to startup costs in our new plants in Turkey and Mexico and the startup of new wind blade models for certain of our customers in Turkey and Dafeng, China. Cost of goods sold as a percentage of net sales increased by approximately five percentage points during the year ended December 31, 2018 as compared to the same period in 2017, driven by the \$34.1 million increase in startup and transition costs, partially offset by the impact of savings in raw material costs. The impact of the fluctuating U.S. dollar against the Euro, Turkish Lira, Chinese Renminbi and Mexican Peso decreased consolidated cost of goods sold by 2.2% for the year ended December 31, 2018 as compared to 2017.

General and administrative expenses for the year ended December 31, 2018 totaled \$48.1 million, or \$43.5 million excluding the realized loss on the sale of certain receivables, on a non-recourse basis under supply chain financing arrangements with our customers, to financial institutions and the realized loss on the sale of other assets at our manufacturing facilities totaling \$4.6 million, as compared to \$40.4 million of general and administrative expenses for the same period in 2017. As a percentage of net sales, general and administrative expenses, excluding the realized loss on the sale of certain receivables and other assets, was 4.2% for the year ended December 31, 2018, comparable to the same period in 2017. The increase in expenses was primarily driven by additional costs incurred related to the implementation of ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606), costs related to the Sarbanes-Oxley Act and our advanced engineering center, increased personnel costs from filling our key global positions to support our growth and diversification strategy as well as additional depreciation expense related to our enhanced corporate infrastructure.

Other expense totaled \$22.5 million for the year ended December 31, 2018 as compared to \$15.6 million for the same period in 2017. The increase was primarily due to a \$9.0 million increase in the realized losses on foreign currency remeasurement primarily related to the change in the Turkish Lira during 2018 and the expensing of \$3.4 million of deferred financing costs and prepayment penalties related to the refinancing of our previous credit facility in 2018, partially offset by a \$3.5 million increase in miscellaneous income for the year ended December 31, 2018 as compared to the same period in 2017.

Income taxes reflected a benefit of \$3.0 million for the year ended December 31, 2018 as compared to a provision of \$15.8 million for the same period in 2017. The decrease was primarily due to the reduction in pretax income and the reversal of our valuation allowances related to our U.S. federal deferred tax assets in the 2018 period.

Net income for the year ended December 31, 2018 was \$5.3 million as compared to \$38.7 million in the same period in 2017. The decrease was primarily due to the reasons set forth above. Diluted earnings per share for the year ended December 31, 2018 was \$0.15 compared to \$1.11 for the year ended December 31, 2017.

Segment Discussion

The following table summarizes our net sales and income (loss) from operations by our four geographic operating segments for the years ended December 31:

	<u>2018</u>	<u>2017</u>
Net Sales	(in thousands)	
U.S.	\$ 163,716	\$ 191,025
Asia	306,255	372,520
Mexico	268,756	206,563
EMEA	290,897	185,090
Total net sales	<u>\$ 1,029,624</u>	<u>\$ 955,198</u>
	<u>2018</u>	<u>2017</u>
Income (Loss) from Operations	(in thousands)	
U.S.	\$ (67,357)	\$ (33,231)
Asia	28,147	76,332
Mexico	12,154	14,430
EMEA	51,774	12,567
Total income from operations	<u>\$ 24,718</u>	<u>\$ 70,098</u>

U.S. Segment

Net sales in the year ended December 31, 2018 decreased by \$27.3 million or 14.3% to \$163.7 million compared to \$191.0 million in the same period in 2017. Net sales of wind blades decreased to \$126.3 million during the year ended December 31, 2018 from \$164.9 million in the same period of 2017. The decrease was primarily due to an 8% reduction in the number of wind blades produced in the year ended December 31, 2018 as compared to the same period in 2017 and a decline in the average sales prices of the same wind blade models delivered in both periods as a result of savings in raw material costs, a portion of which we share with our customer. Net sales from the manufacturing of precision molding and assembly systems during the year ended December 31, 2018 were \$5.0 million compared to \$8.4 million during the same period in 2017. Additionally, there was a \$14.6 million increase in transportation and other sales during the year ended December 31, 2018 as compared to 2017.

The loss from operations for the year ended December 31, 2018 was \$67.4 million as compared to a loss of \$33.2 million in the same period in 2017. These amounts include corporate general and administrative costs of \$43.5 million and \$40.4 million for the years ended December 31, 2018 and 2017, respectively. The increase in the corporate general and administrative costs was primarily driven by additional costs incurred related to the implementation of Topic 606, costs related to the Sarbanes-Oxley Act and our advanced engineering center, increased personnel costs from filling our key global positions to support our growth and diversification strategy as well as additional depreciation expense related to our enhanced corporate infrastructure. The operating results were also unfavorably impacted by the startup costs related to our second Iowa facility and the lower wind blade volume discussed above.

Asia Segment

Net sales in the year ended December 31, 2018 decreased by \$66.3 million or 17.8% to \$306.3 million compared to \$372.5 million in the same period in 2017. Net sales of wind blades were \$264.4 million in the year ended December 31, 2018 as compared to \$346.2 million in the same period of 2017. The decrease was primarily due to a 36% decrease in the number of wind blades produced during the year ended December 31, 2018 compared to the same period in 2017 primarily due to the expiration of a contract at the end of 2017 and the delayed startup of a new customer in 2018. This decrease was partially offset by a higher average sales prices due to the mix of wind blade models produced during the year ended December 31, 2018 compared to the same period in 2017. Net sales from the manufacturing of precision molding and assembly systems totaled \$36.6 million during the 2018 period compared to \$18.4 million during the same period in 2017. The impact of the fluctuating U.S. dollar against the Chinese Renminbi had a favorable impact of 0.6% on net sales during the year ended December 31, 2018 as compared to the same period in 2017.

Income from operations in the Asia segment for the year ended December 31, 2018 was \$28.1 million as compared to \$76.3 million in the same period in 2017. This decrease was driven by the startup costs incurred at our Taicang Port plant for a new customer and lower wind blade volume discussed above. The fluctuating U.S. dollar against the Chinese Renminbi had a favorable impact of 1.1% on cost of goods sold for the year ended December 31, 2018 as compared to the comparable 2017 period.

Mexico Segment

Net sales in the year ended December 31, 2018 increased by \$62.2 million or 30.1% to \$268.8 million compared to \$206.6 million in the same period in 2017. The increase reflects an 18% net increase in overall wind blade volume driven by greater volume at our second and third Mexico plants, partially offset by a decrease in wind blade volume at our first Mexico plant. These increases were also impacted by an increase in the average sales prices of wind blades due to a change in the mix of wind blades between the two comparable periods.

Income from operations in the Mexico segment for the year ended December 31, 2018 was \$12.2 million as compared to \$14.4 million in the same period in 2017. The decrease was driven by higher startup costs related to our new facility in Matamoros, Mexico, partially offset by the overall increase in wind blade volume noted above as well as from savings in raw material costs and production efficiencies.

EMEA I Segment

Net sales during the year ended December 31, 2018 increased by \$105.8 million or 57.2% to \$290.9 million compared to \$185.1 million in the same period in 2017. The increase was driven by a 77% increase in wind blade production in our second Turkey plant, partially offset by a 11% decrease in wind blade volume at our first Turkey plant as a result of the December 31, 2017 conclusion of our supply agreement with GE. Other items having a favorable impact on net sales include overall higher average sales prices of wind blades delivered in the comparative periods due to the beginning of wind blade production in our second Turkey plant and the mix of wind blades sold during the period. The fluctuation of the U.S. dollar relative to the Euro had a 1.0% unfavorable impact on net sales in the year ended December 31, 2018 as compared to 2017.

The income from operations in the EMEAI segment for the year ended December 31, 2018 was \$51.8 million as compared to \$12.6 million in the same period in 2017. The increase was primarily driven by the wind blade production in our second Turkey plant, improved operating efficiency at our first Turkey plant and savings in raw materials. The fluctuation of the U.S. dollar relative to the Turkish Lira and Euro had a 7.5% favorable impact on cost of goods sold in the year ended December 31, 2018 as compared to 2017.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

The following table summarizes certain information relating to our operating results (in thousands) and related percentage of net sales for the years ended December 31 that has been derived from our consolidated financial statements:

	2017		2016	
Net sales	\$ 955,198	100.0%	\$ 769,019	100.0%
Cost of sales	804,099	84.2%	664,026	86.3%
Startup and transition costs	40,628	4.2%	18,127	2.4%
Total cost of goods sold	844,727	88.4%	682,153	88.7%
Gross profit	110,471	11.6%	86,866	11.3%
General and administrative expenses	40,373	4.2%	33,892	4.4%
Income from operations	70,098	7.4%	52,974	6.9%
Other expense	(15,566)	-1.6%	(22,276)	-2.9%
Income before income taxes	54,532	5.8%	30,698	4.0%
Income tax provision	(15,798)	-1.7%	(3,654)	-0.5%
Net income	38,734	4.1%	27,044	3.5%
Net income attributable to preferred stockholders	—	0.0%	5,471	0.7%
Net income attributable to common stockholders	\$ 38,734	4.1%	\$ 21,573	2.8%

Net sales for the year ended December 31, 2017 increased by \$186.2 million or 24.2% to \$955.2 million compared to \$769.0 million in the same period in 2016. Net sales of wind blades increased by 25.0% to \$890.5 million for the year ended December 31, 2017 as compared to \$712.4 million in the same period in 2016. The increase was primarily driven by a 30% increase in the number of wind blades produced during 2017 as compared to 2016. This increase was partially offset by lower average sales price due to geographic mix, blade mix and the result of savings in raw material costs, a portion of which we share with our customers. Net sales from the manufacturing of precision molding and assembly systems during the year ended December 31, 2017 decreased to \$27.6 million from \$35.9 million in the same period in 2016. This decrease was primarily the result of reduced demand from our customers for precision molding and assembly systems from our Rhode Island facility. Additionally, there was a \$16.3 million increase in transportation and other sales during the year ended December 31, 2017 as compared to the same period in 2016. Total billings for the year ended December 31, 2017 increased by \$177.1 million or 23.2% to \$941.6 million compared to \$764.4 million in the same period in 2016. The impact of the fluctuating U.S. dollar against the Euro at our Turkey operations and the Chinese Renminbi at our China operations on consolidated net sales and total billings for the year ended December 31, 2017 as compared to 2016 was not significant.

Total cost of goods sold for the year ended December 31, 2017 was \$ 844.7 million and included \$ 40.6 million related to startup costs in our new plants in Turkey and Mexico and the startup of new wind blade models for certain of our customers in Turkey and Dafeng, China. This compares to total cost of goods sold for the year ended December 31, 2016 of \$6 82 . 2 million which included aggregate costs of \$18.1 million related to startup costs in our new plants in Mexico and Turkey as well as the transition of wind blade models in our original plant in Mexico . Cost of goods sold as a percentage of net sales remained consistent during the year ended December 31, 2017 as compared to the same period in 2016 driven by improved operating efficiency in China and the impact of savings in raw material costs and foreign currency fluctuations, offset by higher operating costs in our Turkey and Mexico plants due to the startup costs incurred with the opening of new plants in both those segments . The impact of the fluctuating U.S. dollar against the Euro, Turkish Lira, Chinese Renminbi and Mexican Peso decreased consolidated cost of goods sold by 1.7% for the year ended December 31, 2017 as compared to 2016.

General and administrative expenses for the year ended December 31, 2017 totaled \$40.4 million as compared to \$33.9 million for the same period in 2016. As a percentage of net sales, general and administrative expenses were 4.2% for the year ended December 31, 2017, down from 4.4% in the same period in 2016. The increase in expenses was primarily driven by additional costs incurred related to the implementation of Topic 606 , costs related to the Sarbanes-Oxley Act and our secondary public offering, increased personnel costs from filling our key global positions to support our growth and diversification strategy, partially offset by a \$2.3 million decrease in share-based compensation costs in the 2017 period as compared to the same period in 2016, which was the period in which we recorded the expense from the original grant date of the awards.

Other expense totaled \$15.6 million for the year ended December 31, 2017 as compared to \$22.3 million for the same period in 2016. The decrease was primarily due a \$9.7 million decrease in interest expense, related to the expensing of \$4.5 million of deferred financing costs and prepayment penalties related to the refinancing of our previous credit facility in 2016 and the decrease in 2017 non-cash interest expense due to the write off in 2016 of the beneficial conversion feature and deferred financing costs under our previous credit facility. In addition, there was a \$1.0 million increase in miscellaneous income, partially offset by a \$3.7 million increase in realized losses on foreign currency remeasurement for the year ended December 31, 2017 as compared to the same period in 2016.

Income taxes reflected a provision of \$15.8 million for the year ended December 31, 2017 as compared to a provision of \$3.7 million for the same period in 2016. The higher effective tax rate in 2017 was primarily due to the improved operating results in China and Turkey and the mix of earnings among jurisdictions year over year.

Net income for the year ended December 31, 2017 was \$38.7 million, as compared to \$27.0 million in the same period in 2016. The increase was primarily due to the reasons set forth above.

Net income attributable to preferred stockholders was \$5.5 million during the year ended December 31, 2016 and there was none in the 2017 period as following our IPO in July 2016, all of the previously outstanding preferred shares were converted into common shares.

Net income attributable to common stockholders increased to \$38.7 million during the year ended December 31, 2017 from \$21.6 million in the same period in 2016. This increase was primarily due to the improved operating results discussed above as well as the decrease in the net income attributable to preferred stockholders. Diluted earnings per share for the year ended December 31, 2017 was \$1.11 compared to \$1.22 for the year ended December 31, 2016.

Segment Discussion

The following table summarizes our net sales and income (loss) from operations by our four geographic operating segments for the years ended December 31:

	2017	2016
Net Sales	(in thousands)	
U.S.	\$ 191,025	\$ 191,863
Asia	372,520	309,561
Mexico	206,563	128,020
EMEA	185,090	139,575
Total net sales	<u>\$ 955,198</u>	<u>\$ 769,019</u>
	2017	2016
Income (Loss) from Operations	(in thousands)	
U.S.	\$ (33,231)	\$ (19,154)
Asia	76,332	67,127
Mexico	14,430	10,060
EMEA	12,567	(5,059)
Total income from operations	<u>\$ 70,098</u>	<u>\$ 52,974</u>

U.S. Segment

Net sales in the year ended December 31, 2017 decreased by \$0.8 million or 0.4% to \$191.0 million compared to \$191.9 million in the same period in 2016. Net sales of wind blades increased to \$164.9 million during the year ended December 31, 2017 from \$163.9 million in the same period of 2016. The increase was primarily due to a 7% increase in the number of wind blades produced in the year ended December 31, 2017 as compared to the same period in 2016, mostly offset by a decline in the average sales prices of the same wind blade models delivered in both periods as a result of savings in raw material costs, a portion of which we share with our customers. Net sales from the manufacturing of precision molding and assembly systems during the year ended December 31, 2017 were \$8.4 million compared to \$17.7 million during the same period in 2017. The decrease was the result of our customers requiring less precision molding and assembly systems from our Rhode Island facility during the year ended December 31, 2017 as compared to the same period in 2016. Additionally, there was a \$7.5 million increase in non-wind related net sales, primarily transportation sales, during the year ended December 31, 2017 as compared to 2016.

The loss from operations for the year ended December 31, 2017 was \$33.2 million as compared to \$19.2 million in the same period in 2016. These amounts include corporate general and administrative costs of \$40.4 million and \$33.9 million for the years ended December 31, 2017 and 2016, respectively. The increase in the corporate general and administrative costs was primarily driven by additional costs incurred related to the implementation of Topic 606, costs related to the Sarbanes-Oxley Act and our secondary public offering, increased personnel costs from filling our key global positions to support our growth and diversification strategy, partially offset by a \$2.3 million decrease in share-based compensation costs during the year ended December 31, 2017 as compared to the same period in 2016. The operating results were also unfavorably impacted by slightly lower gross profit on wind blades delivered during the year ended December 31, 2017 as compared to the 2016 period as well as the lower precision molding and assembly system volume discussed above during the year ended December 31, 2017 as compared to the same period in 2016.

Asia Segment

Net sales in the year ended December 31, 2017 increased by \$63.0 million or 20.3% to \$372.5 million compared to \$309.6 million in the same period in 2016. Net sales of wind blades were \$346.2 million in the year ended December 31, 2017 as compared to \$287.4 million in the same period in 2016. The increase was primarily the result of a 30% increase in the number of wind blades produced during the year ended December 31, 2017 compared to the same period in 2016. These increases were partially offset by a change in the mix of wind blade models sold,

lower average sales prices of the same wind blades sold in both periods due to savings in raw material costs, a portion of which we share with our customers. Net sales from the manufacturing of precision molding and assembly systems during the year ended December 31, 2017 were \$18.4 million compared to \$17.8 million during the same period in 2016. The impact of the fluctuating U.S. dollar against the Chinese Renminbi had an unfavorable impact of 0.8% on net sales during the year ended December 31, 2017 as compared to the same period in 2016.

Income from operations in the Asia segment for the year ended December 31, 2017 was \$76.3 million as compared to \$67.1 million in the same period in 2016. In addition to the factors noted above, the increase in income from operations reflects higher gross margins on wind blade sales driven by operating efficiencies as well as lower overhead costs in the 2017 period as compared to 2016. The fluctuating U.S. dollar against the Chinese Renminbi had a favorable impact of 1.5% on cost of goods sold for the year ended December 31, 2017 as compared to the comparable 2016 period.

Mexico Segment

Net sales in the year ended December 31, 2017 increased by \$78.5 million or 61.4% to \$206.6 million compared to \$128.0 million in the same period in 2016. The increase reflects an increase in wind blade volume at our first Mexico plant and the beginning of wind blade production in our second and third plants, partially offset by lower average sales prices of wind blades delivered in both periods.

Income from operations in the Mexico segment for the year ended December 31, 2017 was \$14.4 million as compared to \$10.1 million in the same period in 2016. The increase was largely driven by the increase in wind blade volume in the 2017 period as compared to 2016 and operating efficiencies at our first Mexico plant, as well as from savings in raw material costs, partially offset by the startup losses incurred at two of our new Mexico facilities. The fluctuating U.S. dollar against the Mexican Peso on cost of goods sold for the year ended December 31, 2017 as compared to the comparable 2016 period was not significant.

EMEA Segment

Net sales during the year ended December 31, 2017 increased by \$45.5 million or 32.6% to \$185.1 million compared to \$139.6 million in the same period in 2016. The increase was driven by the beginning of wind blade production in our second Turkey plant, partially offset by a 24% decrease in wind blade volume at our first Turkey plant as a result of GE Wind only purchasing the minimum volume required under its supply agreement after its decision to not renew its supply agreement with us beyond 2017. As a result, we accelerated production for GE in 2017 and completed 100% of GE volume by the end of June 2017 to enable us to accelerate the transition of those manufacturing lines to two new manufacturing lines for another customer in the second half of 2017. Other items having a favorable impact on net sales include the mix of wind blades sold during the period as well as overall higher average sales prices of wind blades delivered due to the beginning of wind blade production in our second Turkey plant in the period as compared to 2016. The fluctuating U.S. dollar against the Euro had a favorable effect on net sales of 1.8% for the year ended December 31, 2017 as compared to the comparable 2016 period.

The income from operations in the EMEA segment for the year ended December 31, 2017 was \$12.6 million as compared to a loss of \$5.1 million in the same period in 2016. The increase was primarily driven by the wind blade production in our second Turkey plant, improved operating efficiencies at our first Turkey plant, savings in raw material costs and a warranty reserve provided in 2016 related to one of its customers to resolve a potential warranty claim arising from wind blades primarily manufactured in 2014. The fluctuation of the U.S. dollar relative to the Turkish Lira and Euro had a 5.4% favorable impact on cost of goods sold in the year ended December 31, 2017 as compared to 2016.

LIQUIDITY AND CAPITAL RESOURCES

Our primary needs for liquidity have been, and in the future will continue to be, capital expenditures, new facility startup costs, the impact of transitions, working capital and debt service costs. Our capital expenditures have been primarily related to machinery and equipment for new facilities or facility expansions. Historically, we have funded our working capital needs through cash flows from operations, the proceeds received from our credit

facilities and from proceeds received from the issuance of stock. As discussed below, during 2017 we completed a secondary public offering of common stock for which we received no proceeds and during 2016 we completed an initial public offering of common stock for which we received net proceeds of \$67.2 million. During the years ended December 31, 2018, 2017 and 2016, we had net repayments of financing arrangements of \$8.9 million, \$8.1 million and \$15.4 million, respectively. As of December 31, 2018 and 2017, we had \$138.5 million and \$123.6 million in outstanding indebtedness, excluding debt issuance costs, respectively. As of December 31, 2018, we had an aggregate of \$79.8 million of remaining capacity and \$77.2 million of remaining availability under our various credit facilities. Working capital requirements have increased as a result of our overall growth and the need to fund higher accounts receivable and inventory levels as our business volumes have increased as well as the increased level of transitions. Based upon current and anticipated levels of operations, we believe that cash on hand, available credit facilities and cash flow from operations will be adequate to fund our working capital and capital expenditure requirements and to make required payments of principal and interest on our indebtedness over the next twelve months.

In July 2016, we completed an IPO of 7,187,500 shares of our common stock at a public offering price of \$11.00 per share, which included 937,500 shares issued pursuant to the underwriters' over-allotment option. We received \$67.2 million in proceeds, net of underwriting discounts and offering expenses and intend to use the net proceeds from the public offering for our working capital and other general corporate purposes, including financing existing manufacturing operations, expansion in existing and new geographies and repayment of a customer advance. Immediately prior to the closing of the IPO, all shares of the then-outstanding redeemable preferred shares converted into an aggregate of 21,110,204 shares of common stock and the redeemable preferred share warrants were converted on a net issuance basis into 120,923 shares of common stock. In addition, concurrent with the closing of the IPO, certain subordinated convertible promissory notes in the aggregate principal and interest amount of \$11.9 million were converted into an aggregate of 1,079,749 shares of common stock at the public offering price of \$11.00 per share. Prior to the IPO, in July 2016 we also consummated a 360-for-1 forward stock split of our common stock.

In May 2017, we completed a secondary public offering of 5,075,000 shares of our common stock at a price of \$16.35 per share, which included 575,000 shares issued pursuant to the underwriters' option to purchase additional shares. All of the shares were sold by existing stockholders and certain of our executive officers. The selling stockholders received all of the net proceeds of \$78.8 million from the secondary public offering. We did not sell any shares and did not receive any of the proceeds from the offering and the costs paid by us in connection with the offering of \$0.8 million were recorded in general and administrative costs in the accompanying consolidated income statement.

We anticipate that any new facilities and future facility expansions will be funded through cash flows from operations, the proceeds of our IPO, the incurrence of other indebtedness and other potential sources of liquidity.

At December 31, 2018 and 2017, we had unrestricted cash, cash equivalents and short-term investments totaling \$85.3 million and \$148.1 million, respectively. The December 31, 2018 balance includes \$31.6 million of cash located outside of the United States, including \$28.9 million in China, \$1.0 million in Turkey and \$1.7 million in Mexico. The December 31, 2017 balance includes \$49.2 million of cash located outside of the United States, including \$46.3 million in China, \$0.7 million in Turkey and \$2.2 million in Mexico. Our ability to repatriate funds from China to the United States is subject to a number of restrictions imposed by the Chinese government. We repatriate funds through several technology license and corporate/administrative service agreements. We are compensated quarterly based on agreed upon royalty rates for such intellectual property licenses and quarterly fees for those services. Certain of our subsidiaries are limited in their ability to declare dividends without first meeting statutory restrictions of the People's Republic of China, including retained earnings as determined under Chinese-statutory accounting requirements. Until 50% (\$21.6 million) of registered capital is contributed to a surplus reserve, our Chinese operations can only pay dividends equal to 90% of after-tax profits (10% must be contributed to the surplus reserve). Once the surplus reserve fund requirement is met, our Chinese operations can pay dividends equal to 100% of after-tax profit assuming other conditions are met. At December 31, 2018, the amount of the surplus reserve fund was \$6.5 million.

Operating Cash Flows

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Net income	\$ 5,279	\$ 38,734	\$ 27,044
Depreciation and amortization	26,429	21,698	13,186
Share-based compensation expense	7,795	7,124	9,902
Other non-cash items	(6,598)	2,557	3,047
Changes in assets and liabilities	(36,163)	4,487	6,663
Net cash provided by (used in) operating activities	\$ (3,258)	\$ 74,600	\$ 59,842

Net cash used in operating activities totaled \$3.3 million for the year ended December 31, 2018 and was primarily the result of a \$36.2 million decrease in working capital and \$6.6 million of other non-cash items, mostly offset by non-cash depreciation and amortization charges totaling \$26.4 million, share-based compensation costs of \$7.8 million and net income of \$5.3 million. The key components of the decrease in working capital include a \$59.2 million increase in accounts receivable, a \$7.9 million increase in contract assets and liabilities, a \$5.2 million increase in other noncurrent assets, and a \$2.0 million decrease in other noncurrent liabilities. This was partially offset by a \$32.3 million increase in accounts payable and accrued expenses and a \$6.3 million increase in accrued warranty. The working capital changes in contract assets and liabilities, accounts receivable, accounts payable and accrued expenses and accrued warranty are primarily the result of the timing of production in the year ended December 31, 2018.

Net cash provided by operating activities totaled \$74.6 million for the year ended December 31, 2017 and was primarily the result of net income of \$38.7 million, non-cash depreciation and amortization charges totaling \$21.7 million, share-based compensation costs of \$7.1 million as well as the net changes in working capital. The key components of the working capital changes include a \$51.5 million increase in accounts payable and accrued expenses, a \$9.3 million increase in accrued warranty, a \$3.2 million decrease in prepaid expenses and other current assets, and a \$2.8 million decrease in other noncurrent assets. This was partially offset by a \$54.2 million increase in accounts receivable, a \$4.6 million decrease in other noncurrent liabilities, and a \$4.4 million increase in contract assets and liabilities. The working capital changes in contract assets and liabilities, accounts receivable, accounts payable and accrued expenses and accrued warranty are primarily the result of the timing of production in the year ended December 31, 2017.

Net cash provided by operating activities totaled \$59.8 million for the year ended December 31, 2016 and was primarily the result of net income of \$27.0 million, non-cash depreciation and amortization charges totaling \$13.2 million, share-based compensation costs of \$9.9 million and other non-cash items of \$3.0 million, as well as the net changes in working capital. The key components of the working capital change include a \$17.4 million increase in accounts payable and accrued expenses, a \$6.7 million increase in accrued warranty, and a \$5.6 million decrease in accounts receivable. This was partially offset by a \$17.2 million increase in contract assets and liabilities and a \$3.7 million increase in other noncurrent assets. The working capital changes in contract assets and liabilities, accounts receivable, accounts payable and accrued expenses and accrued warranty are primarily the result of the timing of production in the year ended December 31, 2016.

Investing Cash Flows

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Purchase of property and equipment	\$ (52,688)	\$ (44,828)	\$ (30,507)
Proceeds from sale of assets	—	850	—
Net cash used in investing activities	\$ (52,688)	\$ (43,978)	\$ (30,507)

Net cash flows used in investing activities totaled \$52.7 million, \$44.0 million and \$30.5 million in the years ended December 31, 2018, 2017 and 2016, respectively, driven primarily by capital expenditures for new facilities and expansion or improvements at existing facilities. The capital expenditures for the year ended December 31, 2018 primarily related to our new wind blade plants in Matamoros, Mexico and Yangzhou, China, the expansion and improvements at our Taicang, China facility, our second wind blade plant in Turkey, our second facility in Newton, Iowa and costs to enhance our information technology systems. The capital expenditures for the year ended December 31, 2017 primarily related to the construction and outfitting of our second and third wind blade plants in Mexico and our second wind blade plant in Turkey, the expansion and improvements at certain of our existing wind blade plants and costs at our corporate office to enhance our information technology systems. The capital expenditures for the year ended December 31, 2016 primarily related to the plant build outs of three new wind blade facilities, two in Mexico and one in Turkey. The above capital expenditure amounts do not include the amounts which we financed primarily through capital leases totaling \$22.0 million, \$6.2 million and \$10.0 million in the years ended December 31, 2018, 2017 and 2016, respectively.

We anticipate fiscal year 2019 capital expenditures of between \$95 million to \$100 million and we estimate that the cost that we will incur after December 31, 2018 to complete our current projects in process will be approximately \$9.7 million. We have used, and will continue to use, cash flows from operations, the proceeds received from our credit facilities and the proceeds received from the issuance of stock for major projects currently being undertaken, which include new manufacturing facilities in Chennai, India, Yangzhou, China and our tooling facility in Juárez, Mexico and the continued investment in our existing China, Mexico and Turkey wind blade facilities and costs to enhance our information technology systems.

Financing Cash Flows

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Proceeds from issuance of common stock sold in initial public offering, net of underwriters discount and offering costs	\$ —	\$ —	\$ 67,199
Net proceeds from (repayments of) revolving and term loans	14,463	(3,750)	(930)
Net proceeds from (repayments of) accounts receivable financing	424	(1,020)	(5,385)
Net proceeds from (repayments of) working capital loans	—	(4,638)	(4,290)
Net proceeds from (repayments of) other debt	(23,763)	1,313	(4,765)
Debt issuance costs	(281)	(454)	—
Proceeds from exercise of stock options	4,284	1,430	—
Repurchase of common stock including shares withheld in lieu of income taxes	(2,859)	(1,264)	—
Net cash provided by (used in) financing activities	<u>\$ (7,732)</u>	<u>\$ (8,383)</u>	<u>\$ 51,829</u>

Net cash flows used in financing activities for the year ended December 31, 2018 and 2017 totaled \$7.7 million and \$8.4 million, respectively. The net cash flows provided by financing activities totaled \$51.8 million for the year ended December 31, 2016. Net cash used in financing activities for the year ended December 31, 2018 primarily reflects the net repayment of growth-related debt and the repurchase of common stock associated with taxes on the vesting of share-based awards, mostly offset by the net proceeds from revolving and term loans and the proceeds from the exercise of stock options. Net cash flows used in financing activities for the year ended December 31, 2017 primarily reflects the net repayment of working capital loans, term loans and accounts receivable financings. Net cash flows provided by financing activities for the year ended December 31, 2016 primarily reflects the net proceeds received from our initial public offering, partially offset by repayments of accounts receivable financings and working capital loans.

Description of Our Indebtedness

Refer to Note 12 - Long-Term Debt, Net of Debt Issuance Costs and Current Maturities of the Notes to Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K for a description of our indebtedness.

Other Contingencies

Other than as noted in “Legal Proceedings” included in Part I, Item 3 of this Annual Report on Form 10-K as of December 31, 2018 and 2017, we were not involved in any material litigation. In the future, however, we may become involved in various claims and legal actions arising in the ordinary course of business which may have a material adverse effect on our consolidated financial position, results of operations or liquidity.

The wind blades and other composite structures that we produce are subject to warranties against defects in workmanship and materials, generally for a period of two to five years. We are not responsible for the fitness for use of the wind blade or the overall wind turbine system. If a wind blade is found to be defective during the warranty period as a result of a defect in workmanship or materials, among other potential remedies, we may need to repair or replace the wind blade (which could include significant transportation and installation costs) at our sole expense. At December 31, 2018 and 2017, we had accrued warranty reserves totaling \$36.8 million and \$30.4 million, respectively. The increase in the accrued warranty reserve during 2018 was primarily due to the accrual for sales during the year, partially offset by reductions in the reserve due to the cost of warranty services provided during the year and the expiration of the warranty period for specific products.

Other than as noted in “Legal Proceedings” included in Part I, Item 3 of this Annual Report on Form 10-K as of December 31, 2018 and 2017, we had no material operating expenditures for environmental matters, including government imposed remedial or corrective actions, during the years ended December 31, 2018, 2017 and 2016.

Off-Balance Sheet Transactions

We are not presently involved in any off-balance sheet arrangements, including transactions with unconsolidated special-purpose or other entities that would materially affect our financial position, results of operations, liquidity or capital resources, other than our operating lease arrangements and the accounts receivable assignment agreements described below. Furthermore, we do not have any relationships with special-purpose or other entities that provide off-balance sheet financing; liquidity, market risk or credit risk support; or engage in leasing or other services that may expose us to liability or risks of loss that are not reflected in consolidated financial statements and related notes.

Our Mexico segment has an existing accounts receivable assignment agreement with a financial institution under which the financial institution buys, on a non-recourse basis, the accounts receivable amounts related to one of our Mexico segment’s customers at a discount calculated based on an effective annual rate of LIBOR plus 2.75%.

In September 2018, our U.S. and Mexico segments entered into an accounts receivable assignment agreement with a financial institution. Under this agreement, the financial institution buys, on a non-recourse basis, the accounts receivable amounts related to one of our U.S. (Iowa location) and Mexico segment’s customers at a discount calculated based on LIBOR plus 0.55%.

In the fourth quarter of 2018, our EMEAI segment entered into an accounts receivable assignment agreement with a financial institution. Under this agreement, the financial institution may buy, on a non-recourse basis, up to 15.0 million Euro (approximately \$17.2 million as of December 31, 2018) of the accounts receivable amounts related to one of our EMEAI segment’s customers at a discount calculated based on EURIBOR plus 2.65%.

In the fourth quarter of 2018, our EMEAI segment entered into an accounts receivable assignment agreement with a financial institution. Under this agreement, the financial institution buys, on a non-recourse basis, the accounts receivable amounts related to one of our EMEAI segment’s customers at a discount calculated based on EURIBOR plus 0.75%.

As the receivables are purchased by the financial institutions under the agreements as described in the preceding paragraphs, the receivables were removed from our balance sheet. During the year ended December 31, 2018, \$ 214.6 million of receivables were sold under the accounts receivable assignment agreements described above.

Contractual Obligations

The following table summarizes certain of our contractual obligations as of December 31, 2018:

	Payments Due by Period				Total
	Less than 1 year	1-3 years	3-5 years	More than 5 years	
	(in thousands)				
Long-term debt obligations (1)	\$ 27,058	\$ 16,793	\$ 94,650	\$ —	\$ 138,501
Operating lease obligations (2)	28,173	49,813	43,648	61,049	182,683
Purchase obligations	1,875	884	—	—	2,759
Estimated interest payments (3)	5,951	9,011	4,992	—	19,954
Total contractual obligations	\$ 63,057	\$ 76,501	\$ 143,290	\$ 61,049	\$ 343,897

(1) See “—Description of Our Indebtedness” above.

(2) Our operating lease obligations represent the contractual payments due for the lease of our corporate office in Scottsdale, Arizona in addition to our facilities in Iowa, Massachusetts, Rhode Island, New Mexico, China, Mexico, Turkey and Denmark.

(3) Includes interest on variable rate debt based on interest rates as of December 31, 2018.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amount of our assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis, including those related to income taxes and warranty expense. We base our estimates on our historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making the judgments we make about the carrying values of our assets and liabilities that are not readily apparent from other sources. Because these estimates can vary depending on the situation, actual results may differ from the estimates.

We believe the following critical accounting policies affect our more significant judgments used in the preparation of our consolidated financial statements.

Revenue Recognition. The majority of our revenue is generated from long-term contracts associated with manufacturing of wind blades and related services. We account for a long-term contract when it has the approval from both parties, the rights of the parties are identified, payment terms are established, the contract has commercial substance and the collectability of consideration is probable.

To determine the proper revenue recognition method for each long-term contract, we evaluate whether the original contract should be accounted for as one or more performance obligations. This evaluation requires judgment and the decisions reached could change the amount of revenue and gross profit recorded in a given period. As most of our contracts contain multiple performance obligations, we allocate the total transaction price to each performance obligation based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. Our manufacturing services are customer specific and involve production of items that cannot be sold to other customers due to the customers’ protected intellectual property; therefore, we allocate the total transaction price under our contracts with multiple performance obligations using the contractually stated prices, as these prices represent the relative standalone selling price based on an expected cost plus margin model.

Revenue is primarily recognized over time as we have an enforceable right to payment upon termination and we may not use or sell the product to fulfill other customers' contracts. In addition, the customer does not have return or refund rights for items produced that conform to the specifications included in the contract. Because control transfers over time, revenue is recognized based on the extent of progress towards the completion of the performance obligation. We use the cost-to-cost input measure of progress for our contracts as this method provides the best representation of the production progress towards satisfaction of the performance obligation as the materials are distinct to the product being manufactured because of customer specifications provided for in the contract, the costs incurred are proportional to the progress towards completion of the product, and the products do not involve significant pre-fabricated component parts. Under the cost-to-cost method, progress and the related revenue recognition is determined by a ratio of direct costs incurred to date in fulfillment of the contract to the total estimated direct costs required to complete the performance obligation.

Determining the revenue to be recognized for services performed under our manufacturing contracts involves significant judgments and estimates relating to the total consideration to be received and the expected total costs to complete the performance obligation. The judgments and estimates relating to the total consideration to be received include the amount of variable consideration as our contracts typically provide the customer with a range of production output options from guaranteed minimum volume obligations to the production capacity of the facility, and customers will provide periodic non-cancellable commitments for the number of wind blades to be produced over the term of the agreement. We use historical experience, customer commitments and forecasted future production based on the capacity of the plant to estimate the total revenue to be received to complete the performance obligation. In addition, the amount of revenue per unit produced may vary based on the costs of production of the wind blades as we may be able to change the price per unit based on changes in the cost of production. Further, some of our contracts provide opportunities for us to share in labor and material cost savings as well as absorb some additional costs as an incentive for more efficient production, both of which impact the margin realized on the contract and ultimately the total amount of revenue to be recognized. Additionally, certain of our customer contracts provide for concessions by us for missed production deadlines.

We estimate variable consideration at the most likely amount to which we expect to be entitled. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information available to us at the time of the estimate and may materially change as additional information becomes known.

Our contracts may be modified to account for changes in specifications of products and changing requirements (e.g. transitions). If the contract modifications are for goods or services that are not distinct from the existing contract, they are accounted for as if they were part of the original contract. The effect of a contract modification on the transaction price and the measure of progress for the performance obligation to which it relates is recognized as an adjustment to revenue on a cumulative catch-up basis. If contract modifications are for goods and services that are distinct from the existing contract and increases the amount of consideration reflecting the standalone sale price of the additional goods or services, then the contract modification is accounted for as a separate contract and is evaluated for one or more performance obligations.

Each reporting period, we evaluate the progress towards satisfaction of each performance obligation based on any contract modifications that have occurred, cost incurred to date, and an estimate of the expected future revenue and costs to be incurred to complete the performance obligation. Based on this analysis, any changes in estimates of revenue, cost of sales, contract assets and liabilities and the related impact to operating income are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on the percentage of completion of the performance obligation.

Wind blade pricing is based on annual commitments of volume as established in our customer contracts and orders less than committed volume may result in a higher price per wind blade to our customers. Orders in excess of annual commitments may result in discounts to our customers from the contracted price for the committed volume. Our customers typically provide periodic purchase orders with the price per wind blade given the current cost of the bill of materials, labor requirements and volume desired. We record an allowance for expected utilization of early payment discounts which are reported as a reduction of the related revenue.

Precision molding and assembly systems included in a customer's contract are based upon the specific engineering requirements and design determined by the customer and are specific to the wind blade design and function desired. From the customer's engineering specifications, a job cost estimate is developed along with a production plan, and the desired margin is applied based on the location the work is to be performed and complexity of the customer's design. Precision molding and assembly systems are generally built to produce wind blades which may be manufactured by us in production runs specified in the customer contract.

Contract assets primarily relate to our rights to consideration for work completed but not billed at the reporting date on manufacturing services contracts. The contract assets are transferred to accounts receivable when the rights become unconditional, which generally occurs when customers are invoiced upon the determination that a product conforms to the contract specifications and invoices are due based on each customer's negotiated payment terms, which range from 15 to 90 days. We apply the practical expedient that allows us to exclude payment terms under one year from the transfer of a promised good or service from consideration of a significant financing component in its contracts. With regards to the production of precision molding and assembly systems, our contracts generally call for progress payments to be made in advance of production. Generally, payment is made at certain percentage of completion milestones with the final payment due upon delivery to the manufacturing facility. These progress payments are recorded within contract liabilities as current liabilities in the consolidated balance sheets and are reduced as we record revenue over time.

Our customers may request, in situations where they do not have space available to receive products or do not want to take possession of products immediately for other reasons, that their finished products be stored by us in one of our facilities. Most of our contracts provide for a limited number of wind blades to be stored during the period of the contract with any additional wind blades stored subject to additional storage fees, which are included in the wind blade performance obligation revenue.

Revenue related to non-recurring engineering and freight services provided under our customer contracts is recognized at a point in time following the transfer of control of the promised services to the customer. Customers usually pay the carrier directly for the cost of shipping associated with items produced. When we pay the shipping costs, we apply the practical expedient that allows us to account for shipping and handling as a fulfillment costs and include the revenue in the associated performance obligation and the costs are included in cost of goods sold.

Taxes assessed by a governmental authority that are both imposed on and concurrent with specific revenue-producing transactions, that are collected by us from a customer, are excluded from revenue.

Income Taxes. In connection with preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves our assessment of any net operating loss carryforwards, as well as estimating our actual current tax liability together with assessing temporary differences resulting from differing treatment of items, such as reserves and accrued liabilities, for tax and accounting purposes. We also have to assess whether any portion of our earnings generated in one taxing jurisdiction might be claimed as earned by income tax authorities in a differing tax jurisdiction. Significant judgment is required in determining our annual tax rate, the allocation of earnings to various jurisdictions and in the evaluation of our tax positions.

Additionally, we record the estimated future tax effects of temporary differences between the tax basis of assets and liabilities and amounts reported in the accompanying consolidated balance sheets, as well as operating loss and tax credit carryforwards. We then assess the likelihood that our deferred income tax assets will be realized by evaluating all available positive and negative evidence in order to determine if it is more-likely-than-not that the deferred tax assets will be realized. To the extent we believe that the realization of our deferred tax assets is not more-likely-than-not, we are required to establish a valuation allowance. In doing so we considered our recent operating history, taxpaying history and future reversals of deferred tax liabilities based upon future operating projections. Historically, as a result of cumulative losses in the United States, we determined that a valuation allowance for all of our U.S. deferred tax assets was appropriate. During the third quarter of 2018, we reversed a portion of the United States valuation allowance, based on the available evidence at that time. We periodically evaluate all available positive and negative evidence regarding the future recoverability of our deferred tax assets and, when we determine that the recoverability of deferred tax assets meets the criteria of more-likely-than-not, we reduce the valuation allowance against our deferred tax assets. The effect of a change in judgment concerning the realizability of deferred tax assets is included in provision for income taxes.

As of December 31, 2018, we have U.S. federal NOLs of approximately \$25.8 million, state NOLs of approximately \$118.5 million, foreign NOLs of approximately \$14.6 million and foreign tax credits of approximately \$1.9 million available to offset future taxable income in the U.S. and China. We also have tax incentives available to reduce approximately \$0.3 million of future taxes to be incurred by our original Turkey facility.

On December 22, 2017, President Trump signed into law Tax Reform, which significantly revised U.S. tax law by, among other things, lowering the statutory federal corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017, eliminating certain deductions, imposing a mandatory one-time transition tax, introducing new tax regimes, and changing how foreign earnings are subject to U.S. tax. Tax Reform also includes many new provisions, such as changes to bonus depreciation, changes to deductions for executive compensation, interest expense limitations, net operating loss deduction limitations, tax on GILTI earned by foreign corporate subsidiaries, the BEAT, and a deduction for FDII.

At December 31, 2018, we completed the accounting for the enactment-date income tax effects of Tax Reform, which resulted in an immaterial impact to the financial statements. Upon further analyses of certain aspects of Tax Reform, and refinement of calculations during 2018, we increased our provisional amount of previously untaxed foreign earnings by \$13.8 million, to \$88.1 million. This resulted in no change to our U.S. federal income tax expense due to the impact of foreign tax credits. In addition, the provisional net tax expense, which was estimated at approximately \$0.1 million, primarily attributable to the reduction in the federal tax rate, was unchanged. Additionally, we have made a policy election to account for any impacts of GILTI tax in the period in which it is incurred.

Income tax expense or benefit, deferred tax assets and liabilities, and liabilities for unrecognized tax benefits reflect our best estimate of current and future taxes to be paid. We are subject to income taxes in both the U.S. and numerous foreign jurisdictions in which we operate, principally, China, Mexico, and Turkey. Significant judgements and estimates are required in determining our consolidated income tax expense. The statutory federal corporate income tax rate in the U.S. decreased from 35% to 21% beginning in January 2018, while the tax rates in China and Mexico are 25% and 30%, respectively. During the fourth quarter of 2017, Turkey also modified its statutory corporate income tax rate from 20% to 22% for 2018, 2019, and 2020. Our second Turkey facility is located in a tax-free zone and is not subject to income taxes for its earnings recognized from its manufacturing activities.

Warranty Expense. As discussed above, the wind blades we manufacture are subject to warranties against defects in workmanship and materials, generally for a period of two to five years. We are not responsible for the fitness for use of the wind blade in the overall wind turbine system. If a wind blade is found to be defective during the warranty period as a result of a defect in workmanship or materials, among other potential remedies, we may need to repair or replace the wind blade at our sole expense. We provide warranties for all of our products with terms and conditions that vary depending on the product sold. We record warranty expense based upon our estimate of future repairs using a probability-based methodology that considers previous warranty claims, identified quality issues and industry practices. Once the warranty period has expired, any remaining unused warranty accrual for the specific products is reversed against the current year warranty expense amount.

Our estimate of warranty expense requires us to make assumptions about matters that are highly uncertain, including future rates of product failure, repair costs, availability of materials, shipping and handling, and de-installation and re-installation costs at customers' sites, among others. When a potential or actual warranty claim arises, we may accrue additional warranty reserves for the estimated cost of remediation or proposed settlement. We accrued \$15.0 million during 2016 to cover the aggregate costs associated with the agreement that we entered into with Nordex to settle potential claims relating to a wind blade failure that occurred in 2015 and certain alleged defects with respect to that wind blade and certain other wind blades that were primarily manufactured in 2014. See "—Other Contingencies" above for more information. Except for these costs, we have not experienced other material warranty expenses beyond the provision described above in the years ended December 31, 2018, 2017 and 2016. However, changes in warranty reserves could have a material effect on our consolidated financial statements.

Recent Accounting Pronouncements

For a discussion of recent accounting pronouncements, see Note 1 – Summary of Significant Accounting Policies of the Notes to Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

Jumpstart Our Business Startups Act of 2012

On April 5, 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. We intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of our IPO; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years or (iv) the date on which we are deemed to be a “large accelerated filer” under the rules of the SEC.

We expect to no longer qualify as an emerging growth company at some point during 2019; therefore, we will no longer be able to take advantage of the exemptions provided for the various reporting requirements described above.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk in the ordinary course of our business. These market risks are principally limited to changes in foreign currency exchange rates and commodity prices. We currently do not hedge our exposure to these risks.

Foreign Currency Risk. We conduct international operations in China, Mexico, Turkey and Denmark. Our results of operations are subject to both currency transaction risk and currency translation risk. We incur currency transaction risk whenever we enter into either a purchase or sale transaction using a currency other than the local currency of the transacting entity. With respect to currency translation risk, our financial condition and results of operations are measured and recorded in the relevant domestic currency and then translated into U.S. dollars for inclusion in our consolidated financial statements. In recent years, exchange rates between these foreign currencies and the U.S. dollar have fluctuated significantly and may do so in the future. A hypothetical change of 10% in the exchange rates for the countries above would have resulted in a change to income from operations of approximately \$7.4 million and \$8.9 million for the years ended December 31, 2018 and 2017, respectively.

Commodity Price Risk. We are subject to commodity price risk under agreements for the supply of our raw materials. We have not hedged, nor do we intend to hedge, our commodity price exposure. We generally lock in pricing for our key raw materials for 12 months which protects us from price increases within that period. As many of our raw material supply agreements have meet or release clauses, if raw materials prices go down, we are able to benefit from the reductions in price. We believe that this adequately protects us from increases in raw material prices and also enables us to take full advantage of decreases.

Resin and resin systems are the only commodities for which we do not have fixed pricing. Approximately 30% of the resin and resin systems we use is purchased under contracts controlled by two of our customers and therefore they receive/bear 100% of any increase or decrease in resin costs further limiting our exposure to price

fluctuations. We believe that a 10% change in the price of resin and resin systems for the customers in which we are exposed to fluctuating prices would have had an impact to income from operations of approximately \$ 7.6 million and \$ 13.3 million for the years ended December 31, 2018 and 2017, respectively. Furthermore, this amount does not include the portion of any increase or decrease that would be shared with our customers under our long-term supply agreements, which is generally 70%.

Interest Rate Risk . As of December 31, 2018, our EMEAI segment has one general credit agreement with a Turkish financial institution outstanding which is tied to EURIBOR. This agreement contains collateralized financing of capital expenditures. As of December 31, 2018, there was \$12.2 million of collateralized financing of capital expenditures outstanding. In addition, as of December 31, 2018, our Credit Agreement includes interest on the unhedged principal amount of \$15.4 million which is tied to LIBOR. The one EMEAI general credit agreement and our Credit Agreement noted above are the only variable rate debt that we had outstanding as of December 31, 2018 as all remaining working capital loans, accounts receivable financing and capital lease obligations are fixed rate instruments and are not subject to fluctuations in interest rates. Due to the relatively low LIBOR and EURIBOR rates in effect as of December 31, 2018, a 10% change in the LIBOR or EURIBOR rate would not have had a material impact on our future earnings, fair values or cash flows.

Item 8. Financial Statements and Supplementary Data

The financial statements required to be filed pursuant to this Item 8 are appended to this Report. An index of those financial statements is found in Item 15.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized, and reported within the time period specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As required by Rule 13a-15(b) promulgated under the Exchange Act, our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the design and operating effectiveness as of December 31, 2018 of our disclosure controls and procedures, as defined in Rule 13a-15(e) promulgated under the Exchange Act. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2018.

Management’s Report on Internal Control Over Financial Reporting and Attestation Report of the Registered Public Accounting Firm

As required by Rules 13a-15(f) promulgated under the Exchange Act, our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2018. Management based its assessment on criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Management's assessment included evaluation of elements such as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies and our overall control environment. Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2018 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles. We reviewed the results of management's assessment with the Audit Committee of our Board of Directors.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm on our internal control over financial reporting due to an exemption established under the JOBS Act for “emerging growth companies.”

Changes in Internal Control Over Financial Reporting

As a result of the adoption of Topic 606, we have re-evaluated and established new internal controls related to revenue recognition. We are also currently updating our enterprise risk planning systems to accommodate Topic 606 and will continue to evaluate such internal controls.

Except as noted above, there have not been any other changes in our internal control over financial reporting during the three months ended December 31, 2018, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item is incorporated by reference to “Business – Executive Officers” included in Part 1, Item 1 of this Annual Report on Form 10-K and the information that will be contained in our proxy statement related to the 2019 Annual Meeting of Stockholders, which we intend to file with the SEC within 120 days of the fiscal year ended December 31, 2018.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference to the information that will be contained in our proxy statement related to the 2019 Annual Meeting of Stockholders, which we intend to file with the SEC within 120 days of the fiscal year ended December 31, 2018.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is incorporated by reference to the information that will be contained in our proxy statement related to the 2019 Annual Meeting of Stockholders, which we intend to file with the SEC within 120 days of the fiscal year ended December 31, 2018.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item is incorporated by reference to the information that will be contained in our proxy statement related to the 2019 Annual Meeting of Stockholders, which we intend to file with the SEC within 120 days of the fiscal year ended December 31, 2018.

Item 14. Principal Accounting Fees and Services

The information required by this Item is incorporated by reference to the information that will be contained in our proxy statement related to the 2019 Annual Meeting of Stockholders, which we intend to file with the SEC within 120 days of the fiscal year ended December 31, 2018.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Financial Statements and Schedules

The financial statements listed in the accompanying Index to Consolidated Financial Statements are filed as part of this Annual Report on Form 10-K.

(b) Exhibits

See Exhibit Index.

Item 16. Form 10-K Summary

Not applicable.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
<u>Report of Independent Registered Public Accounting Firm</u>	F-2
<u>Consolidated Balance Sheets as of December 31, 2018 and 2017</u>	F-3
<u>Consolidated Income Statements for the years ended December 31, 2018, 2017 and 2016</u>	F-4
<u>Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016</u>	F-5
<u>Consolidated Statements of Changes in Stockholders' Equity (Deficit) for the years ended December 31, 2018, 2017 and 2016</u>	F-6
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016</u>	F-7
<u>Notes to Consolidated Financial Statements</u>	F-8

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
TPI Composites, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of TPI Composites, Inc. and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income (loss), changes in stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

Adoption of New Accounting Pronouncement

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for revenue in 2018, 2017, and 2016 due to the adoption of ASC Topic 606, *Revenue from Contracts with Customers*.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2008.

Phoenix, Arizona
March 4, 2019

TPI COMPOSITES, INC. AND SUBSIDIARIES

Consolidated Balance Sheets
(In thousands, except par value data)

	December 31,	
	2018	2017
		(as adjusted)
Assets		
Current assets:		
Cash and cash equivalents	\$ 85,346	\$ 148,113
Restricted cash	3,555	3,849
Accounts receivable	176,815	121,576
Contract assets	116,708	105,619
Prepaid expenses and other current assets	26,038	27,507
Inventories	5,735	4,112
Total current assets	414,197	410,776
Property, plant and equipment, net	159,423	123,480
Goodwill	2,807	2,807
Intangible assets and deferred costs, net	4,458	1,108
Other noncurrent assets	23,970	7,566
Total assets	\$ 604,855	\$ 545,737
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	\$ 199,078	\$ 167,175
Accrued warranty	36,765	30,419
Current maturities of long-term debt	27,058	35,506
Contract liabilities	7,143	2,763
Total current liabilities	270,044	235,863
Long-term debt, net of debt issuance costs and current maturities	110,565	85,879
Other noncurrent liabilities	3,289	3,441
Total liabilities	383,898	325,183
Commitments and contingencies (Note 13)		
Stockholders' equity: (Note 4)		
Common shares, \$0.01 par value, 100,000 shares authorized and 34,745 shares issued and 34,678 shares outstanding at December 31, 2018; 100,000 shares authorized and 34,049 shares issued and 34,021 shares outstanding at December 31, 2017	347	340
Paid-in capital	311,771	301,543
Accumulated other comprehensive loss	(14,392)	(558)
Accumulated deficit	(74,981)	(80,260)
Treasury stock, at cost, 67 shares at December 31, 2018; 28 shares at December 31, 2017	(1,788)	(511)
Total stockholders' equity	220,957	220,554
Total liabilities and stockholders' equity	\$ 604,855	\$ 545,737

See accompanying notes to consolidated financial statements.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Consolidated Income Statements
(In thousands, except per share data)

	Year Ended December 31,		
	2018	2017 (as adjusted)	2016 (as adjusted)
Net sales (Note 4)	\$ 1,029,624	\$ 955,198	\$ 769,019
Cost of sales	882,075	804,099	664,026
Startup and transition costs	74,708	40,628	18,127
Total cost of goods sold	956,783	844,727	682,153
Gross profit	72,841	110,471	86,866
General and administrative expenses	48,123	40,373	33,892
Income from operations	24,718	70,098	52,974
Other income (expense):			
Interest income	181	95	344
Interest expense	(10,417)	(12,381)	(17,614)
Loss on extinguishment of debt	(3,397)	—	(4,487)
Realized loss on foreign currency remeasurement	(13,489)	(4,471)	(757)
Miscellaneous income	4,650	1,191	238
Total other expense	(22,472)	(15,566)	(22,276)
Income before income taxes	2,246	54,532	30,698
Income tax benefit (provision)	3,033	(15,798)	(3,654)
Net income	5,279	38,734	27,044
Net income attributable to preferred stockholders	—	—	5,471
Net income attributable to common stockholders	\$ 5,279	\$ 38,734	\$ 21,573
Weighted-average common shares outstanding:			
Basic	34,311	33,844	17,530
Diluted	36,002	34,862	17,616
Net income per common share:			
Basic	\$ 0.15	\$ 1.14	\$ 1.23
Diluted	\$ 0.15	\$ 1.11	\$ 1.22

See accompanying notes to consolidated financial statements.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income (Loss)
(In thousands)

	Year Ended December 31,		
	2018	2017 (as adjusted)	2016 (as adjusted)
Net income	\$ 5,279	\$ 38,734	\$ 27,044
Other comprehensive income (loss):			
Foreign currency translation adjustments	(14,428)	3,304	(3,837)
Unrealized gain on hedging derivatives, net of taxes of \$158 for the year ended December 31, 2018	594	—	—
Comprehensive income (loss)	\$ (8,555)	\$ 42,038	\$ 23,207

See accompanying notes to consolidated financial statements.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Consolidated Statements of Changes in Stockholders' Equity (Deficit)
(In thousands)

	Common		Paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Treasury stock, at cost	Total stockholders' equity (deficit)
	Shares	Amount					
Balance at December 31, 2015	4,238	\$ —	\$ —	\$ (25)	\$ (191,172)	\$ —	\$ (191,197)
Cumulative-effect adjustment of the adoption of Topic 606 on January 1, 2016	—	—	—	—	51,691	—	51,691
Net income	—	—	—	—	27,044	—	27,044
Other comprehensive loss	—	—	—	(3,837)	—	—	(3,837)
Redeemable preferred shares fair value adjustment	—	—	—	—	(5,471)	—	(5,471)
Issuance of common stock sold in initial public offering (IPO), net of underwriters discount and offering costs	7,188	72	67,127	—	—	—	67,199
Conversion of convertible preferred shares into common stock upon consummation of IPO	21,110	253	202,993	—	—	—	203,246
Conversion of subordinated convertible promissory notes into common stock upon consummation of IPO	1,080	11	11,866	—	—	—	11,877
Conversion of redeemable preferred share warrants into common stock upon consummation of IPO	121	1	1,083	—	—	—	1,084
Share-based compensation expense	—	—	9,764	—	—	—	9,764
Balance at December 31, 2016 (as adjusted)	33,737	337	292,833	(3,862)	(117,908)	—	171,400
Cumulative-effect adjustment of the adoption of ASU 2016-09 on January 1, 2017	—	—	1,072	—	(1,086)	—	(14)
Net income	—	—	—	—	38,734	—	38,734
Other comprehensive income	—	—	—	3,304	—	—	3,304
Common stock repurchased	—	—	—	—	—	(1,264)	(1,264)
Issuances under share-based compensation plan	312	3	674	—	—	753	1,430
Share-based compensation expense	—	—	6,964	—	—	—	6,964
Balance at December 31, 2017 (as adjusted)	34,049	340	301,543	(558)	(80,260)	(511)	220,554
Net income	—	—	—	—	5,279	—	5,279
Other comprehensive loss	—	—	—	(13,834)	—	—	(13,834)
Common stock repurchased	—	—	—	—	—	(2,859)	(2,859)
Issuances under share-based compensation plan	696	7	2,695	—	—	1,582	4,284
Share-based compensation expense	—	—	7,533	—	—	—	7,533
Balance at December 31, 2018	<u>34,745</u>	<u>\$ 347</u>	<u>\$ 311,771</u>	<u>\$ (14,392)</u>	<u>\$ (74,981)</u>	<u>\$ (1,788)</u>	<u>\$ 220,957</u>

See accompanying notes to consolidated financial statements.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2018	2017 (as adjusted)	2016 (as adjusted)
Cash flows from operating activities:			
Net income	\$ 5,279	\$ 38,734	\$ 27,044
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation and amortization	26,429	21,698	13,186
Share-based compensation expense	7,795	7,124	9,902
Amortization of debt issuance costs and debt discount	336	573	4,681
Loss on extinguishment of debt	3,397	—	4,487
Loss on sale of assets	4,581	334	2
Deferred income taxes	(14,912)	1,650	(6,123)
Changes in assets and liabilities:			
Accounts receivable	(59,200)	(54,227)	5,564
Contract assets and liabilities	(7,898)	(4,423)	(17,227)
Inventories	(1,685)	964	(1,179)
Prepaid expenses and other current assets	1,186	3,150	681
Other noncurrent assets	(5,167)	2,816	(3,690)
Accounts payable and accrued expenses	32,263	51,474	17,424
Accrued warranty	6,346	9,330	6,709
Other noncurrent liabilities	(2,008)	(4,597)	(1,619)
Net cash provided by (used in) operating activities	<u>(3,258)</u>	<u>74,600</u>	<u>59,842</u>
Cash flows from investing activities:			
Purchases of property, plant and equipment	(52,688)	(44,828)	(30,507)
Proceeds from sale of assets	—	850	—
Net cash used in investing activities	<u>(52,688)</u>	<u>(43,978)</u>	<u>(30,507)</u>
Cash flows from financing activities:			
Proceeds from issuance of common stock sold in initial public offering, net of underwriters discount and offering costs	—	—	67,199
Proceeds from revolving and term loans	89,435	—	—
Repayments of revolving and term loans	(74,972)	(3,750)	(930)
Net proceeds from (repayments of) accounts receivable financing	424	(1,020)	(5,385)
Proceeds from working capital loans	—	9,936	15,813
Repayments of working capital loans	—	(14,574)	(20,103)
Net proceeds from (repayments of) other debt	(23,763)	1,313	(4,765)
Proceeds from customer advances	—	—	2,000
Repayments of customer advances	—	—	(2,000)
Debt issuance costs	(281)	(454)	—
Proceeds from exercise of stock options	4,284	1,430	—
Repurchase of common stock including shares withheld in lieu of income taxes	(2,859)	(1,264)	—
Net cash provided by (used in) financing activities	<u>(7,732)</u>	<u>(8,383)</u>	<u>51,829</u>
Impact of foreign exchange rates on cash, cash equivalents and restricted cash	617	335	(1,515)
Net change in cash, cash equivalents and restricted cash	(63,061)	22,574	79,649
Cash, cash equivalents and restricted cash, beginning of year	152,437	129,863	50,214
Cash, cash equivalents and restricted cash, end of year	<u>\$ 89,376</u>	<u>\$ 152,437</u>	<u>\$ 129,863</u>
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$ 9,904	\$ 11,803	\$ 11,126
Cash paid for income taxes, net	7,246	17,263	8,506
Supplemental disclosures of noncash investing and financing activities:			
Conversion of subordinated convertible promissory notes into common stock	—	—	11,877
Accrued capital expenditures in accounts payable	5,139	5,725	2,664
Equipment acquired through capital lease and financing obligations	21,968	6,206	10,011
Debt refinance and related fees	—	—	2,163

See accompanying notes to consolidated financial statements.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 1. Summary of Operations and Significant Accounting Policies

(a) Description of Business

TPI Composites, Inc. is the holding company that conducts substantially all of its business operations through its direct and indirect subsidiaries (collectively, the Company or we). The Company was founded in 1968 and has been producing composite wind blades since 2001. The Company's knowledge and experience of composite materials and manufacturing originates with its predecessor company, Tillotson Pearson Inc., a leading manufacturer of high-performance sail and powerboats along with a wide range of composite structures used in other industrial applications. Following the separation from the boat building business in 2004, the Company reorganized in Delaware as LCS Holding, Inc. and then changed its corporate name to TPI Composites, Inc. in 2008. Today, the Company is headquartered in Scottsdale, Arizona and has expanded its global footprint to include domestic facilities in Newton, Iowa; Fall River, Massachusetts; Warren, Rhode Island and Santa Teresa, New Mexico and international facilities in Dafeng, China; Taicang Port, China; Taicang City, China; Juárez, Mexico; Matamoros, Mexico; Izmir, Turkey; Kolding, Denmark and Chennai, India.

(b) Basis of Presentation

We divide our business operations into four geographic operating segments—the United States (U.S.), Asia, Mexico and Europe, the Middle East, Africa and India (EMEAI), as follows:

- Our U.S. segment includes (1) the manufacturing of wind blades at our Newton, Iowa plant, (2) the manufacturing of precision molding and assembly systems used for the manufacture of wind blades at our Warren, Rhode Island facility, (3) the manufacturing of composite solutions for the transportation industry, which we also conduct at our existing Rhode Island facility as well as at our Fall River, Massachusetts facility and at a second manufacturing facility in Newton, Iowa which commenced operations in the second quarter of 2018, (4) wind blade inspection and repair services in North America, (5) our advanced engineering center in Kolding, Denmark, which provides technical and engineering resources to our manufacturing facilities and (6) our corporate headquarters, the costs of which are included in general and administrative expenses.
- Our Asia segment includes (1) the manufacturing of wind blades at our facilities in Taicang Port, China; Dafeng, China and Yangzhou, China, the latter of which we expect to commence operations in the first quarter of 2019, (2) the manufacturing of precision molding and assembly systems at our Taicang City, China facility and (3) wind blade inspection and repair services.
- Our Mexico segment manufactures wind blades from three facilities in Juárez, Mexico and a facility in Matamoros, Mexico at which we commenced operations in the third quarter of 2018. In November 2018, we entered into a new lease agreement with a third party for a new precision molding and assembly systems manufacturing facility in Juárez, Mexico and we expect to commence operations at this facility in the first quarter of 2019. This segment also performs wind blade inspection and repair services.
- Our EMEAI segment manufactures wind blades from two facilities in Izmir, Turkey and also performs wind blade inspection and repair services. In February 2019, we entered into a new lease agreement with a third party for a new manufacturing facility that will be built near Chennai, India and we expect to commence operations at this facility in the first half of 2020.

The accompanying consolidated financial statements include the accounts of TPI Composites, Inc. and all majority owned subsidiaries. All significant intercompany transactions and balances have been eliminated.

As previously announced, effective January 1, 2018, we adopted Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, (Topic 606) using the full retrospective method as further described in *Recently Issued Accounting Pronouncements - Revenue from Contracts with Customers* and Note 2, *Revenue from Contracts with Customers*. All amounts and disclosures set forth in this Annual Report on Form 10-K reflect the adoption of Topic 606 and may differ, as disclosed in these notes, from amounts previously reported in our December 31, 2017 consolidated balance sheet and our consolidated income and cash flow statements for the years

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

ended December 31, 2017 and 2016. See Note 19, *Adjustments to Previously Reported Financial Statements from the Adoption of an Accounting Pronouncement*, for a further discussion of the adoption of Topic 606, including the impact on our previously reported consolidated financial statements.

(c) Public Offerings and Stock Split

In July 2016, we completed an initial public offering (IPO) of 7,187,500 shares of our common stock at a price of \$11.00 per share, which included 937,500 shares issued pursuant to the underwriters' over-allotment option. Certain of our existing stockholders, a non-employee director and executive officers purchased an aggregate of 1,250,000 shares of our common stock in the IPO included in the total issuance above. The net proceeds from the IPO were \$67.2 million after deducting underwriting discounts and offering expenses. Immediately prior to the closing of the IPO, all shares of the then-outstanding redeemable preferred shares converted into an aggregate of 21,110,204 shares of our common stock and the redeemable preferred share warrants converted on a net issuance basis into 120,923 shares of our common stock. In addition, concurrent with the closing of the IPO, certain subordinated convertible promissory notes in the aggregate principal and interest amount of \$11.9 million were converted into 1,079,749 shares of our common stock at the public offering price of \$11.00 per share.

Prior to the IPO, in July 2016, we amended our amended and restated certificate of incorporation to effect a 360-for-1 forward stock split of our common stock. As a result of the stock split, we have adjusted the share amounts authorized and issuable under the share-based compensation plans. All share and per share common stock information referenced throughout the consolidated financial statements and notes thereto have been retroactively adjusted to reflect this stock split. The stock split did not cause an adjustment to the par value of the authorized shares of our common stock.

In May 2017, we completed a secondary public offering of 5,075,000 shares of our common stock at a price of \$16.35 per share, which included 575,000 shares issued pursuant to the underwriters' option to purchase additional shares. All of the shares were sold by existing stockholders and certain of our executive officers. The selling stockholders received all of the net proceeds of \$78.8 million from the secondary public offering. We did not sell any shares and did not receive any of the proceeds from the offering and the costs paid by us in connection with the offering of \$0.8 million were recorded in general and administrative costs in the accompanying consolidated income statement.

(d) Revenue Recognition

The majority of our revenue is generated from long-term contracts associated with manufacturing of wind blades and related services. We account for a long-term contract when it has the approval from both parties, the rights of the parties are identified, payment terms are established, the contract has commercial substance and the collectability of consideration is probable.

To determine the proper revenue recognition method for each long-term contract, we evaluate whether the original contract should be accounted for as one or more performance obligations. This evaluation requires judgment and the decisions reached could change the amount of revenue and gross profit recorded in a given period. As most of our contracts contain multiple performance obligations, we allocate the total transaction price to each performance obligation based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. Our manufacturing services are customer specific and involve production of items that cannot be sold to other customers due to the customers' protected intellectual property; therefore, we allocate the total transaction price under our contracts with multiple performance obligations using the contractually stated prices, as these prices represent the relative standalone selling price based on an expected cost plus margin model.

Revenue is primarily recognized over time as we have an enforceable right to payment upon termination and we may not use or sell the product to fulfill other customers' contracts. In addition, the customer does not have return or refund rights for items produced that conform to the specifications included in the contract. Because control transfers over time, revenue is recognized based on the extent of progress towards the completion of the performance obligation. We use the cost-to-cost input measure of progress for our contracts as this method provides the best representation of the production progress towards satisfaction of the performance obligation as the materials are distinct to the product being manufactured because of customer specifications provided for in the contract, the

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

costs incurred are proportional to the progress towards completion of the product, and the products do not involve significant pre-fabricated component parts. Under the cost-to-cost method, progress and the related revenue recognition is determined by a ratio of direct costs incurred to date in fulfillment of the contract to the total estimated direct costs required to complete the performance obligation.

Determining the revenue to be recognized for services performed under our manufacturing contracts involves significant judgments and estimates relating to the total consideration to be received and the expected total costs to complete the performance obligation. The judgments and estimates relating to the total consideration to be received include the amount of variable consideration as our contracts typically provide the customer with a range of production output options from guaranteed minimum volume obligations to the production capacity of the facility, and customers will provide periodic non-cancellable commitments for the number of wind blades to be produced over the term of the agreement. We use historical experience, customer commitments and forecasted future production based on the capacity of the plant to estimate the total revenue to be received to complete the performance obligation. In addition, the amount of revenue per unit produced may vary based on the costs of production of the wind blades as we may be able to change the price per unit based on changes in the cost of production. Further, some of our contracts provide opportunities for us to share in labor and material cost savings as well as absorb some additional costs as an incentive for more efficient production, both of which impact the margin realized on the contract and ultimately the total amount of revenue to be recognized. Additionally, certain of our customer contracts provide for concessions by us for missed production deadlines.

We estimate variable consideration at the most likely amount to which we expect to be entitled. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information available to us at the time of the estimate and may materially change as additional information becomes known.

Our contracts may be modified to account for changes in specifications of products and changing requirements. If the contract modifications are for goods or services that are not distinct from the existing contract, they are accounted for as if they were part of the original contract. The effect of a contract modification on the transaction price and the measure of progress for the performance obligation to which it relates is recognized as an adjustment to revenue on a cumulative catch-up basis. If contract modifications are for goods and services that are distinct from the existing contract and increases the amount of consideration reflecting the standalone sale price of the additional goods or services, then the contract modification is accounted for as a separate contract and is evaluated for one or more performance obligations.

Each reporting period, we evaluate the progress towards satisfaction of each performance obligation based on any contract modifications that have occurred, cost incurred to date, and an estimate of the expected future revenue and costs to be incurred to complete the performance obligation. Based on this analysis, any changes in estimates of revenue, cost of sales, contract assets and liabilities and the related impact to operating income are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on the percentage of completion of the performance obligation.

Wind blade pricing is based on annual commitments of volume as established in our customer contracts and orders less than committed volume may result in a higher price per wind blade to our customers. Orders in excess of annual commitments may result in discounts to our customers from the contracted price for the committed volume. Our customers typically provide periodic purchase orders with the price per wind blade given the current cost of the bill of materials, labor requirements and volume desired. We record an allowance for expected utilization of early payment discounts which are reported as a reduction of the related revenue.

Precision molding and assembly systems included in a customer's contract are based upon the specific engineering requirements and design determined by the customer and are specific to the wind blade design and function desired. From the customer's engineering specifications, a job cost estimate is developed along with a production plan, and the desired margin is applied based on the location the work is to be performed and complexity of the customer's design. Precision molding and assembly systems are generally built to produce wind blades which may be manufactured by us in production runs specified in the customer contract.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Contract assets primarily relate to our rights to consideration for work completed but not billed at the reporting date on manufacturing services contracts. The contract assets are transferred to accounts receivable when the rights become unconditional, which generally occurs when customers are invoiced upon the determination that a product conforms to the contract specifications and invoices are due based on each customer's negotiated payment terms, which range from 15 to 90 days. We apply the practical expedient that allows us to exclude payment terms under one year from the transfer of a promised good or service from consideration of a significant financing component in its contracts. With regards to the production of precision molding and assembly systems, our contracts generally call for progress payments to be made in advance of production. Generally, payment is made at certain percentage of completion milestones with the final payment due upon delivery to the manufacturing facility. These progress payments are recorded within contract liabilities as current liabilities in the consolidated balance sheets and are reduced as we record revenue over time. We evaluate indications that a customer may not be able to meet the obligations under our long-term supply agreements to determine if an account receivable or contract asset may be impaired.

Our customers may request, in situations where they do not have space available to receive products or do not want to take possession of products immediately for other reasons, that their finished products be stored by us in one of our facilities. Most of our contracts provide for a limited number of wind blades to be stored during the period of the contract with any additional wind blades stored subject to additional storage fees, which are included in the wind blade performance obligation revenue.

Revenue related to non-recurring engineering and freight services provided under our customer contracts is recognized at a point in time following the transfer of control of the promised services to the customer. Customers usually pay the carrier directly for the cost of shipping associated with items produced. When we pay the shipping costs, we apply the practical expedient that allows us to account for shipping and handling as a fulfillment cost and include the revenue in the associated performance obligation and the costs are included in cost of goods sold.

Taxes assessed by a governmental authority that are both imposed on and concurrent with specific revenue-producing transactions, that are collected by us from a customer, are excluded from revenue.

(e) Cost of Goods Sold

Cost of goods sold includes the costs we incur at our production facilities to make products saleable on both products invoiced during the period as well as products in progress towards the completion of each performance obligation. Cost of goods sold includes such items as raw materials, direct and indirect labor and facilities costs, including purchasing and receiving costs, plant management, inspection costs, production process improvement activities, product engineering and internal transfer costs. In addition, all depreciation associated with assets used in the production of our products is also included in cost of goods sold. Direct labor costs consist of salaries, benefits and other personnel related costs for employees engaged in the manufacture of our products and services.

Startup costs represent the unallocated overhead related to both new manufacturing facilities as well as new lines in existing manufacturing facilities. Transition costs represent the unallocated overhead related to the transition of wind blade models. The startup and transition costs are primarily fixed overhead costs incurred during the period production facilities are under-utilized while transitioning wind blade models and ramping up manufacturing, which are not allocated to products and are expensed as incurred. The cost of sales for the initial wind blades from a new model manufacturing line is generally higher than when the line is operating at optimal production volume levels due to inefficiencies during ramp-up related to labor hours per blade, cycle times per blade and raw material usage. Additionally, manufacturing overhead as a percentage of net sales is generally higher during the period in which a facility is ramping up to full production capacity due to underutilization of the facility. Manufacturing overhead at each of our facilities includes virtually all indirect costs (including share-based compensation costs) incurred at the plants, including engineering, finance, information technology, human resources and plant management.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(f) General and Administrative Expense

General and administrative expenses are primarily incurred at our corporate headquarters and our research facilities and include salaries, benefits and other personnel related costs for employees engaged in research and development, engineering, finance, internal audit, information technology, human resources, business development, global operational excellence, global supply chain, in-house legal and executive management. Other costs include outside legal and accounting fees, risk management (insurance), share-based compensation and certain other administrative and global resources costs. In addition, realized gains and losses on the sale of certain receivables, on a non-recourse basis under supply chain financing arrangements with our customers, to financial institutions and on the sale of other assets at our manufacturing facilities are also included in general and administrative expenses.

The research and development expenses incurred at our Warren, Rhode Island and Fall River, Massachusetts locations as well as at our Kolding, Denmark advanced engineering center are included in general and administrative expenses. For the years ended December 31, 2018, 2017 and 2016, total research and development expenses totaled \$0.8 million, \$1.6 million and \$1.5 million, respectively.

For the year ended December 31, 2018, the realized loss on the sale of certain receivables, on a non-recourse basis under supply chain financing arrangements with our customers, to financial institutions and the realized loss on the sale of other assets at our manufacturing facilities totaled \$4.6 million. There were no such amounts for the years ended December 31, 2017 and 2016.

(g) Cash and Cash Equivalents and Restricted Cash

Cash and cash equivalents include highly liquid investments that are readily convertible to known amounts of cash with original maturities of three months or less. The carrying value of cash and cash equivalents approximates fair value.

As of December 31, 2018 and 2017, our China locations collectively had unrestricted cash totaling \$28.9 million and \$46.3 million, respectively, in bank accounts in China. The Chinese government imposes certain restrictions on transferring cash out of China. The local governments in Turkey and Mexico impose no such restrictions on transferring cash out of the respective country.

As of December 31, 2018 and 2017, we had provided for cash deposits for letters of guarantee used for customs clearance related to our China locations totaling \$3.5 million and \$3.8 million, respectively. These amounts are reported as restricted cash in our consolidated balance sheets.

As of December 31, 2018 and 2017, we maintained a long-term deposit in interest bearing accounts, related to fully cash-collateralized letters of credit in connection an equipment lessor in Iowa, totaling \$0.5 million. See Note 9, *Other Noncurrent Assets*.

(h) Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount and generally do not bear interest. We follow the allowance method of recognizing uncollectible accounts receivable, which recognizes bad debt expense based on a review of the individual accounts outstanding and prior history of uncollectible accounts receivable. Credit is extended based on evaluation of each of our customer's financial condition and is generally unsecured. Accounts receivable are generally due within 30 days and are stated net of an allowance for doubtful accounts in the consolidated balance sheets. Accounts are considered past due if outstanding longer than contractual payment terms. We record an allowance based on consideration of a number of factors, including the length of time trade accounts are past due, previous loss history, the credit-worthiness of individual customers, economic conditions affecting specific customer industries, and economic conditions in general. We charge-off accounts receivable after all reasonable collection efforts have been exhausted. We credit payments subsequently received on such receivables to bad debt expense in the period payment is received. We record delinquent finance charges on outstanding accounts receivables only if they are collected. We wrote off \$0.2 million during 2018, \$0.2 million during 2017 and \$0.5 million during 2016, and do not have any off-balance-sheet credit exposure related to our customers. See Note 5, *Accounts Receivable*.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(i) Inventories

Inventories represent materials purchased that are not restricted to fulfillment of a specific contract and are measured at the lower of cost or net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Cost is determined using the first-in, first-out method for such raw materials. Write-downs to reduce the carrying cost of obsolete, slow-moving, and unusable inventory to net realizable value are recognized in cost of goods sold. The effect of these write-downs establishes a new cost basis in the related inventory, which is not subsequently written up.

(j) Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation and amortization of property, plant, and equipment is calculated on the straight-line method over the estimated useful lives of the assets. See Note 7, *Property, Plant and Equipment, Net*.

	Estimated useful lives
Machinery and equipment	7–10 years
Buildings	20 years
Leasehold improvements	5 to 10 years, or the term of the lease, if shorter
Office equipment and software	3 to 5 years
Furniture	3 to 5 years
Vehicles	5 years

(k) Recoverability of Long-Lived Assets

We review property, plant and equipment and other long-lived assets in order to assess recoverability based on expected future undiscounted cash flows whenever events or circumstances indicate that the carrying value may not be recoverable. If the sum of the expected future net cash flows is less than the carrying value, an impairment loss is recognized. The impairment loss is measured as the amount by which the carrying value exceeds the fair value of the asset.

(l) Goodwill, Intangible Assets and Deferred Costs

Goodwill represents the excess of the acquisition cost of Composite Solutions, Inc. from True North Partners, LLC in 2004 over the fair value of identifiable assets acquired and liabilities assumed. Goodwill, which is entirely in the U.S. segment, is evaluated for impairment annually on October 31 and whenever events or circumstances make it likely that impairment may have occurred. In determining whether impairment has occurred, we use a two-step approach. Step one compares the fair value of the related reporting unit (calculated using the discounted cash flow method) to its carrying value. If the carrying value exceeds the fair value, there is a potential impairment and step two must be performed. Step two compares the carrying value of the reporting unit's goodwill to its implied fair value (i.e., fair value of reporting unit less the fair value of the unit's assets and liabilities, including identifiable intangible assets). If the implied fair value of goodwill is less than the carrying amount of goodwill, impairment is recognized for that difference. We may first assess qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. We performed our annual goodwill impairment test during 2018 and determined that it is more-likely-than-not that its fair value exceeds its carrying amount.

Our only intangible assets were acquired in a business acquisition and provide contractual or legal rights, or other future benefits that could be separately identified. Our valuation of identified intangible assets was based upon discounted cash flow estimates that require significant management judgment with respect to revenue and expense growth rates, changes in working capital, and the selection and use of the appropriate discount rate. The intangible assets are amortized over their estimated useful life. Intangible assets with indefinite lives are evaluated at least annually for impairment or whenever events or circumstances make it likely that impairment may have occurred.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

As a result of our adoption of Topic 606, we recognized an asset for deferred costs incurred to fulfill a contract when such costs meet certain criteria. These deferred costs are amortized over their estimated useful life. See Note 2, *Revenue From Contracts with Customers* for a further discussion of those deferred costs recognized as a result of the adoption of Topic 606. See Note 8, *Intangible Assets and Deferred Costs, Net*.

(m) Warranty Expense

We provide a limited warranty for our mold and wind blade products, including materials and workmanship, with terms and conditions that vary depending on the product sold, generally for periods that range from two to five years. We also provide a limited warranty for our transportation products, including materials and workmanship, with terms and conditions that vary depending on the product sold, generally for a period of approximately two years. Warranty expense is recorded based upon estimates of future repairs using a probability-based methodology that considers previous warranty claims, identified quality issues and industry practices. Once the warranty period has expired, any remaining unused warranty accrual for the specific products is generally reversed against the current year warranty expense amount. See Note 10, *Accrued Warranty*.

(n) Treasury Stock

Common stock purchased for treasury is recorded at historical cost. Transactions in treasury shares relate to share-based compensation plans and are recorded at weighted-average cost.

(o) Foreign Currency Translation Adjustments

Our reporting currency is the U.S. dollar. However, we have non-U.S. operating segments in our U.S., Mexico, Turkey and China operations

- The U.S. parent companies of our China and Mexico operations, which are wholly-owned subsidiaries of TPI Composites, Inc., maintain their books and records in U.S. dollars.
- Our Kolding, Denmark operation, which is a wholly-owned subsidiary of TPI Composites, Inc., maintains its books and records denominated in the local Danish currency, the Krone.
- Our Mexico operations maintain their books and records through multiple legal entities that are denominated in the local Mexican currency, the Peso.
- Our Turkey operations maintain their books and records in the local Turkish currency, the Lira.
- Our China operations maintain their books and records in the local Chinese currency, the Renminbi.

Foreign currency-denominated assets and liabilities are translated into U.S. dollars at exchange rates existing at the respective balance sheet dates. Results of operations of our foreign subsidiaries are translated at the average exchange rates during the respective periods. Foreign currency transaction gains and losses are reported in realized loss on foreign currency remeasurement in our consolidated income statements. Translation adjustments are reported in accumulated other comprehensive loss in our consolidated balance sheets. Currency translation adjustments for the years ended December 31, 2018, 2017 and 2016 amounted to a loss of \$14.4 million, a gain of \$3.3 million and a loss of \$3.8 million, respectively.

(p) Share-Based Compensation

We maintain two active incentive compensation plans: the 2008 Stock Option and Grant Plan and the Amended and Restated 2015 Stock Option and Incentive Plan (the 2015 Plan). In May 2015, our board of directors and stockholders adopted and approved the 2015 Plan, which provides for the issuance of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock units, restricted stock awards, unrestricted stock awards, cash-based awards, performance share awards and dividend equivalent rights to certain of our employees, non-employee directors and consultants. The term of stock options issued under the 2015 Plan may not exceed ten years from the date of grant. Under the 2015 Plan, incentive stock options and non-qualified stock options are granted at an exercise price that is not to be less than 100% of the fair market value of our common stock on the date of grant, as determined by the Compensation Committee of our board of directors. Stock options become vested and exercisable at such times and under such conditions as determined by the Compensation Committee on the date of grant. Upon approval of the 2015 Plan, no future grants will be made from the 2008 Stock Option and Grant Plan.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

We use the Black Scholes valuation model, unless the awards are subject to market conditions, in which case we utilize a binomial-lattice model (i.e., Monte Carlo simulation model), to determine the fair value of stock options and certain performance-based restricted stock units (PSUs) granted pursuant to the 2015 Plan. The Monte Carlo simulation model utilizes multiple input variables to determine the share-based compensation expense. For grants with market conditions made in the year ended December 31, 2018, we utilized a volatility of 31.1%, a 0% dividend yield and a risk-free interest rate of 2.4%. The volatility was based on the most recent comparable period for the Company and the peer group. The stock price projection for the Company and the components of the peer group assumes a 0% dividend yield. This is mathematically equivalent to reinvesting dividends in the issuing entity over the performance period. The risk-free interest rate is equal to the yield, as of the measurement date, of the zero-coupon U.S. Treasury bill that is commensurate with the remaining performance measurement period.

The determination of the grant date fair value using an option-pricing model and simulation model requires judgment as well as assumptions regarding a number of other complex and subjective variables. These variables include our closing market price at the grant date as well as the following assumptions:

Expected Volatility . As our common stock had not been publicly traded prior to July 2016, the expected volatility assumption reflects an average of volatilities of publicly traded peer group companies with a period equal to the expected life of the options.

Expected Life (years) . We use the simplified method to estimate the expected term of stock options. The simplified method for estimating expected term is to use the mid-point between the vesting term and the contractual term of the option. We elected to use the simplified method because we did not have historical exercise data to estimate the expected term due to the limited time period our common stock had been publicly traded.

Risk-Free Interest Rate . The risk-free interest rate assumption is based upon the U.S. constant maturity treasury rates as the risk-free rate interpolated between the years commensurate with the expected life of the options.

Dividend Yield . The dividend yield assumption is zero since we do not expect to declare or pay dividends in the foreseeable future.

Forfeitures . Share-based compensation expense is reversed when the service-based award is forfeited.

Expected Vesting Period . We amortize the share-based compensation expense over the requisite service period.

Share-based compensation expense related to restricted stock units and PSUs are expensed over the vesting period using the straight-line method for our employees and our board of directors. The restricted stock units and PSUs do not have voting rights. We calculate the fair value of our share-based awards on the date of grant for our employees and directors. We calculate the fair value of our share-based awards to our consultants on the date of vesting.

(q) Leases

Leases are classified as either operating leases or capital leases. Assets acquired under capital leases are amortized on the same basis as similar property, plant and equipment. Rental payments, including rent holidays, leasehold incentives, and scheduled rent increases are expensed on a straight-line basis over the lease term including any applicable renewals. Leasehold improvements are amortized over the shorter of the depreciable lives of the corresponding fixed assets or the lease term including any applicable renewals.

(r) Financial Instruments

Interest Rate Swap

We use interest rate swap contracts to mitigate our exposure to interest rate fluctuations associated with our new credit agreement (the Credit Agreement) that we entered into in April 2018. We do not use such swap contracts for speculative or trading purposes.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

To offset the variability of future interest payments on the Credit Agreement arising from changes in the London Interbank Offered Rate (LIBOR), in April 2018, we entered into an interest rate swap agreement with a financial institution for a notional amount of \$75.0 million with an expiration date of April 2023. This interest rate swap effectively hedges \$75.0 million of the future variable rate LIBOR interest expense to a fixed rate interest expense. The derivative instrument qualified for accounting as a cash flow hedge in accordance with Financial Accounting Standards Board (FASB) Accounting Standard Codification (ASC) Topic 815, *Derivatives and Hedging*, and we designated it as such.

The settlement value of the interest rate swap is \$0.8 million as of December 31, 2018 and is included in other noncurrent assets in the consolidated balance sheet. The unrealized gain on the swap of \$0.6 million, net of tax, is included in the consolidated statement of other comprehensive income (loss).

Forward Contract

We use forward contracts to mitigate our exposure associated with fluctuations in foreign currency exchange rates. We do not use such forward contracts for speculative or trading purposes.

In August 2018, we provided a Turkish Lira denominated intercompany loan to an EMEAI subsidiary of \$15.0 million converted at the spot rate on the transaction date to 96.6 million Turkish Lira to fund their working capital requirements. We entered into a forward contract, with the same expiration as that of the intercompany loan's maturity in October 2018, for a notional amount of 101.5 million Turkish Lira to reduce our exposure to currency fluctuations from the settlement of this Turkish Lira denominated intercompany loan. The derivative instrument qualifies for accounting as a cash flow hedge in accordance with FASB ASC Topic 815, *Derivatives and Hedging*, and we designated it as such at inception. The forward contract was settled in October 2018.

(s) Income Taxes

Income taxes are accounted for under the asset and liability method in accordance with FASB ASC Topic 740, *Income Taxes*. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those differences are projected to be recovered or settled. Realization of deferred tax assets is dependent on our ability to generate sufficient taxable income of an appropriate character in future periods. A valuation allowance is established if it is determined to be more-likely-than-not that a deferred tax asset will not be realized. Interest and penalties related to unrecognized tax benefits are reported in income tax expense, See Note 15, *Income Taxes*.

(t) Net Income Attributable to Preferred Stockholders

Net income attributable to preferred stockholders relates to the accrual of dividends on our convertible and senior redeemable preferred shares, the accretion to redemption amounts on our convertible preferred shares and warrant fair value adjustment. Immediately prior to the closing of our IPO, all preferred shares were converted into shares of our common stock and as a result, the accrual of dividends ceased.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(u) Net Income Per Share Calculation

The basic net income per common share is computed by dividing the net income by the weighted-average number of common shares outstanding during a period. Diluted net income per common share is computed by dividing the net income by the weighted-average number of common shares outstanding plus potentially dilutive securities using the treasury stock method. The table below reflects the calculation of the weighted-average number of common shares outstanding, using the treasury stock method, used in computing basic and diluted earnings per common share for the years ended December 31:

	2018	2017	2016
	(in thousands)		
Basic weighted-average shares outstanding	34,311	33,844	17,530
Effect of dilutive stock options and warrants	1,691	1,018	86
Diluted weighted-average shares outstanding	36,002	34,862	17,616

Share-based compensation awards of 30,000 shares were excluded from the computation of diluted net income per share for the year ended December 31, 2018 because their effect would be anti-dilutive. We did not have any potential dilutive securities which were excluded from the computation of diluted net income per share for the years ended December 31, 2017 and 2016.

(v) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include the useful lives of property, plant and equipment, realizability of intangible assets, deferred costs and deferred tax assets, inventory valuation, relative selling prices and cost assumptions for revenue recognition, fair value of stock options, performance-based restricted stock units and warrants, warranty reserves and other contingencies.

(w) Fair Value of Financial Instruments

FASB ASC Topic 820, *Fair Value Measurements*, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Topic 820 also specifies a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value is follows:

Level 1: Quoted prices in active markets for identical assets or liabilities;

Level 2: Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3: Valuation is generated from model-based techniques that use significant assumptions not observable in the market. These unobservable assumptions reflect our own estimate of assumptions that market participants would use in pricing the asset or liability.

The carrying amounts of cash and cash equivalents, trade accounts receivable, income taxes receivable, accounts payable and accrued expenses and income taxes payable approximate fair value because of the short-term nature of these financial instruments. The carrying amount of working capital loans approximates fair value due to their short term nature and the loans carry a current market rate of interest, a level 2 input. The carrying value of long-term debt approximates fair value based on its variable rate index or based upon market interest rates available to us for debt of similar risk and maturities, both of which are level 2 inputs.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(x) Recently Issued Accounting Pronouncements

Accounting Pronouncements Adopted in 2018

Revenue from Contracts with Customers

In May 2014, the FASB issued Topic 606, which provides new recognition and disclosure requirements for revenue from contracts with customers that supersedes the existing revenue recognition guidance. The new recognition requirements focus on when the customer obtains control of the goods or services, rather than the current risks and rewards model of recognition. The core principle of the new standard is that an entity will recognize revenue when it transfers goods or services to its customers in an amount that reflects the consideration an entity expects to be entitled to for those goods or services. The new disclosure requirements included in these financial statements contain information intended to communicate the nature, amount, timing and any uncertainty of revenue and cash flows from the applicable contracts, including any significant judgments and changes in judgments and assets recognized from the costs to obtain or fulfill a contract.

We adopted Topic 606 as of January 1, 2018 with retrospective application to January 1, 2016 through December 31, 2017. See Note 2, *Revenue From Contracts with Customers* and Note 19, *Adjustments to Previously Reported Financial Statements from the Adoption of an Accounting Pronouncement*, for further discussion of the adoption of this standard, including the impact on our previously reported financial statements.

Cash Flow Presentation

In August 2016, the FASB issued ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments*, that clarifies how certain cash receipts and cash payments are presented and classified in the consolidated statements of cash flows. In addition, in November 2016, the FASB issued ASU 2016-18, *Restricted Cash*, that requires restricted cash and cash equivalents to be included with the amount of cash and cash equivalents that are reconciled on the consolidated statements of cash flows. We adopted these ASUs as of January 1, 2018 with retrospective application to each period presented.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheets which total the same such amounts in the consolidated statements of cash flows:

	December 31,			
	2018	2017	2016	2015
	(in thousands)			
Cash and cash equivalents	\$ 85,346	\$ 148,113	\$ 119,066	\$ 45,917
Restricted cash	3,555	3,849	2,259	1,760
Restricted cash included within other noncurrent assets	475	475	8,538	2,537
Total cash, cash equivalents and restricted cash shown in the consolidated statements of cash flows	<u>\$ 89,376</u>	<u>\$ 152,437</u>	<u>\$ 129,863</u>	<u>\$ 50,214</u>

See Note 19, *Adjustments to Previously Reported Financial Statements from the Adoption of an Accounting Pronouncement*, for further discussion of the adoption of these standards, including the impact on our previously reported financial statements.

Income Taxes

In December 2017, the SEC staff issued Staff Accounting Bulletin 118 (SAB 118), which provides relief for companies that have not completed their accounting for the effects of The Tax Cuts and Jobs Act (Tax Reform Act) but can determine a reasonable estimate of those effects to allow them to include a provisional amount based on their reasonable estimate in their financial statements. The guidance in SAB 118 also allows companies to adjust the provisional amounts during a one-year “measurement period” which is similar to the measurement period used when accounting for business combinations. In the accompanying consolidated financial statements, we have completed our accounting for all the tax effects associated with the enactment of the Tax Reform Act. See Note 15, *Income Taxes*, for further discussion.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Share-Based Compensation

In May 2017, the FASB issued ASU 2017-09, Scope of Modification Accounting, which provides guidance about which changes to terms or conditions of share-based payment awards requires an entity to apply the modification accounting of Topic 718, Compensation-Stock Compensation. This standard is effective for all entities for annual and interim periods beginning after December 15, 2017, with early adoption permitted. We adopted this standard on January 1, 2018 and it did not have a material effect on our consolidated financial statements.

Financial Instruments

In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities, which simplifies the application of hedge accounting guidance, including eliminating the requirement to separately measure and report hedge ineffectiveness. This standard is effective for all public business entities for annual and interim periods beginning after December 15, 2018, with early adoption permitted. We adopted this standard on January 1, 2018 and it did not have a material effect on our consolidated financial statements.

Accounting Pronouncements Not Yet Adopted

Leases

In February 2016, the FASB established Topic 842, *Leases*, by ASU No. 2016-02, which requires lessees to recognize leases on-balance sheet and disclose key information about leasing arrangements. Topic 842 was subsequently amended by ASU No. 2018-01, *Land Easement Practical Expedient for Transition to Topic 842*; ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*; and ASU No. 2018-11, *Targeted Improvements*. The new standard establishes a right-of-use model (ROU) that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement.

This standard is effective for all public business entities for annual and interim periods beginning after December 15, 2018, with early adoption permitted. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either (1) its effective date or (2) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. We will adopt this new standard on January 1, 2019 and use the effective date as our date of initial application. Consequently, financial information will not be updated and the disclosures required under the new standard will not be provided for dates and periods before January 1, 2019.

The new standard provides a number of optional practical expedients in transition. We expect to elect the package of practical expedients, which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and initial direct costs. We do not expect to elect the use-of-hindsight or the practical expedient pertaining to land easements, the latter not being applicable to us.

We expect that this standard will have a material effect on our financial statements. While we continue to assess all of the effects of adoption, we currently believe the most significant effects relate to the recognition of new ROU assets and lease liabilities on our balance sheet for our real estate, equipment and auto operating leases and providing significant new disclosures about our leasing activities.

On adoption, we currently expect to recognize additional operating liabilities of approximately \$135 million, with corresponding ROU assets of approximately the same amount based on the present value of the remaining minimum rental payments under current leasing standards for existing operating leases.

The new standard also provides practical expedients for an entity's ongoing accounting. We currently expect to elect the short-term lease recognition exemption for all leases that qualify. Accordingly, for those leases that qualify, we will not recognize ROU assets or lease liabilities, and this includes not recognizing ROU assets or lease liabilities for existing short-term leases of those assets in transition. We also currently expect to elect the practical expedient to not separate lease and non-lease components for all of our leases.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Income Taxes

In February 2018, the FASB issued ASU 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows a reclassification from accumulated other comprehensive income to retained earnings stranded tax effects resulting from the Tax Reform Act. This standard is effective for all entities for annual and interim periods beginning after December 15, 2018, with early adoption permitted. We will adopt this standard on January 1, 2019 and do not expect that it will have a material impact on our consolidated financial statements.

Share-Based Compensation

In June 2018, the FASB issued ASU 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting*, which expands the scope of Topic 718, *Compensation-Stock Compensation*, to include share-based payment transactions for acquiring goods and services from nonemployees. This standard is effective for all public business entities for annual and interim periods beginning after December 15, 2018. Early adoption is permitted, but no earlier than our adoption date of Topic 606. We will adopt this standard on January 1, 2019 and do not expect that it will have a material impact on our consolidated financial statements.

In July 2018, the FASB issued ASU 2018-09, *Codification Improvements*, which contains amendments that affect a wide variety of Topics in the Codification, including amendment to Subtopic 718-40, *Compensation-Stock Compensation-Income Taxes*, that clarifies the timing of when an entity should recognize excess tax benefits. This standard is effective for all public business entities for annual periods beginning after December 15, 2018. We will adopt this standard on January 1, 2019 and are currently evaluating the impact of the adoption of this standard on our consolidated financial statements.

There have been no other recent accounting pronouncements or changes in accounting pronouncements during the current year that are of significance, or potential significance, to us.

Note 2 – Revenue From Contracts with Customers

The following tables represents the disaggregation of our net sales revenue by product for each of our reportable segments:

	Year Ended December 31, 2018				
	U.S.	Asia	Mexico	EMEI	Total
	(in thousands)				
Wind blade sales	\$ 126,335	\$ 264,417	\$ 256,101	\$ 286,414	\$ 933,267
Precision molding and assembly systems sales	5,034	36,616	7,203	—	48,853
Transportation sales	29,254	—	—	—	29,254
Other sales	3,093	5,222	5,452	4,483	18,250
Total net sales	\$ 163,716	\$ 306,255	\$ 268,756	\$ 290,897	\$ 1,029,624

	Year Ended December 31, 2017				
	U.S.	Asia	Mexico	EMEI	Total
	(in thousands)				
Wind blade sales	\$ 164,870	\$ 346,200	\$ 200,355	\$ 179,100	\$ 890,525
Precision molding and assembly systems sales	8,445	18,408	760	—	27,613
Transportation sales	14,020	—	—	—	14,020
Other sales	3,690	7,912	5,448	5,990	23,040
Total net sales	\$ 191,025	\$ 372,520	\$ 206,563	\$ 185,090	\$ 955,198

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

	Year Ended December 31, 2016				
	U.S.	Asia	Mexico	EMEAI	Total
	(in thousands)				
Wind blade sales	\$ 163,926	\$ 287,398	\$ 122,712	\$ 138,358	\$ 712,394
Precision molding and assembly systems sales	17,683	17,846	363	—	35,892
Transportation sales	7,552	—	—	—	7,552
Other sales	2,702	4,317	4,945	1,217	13,181
Total net sales	\$ 191,863	\$ 309,561	\$ 128,020	\$ 139,575	\$ 769,019

In addition, most of our net sales are made directly to our customers, primarily large multi-national wind turbine manufacturers, under our long-term contracts which are typically five years in length.

Contract Assets and Liabilities

Contract assets consist of the amount of revenue recognized over time for performance obligations in production where control has transferred to the customer but the contract does not yet allow for the customer to be billed. Typically, customers are billed when the product finishes production and meets the technical specifications contained in the contract. The contract assets are recorded as current assets in the consolidated balance sheets. Contract liabilities consist of advance payments in excess of revenue earned. These amounts were historically recorded as customer deposits which usually relate to progress payments received as precision molding and assembly systems were being manufactured. The contract liabilities are recorded as current liabilities in the consolidated balance sheets and are reduced as we record revenue over time.

These contract assets and liabilities are reported on the consolidated balance sheets net on a contract-by-contract basis at the end of each reporting period, as demonstrated in the table below.

Contract assets and contract liabilities consisted of the following:

	December 31,		
	2018	2017	\$ Change
	(in thousands)		
Gross contract assets	\$ 127,568	\$ 112,557	\$ 15,011
Less: reclassification from contract liabilities	(10,860)	(6,938)	(3,922)
Contract assets	\$ 116,708	\$ 105,619	\$ 11,089
	(in thousands)		
Gross contract liabilities	\$ 18,003	\$ 9,701	\$ 8,302
Less: reclassification to contract assets	(10,860)	(6,938)	(3,922)
Contract liabilities	\$ 7,143	\$ 2,763	\$ 4,380

Contracts assets increased by \$11.1 million from December 31, 2017 to December 31, 2018 due to incremental unbilled production during the year ended December 31, 2018. Contracts liabilities increased by \$4.4 million from December 31, 2017 to December 31, 2018 due to the amounts billed to customers exceeding the revenue earned related to precision molding and assembly systems and wind blades being produced in the year ended December 31, 2018.

The time it takes to produce a single blade is typically between 5 to 7 days. The time it takes to produce a mold is typically between 3 to 6 months.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

For the year ended December 31, 2018, we recognized \$2.8 million of revenue that was included in the corresponding contract liability balance at the beginning of the period.

Performance Obligations

Remaining performance obligations represent the transaction price of firm orders for which work has not been performed and excludes any unexercised contract options.

For the year ended December 31, 2018, net revenue recognized from our performance obligations satisfied in previous periods decreased by \$12.7 million. This primarily relates to changes in certain of our estimated total contract values and related percentage of completion estimates.

As of December 31, 2018, the aggregate amount of the transaction price allocated to the remaining performance obligations to be satisfied in future periods was approximately \$5.6 billion. We estimate that we will recognize the remaining performance obligations as revenue as follows: 27 percent in 2019, 28 percent in 2020, 20 percent in 2021, 15 percent in 2022 and the remaining 10 percent in 2023.

Pre-Production Investments

We recognize an asset for deferred costs incurred to fulfill a contract when those costs meet all of the following criteria: (a) the costs relate directly to a contract or to an anticipated contract that we can specifically identify; (b) the costs generate or enhance our resources that will be used in satisfying performance obligations in the future; and, (c) the costs are expected to be recovered. We capitalize the costs related to training our workforce to execute the manufacturing services and other facility set-up costs related to preparing for production of a specific contract. We factor these costs into our estimated cost analysis for the overall contract. Costs capitalized are amortized over the number of units produced during the contract term. As of December 31, 2018, the cost and accumulated amortization of such assets totaled \$5.6 million and \$2.1 million, respectively. As of December 31, 2017, the cost and accumulated amortization of such assets totaled \$2.4 million and \$1.4 million, respectively. These amounts are included in intangible assets and deferred costs, net in the consolidated balance sheet. See Note 8, *Intangible Assets and Deferred Costs, Net*.

In applying the practical expedient as permitted under Topic 606, we recognize the incremental costs of obtaining contracts as an expense when incurred if the amortization period of the asset that we otherwise would have recognized is one year or less. These costs are included in cost of goods sold.

Note 3. Significant Risks and Uncertainties

Our revenues and receivables are from a small number of customers. As such, our production levels are dependent on these customers' orders. See Note 16, *Concentration of Customers*.

We maintain our U.S. cash in bank deposit accounts that, at times, exceed U.S. federally insured limits. U.S. bank accounts are guaranteed by the Federal Deposit Insurance Corporation (FDIC) in an amount up to \$250,000 during 2018 and 2017. At December 31, 2018 and 2017, we had \$53.7 million and \$98.9 million, respectively, of cash in deposit accounts in high quality U.S. banks, which was in excess of FDIC limits. We have not experienced losses in any such accounts.

We also maintain cash in bank deposit accounts outside the U.S. with no insurance. At December 31, 2018, this includes \$1.0 million in Turkey, \$28.9 million in China and \$1.7 million in Mexico. We have not experienced losses in these accounts. In addition, we have short-term deposits in interest bearing accounts of \$3.5 million in China, which are reported as restricted cash in our consolidated balance sheets. We also have long-term deposits in interest bearing accounts of \$0.5 million in Iowa. See Note 9, *Other Noncurrent Assets*.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 4. Related-Party Transactions

Related party transactions include transactions between us and certain of our affiliates. The following transactions were in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

We have previously entered into several agreements with subsidiaries of General Electric Company and its consolidated affiliates (GE) relating to the operation of its business. As a result of these agreements, GE has been a debtor, creditor and holder of both our preferred and common shares. During the second quarter of 2017, GE reduced its holdings of our common shares to less than five percent of the total shares outstanding and then completely divested of our common shares during the third quarter of 2017.

We have entered into five separate supply agreements with GE to manufacture wind blades in Newton, Iowa; Taicang Port, China; Juárez, Mexico (2) and Izmir, Turkey. The supply agreements in Taicang Port, China and Izmir, Turkey expired on December 31, 2017. For the six months ended June 30, 2017, we recorded related-party sales with GE of \$198.6 million. As disclosed in Note 16, *Concentration of Customers*, for the year ended December 31, 2016, we recorded related-party sales with GE of \$372.3 million.

In January 2016, we entered into an agreement with GE and received an advance of \$2.0 million, which we repaid in full in August 2016.

Certain of our existing stockholders, consisting of entities associated with Element Partners, Angeleno Group and Landmark Partners, each of which is an affiliate of a member of our board of directors, as well as certain of our executive officers and a director, purchased an aggregate of 1,250,000 shares of our common stock in the IPO. In addition, all outstanding obligations and accrued interest under our subordinated convertible promissory notes held by certain of our existing stockholders, including Element Partners, Angeleno Group and Landmark Partners, were converted into an aggregate of 1,079,749 shares of our common stock concurrent with the closing of the IPO at the public offering price of \$11.00 per share.

In connection with our secondary offering in May 2017, certain entities associated with Element Partners, Angeleno Group, Landmark Partners and NGP Energy Technology Partners, L.P, as well as certain of our executive officers sold an aggregate of 5,075,000 shares of our common stock at the public offering price of \$16.35 per share.

Note 5. Accounts Receivable

Accounts receivable at December 31 consisted of the following:

	2018	2017
	(in thousands)	
Trade accounts receivable	\$ 172,667	\$ 117,794
Other accounts receivable	4,148	3,782
Total accounts receivable	<u>\$ 176,815</u>	<u>\$ 121,576</u>

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets at December 31 consisted of the following:

	2018	2017
	(in thousands)	
Refundable value-added tax	\$ 11,160	\$ 11,507
Prepaid customs and duty charges	495	280
Deposits	5,659	4,585
Other prepaid expenses	8,724	10,357
Other current assets	—	778
Total prepaid expenses and other current assets	<u>\$ 26,038</u>	<u>\$ 27,507</u>

Note 7. Property, Plant and Equipment, Net

Property, plant and equipment, net at December 31 consisted of the following:

	2018	2017
	(in thousands)	
Machinery and equipment	\$ 119,737	\$ 100,681
Buildings	15,080	14,711
Leasehold improvements	38,747	21,853
Office equipment and software	26,363	18,664
Furniture	19,579	19,017
Vehicles	287	294
Construction in progress	17,390	10,687
Total property, plant and equipment, gross	237,183	185,907
Accumulated depreciation	(77,760)	(62,427)
Total property, plant and equipment, net	<u>\$ 159,423</u>	<u>\$ 123,480</u>

As of December 31, 2018, we had undertaken projects including the construction and outfitting of our Matamoros, Mexico facility, our Yangzhou, China facility, the expansion and improvements at certain of our existing wind blade production facilities and costs at our corporate office to enhance our information technology systems.

Total depreciation for the years ended December 31, 2018, 2017 and 2016 was \$25.5 million, \$20.8 million and \$12.7 million, respectively.

As of December 31, 2018, the cost and accumulated depreciation of property, plant and equipment that we are leasing under capital lease arrangements is \$41.3 million and \$11.7 million, respectively. As of December 31, 2017, the cost and accumulated depreciation of property, plant and equipment that we are leasing under capital lease arrangements is \$29.7 million and \$8.0 million, respectively.

Note 8. Intangible Assets and Deferred Costs, Net

Carrying values and estimated useful lives of intangible assets and deferred costs as of December 31, 2018, consisted of the following:

	Estimated Useful Life	Cost	Accumulated Amortization	Net
		(in thousands)		
Pre-production investments (1)	Various	\$ 5,598	\$ (2,111)	\$ 3,487
License	5 years	1,000	(179)	821
Trademarks	Indefinite	150	—	150
Total intangible assets and deferred costs, net		<u>\$ 6,748</u>	<u>\$ (2,290)</u>	<u>\$ 4,458</u>

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Carrying values and estimated useful lives of intangible assets and deferred costs as of December 31, 2017, consisted of the following:

	Estimated Useful Life	Cost	Accumulated Amortization (in thousands)	Net
Pre-production investments (1)	Various	\$ 2,387	\$ (1,429)	\$ 958
Trademarks	Indefinite	150	—	150
Total intangible assets and deferred costs, net		<u>\$ 2,537</u>	<u>\$ (1,429)</u>	<u>\$ 1,108</u>

(1) See Note 2, *Revenue From Contracts with Customers*, for a further discussion of these pre-production investments.

During the years ended December 31, 2018, 2017 and 2016, we recorded amortization expense for the intangible assets and deferred costs of \$0.9 million, \$0.9 million and \$0.4 million, respectively.

Note 9. Other Noncurrent Assets

Other noncurrent assets at December 31 consisted of the following:

	2018	2017
	(in thousands)	
Restricted cash	\$ 475	\$ 475
Deferred tax assets	15,296	1,740
Land use right	2,378	1,708
Deposits	3,845	3,237
Other	1,976	406
Total other noncurrent assets	<u>\$ 23,970</u>	<u>\$ 7,566</u>

As of December 31, 2018 and 2017, we maintained long-term deposits in interest bearing accounts related to fully cash-collateralized letter of credit in connection with an equipment lessor in Iowa totaling approximately \$0.5 million.

The historical land use right asset was purchased during 2007 and permits us to use the land where the Taicang Port, China facility, owned by us, is situated. Amortization of the land use right began upon the opening of the plant in 2008. An additional land use right asset was purchased during 2018 which permits us to use additional land where the Taicang Port, China facility is situated. We are amortizing both these land use rights on a straight-line basis over their 50 year lives.

Note 10. Accrued Warranty

Warranty accrual at December 31 consisted of the following:

	2018	2017	2016
	(in thousands)		
Warranty accrual at beginning of year	\$ 30,419	\$ 21,089	\$ 14,380
Accrual during the year	14,605	15,443	19,279
Cost of warranty services provided during the year (1)	(4,457)	(1,986)	(10,808)
Reduction of reserves	(3,802)	(4,127)	(1,762)
Warranty accrual at end of year	<u>\$ 36,765</u>	<u>\$ 30,419</u>	<u>\$ 21,089</u>

(1) The 2016 amount includes an 8.0 million Euro (\$8.5 million) payment related to a settlement agreement with a customer.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 11. Share-Based Compensation

Since 2015, we have granted awards of stock options, restricted stock units (RSUs) and performance-based restricted stock units to certain employees and non-employee directors under the 2015 Plan. Each award granted prior to the consummation of our IPO included a performance condition that required the completion of an initial public offering by us and a required vesting period of one to four years commencing upon achievement of the performance condition. As the IPO was consummated in July 2016, we began recording compensation expense in July 2016 for the requisite service period from the grant date through the IPO date with the balance of the share-based compensation to be expensed over the remaining vesting period.

Upon completion of the IPO and the achievement of the performance condition in 2016, we recorded share-based compensation expense for the requisite service period from the grant date which included approximately \$3.6 million related to the portion of the service period from the grant date through December 31, 2015.

The share-based compensation expense recognized in the consolidated income statements for the years ended December 31 was as follows:

	2018	2017	2016
	(in thousands)		
Cost of goods sold	\$ 1,281	\$ 1,070	\$ 1,505
General and administrative expenses	6,514	6,054	8,397
Total share-based compensation expense	\$ 7,795	\$ 7,124	\$ 9,902

The share-based compensation expense recognized by award type for the years ended December 31 was as follows:

	2018	2017	2016
	(in thousands)		
RSUs	\$ 4,209	\$ 2,808	\$ 3,457
Stock options	2,463	4,316	6,445
PSUs	1,123	—	—
Total share-based compensation expense	\$ 7,795	\$ 7,124	\$ 9,902

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The summary of activity for our incentive plans is as follows:

	Shares Available for Grant	Stock Options			RSUs		PSUs	
		Shares	Weighted-Average Exercise Price	Options Exercisable	Shares	Weighted-Average Grant Date Fair Value	Shares	Weighted-Average Grant Date Fair Value
Balance as of December 31, 2015	3,392,141	3,261,663	\$ 11.90	35,703	731,880	\$ 10.89	—	—
Increase in shares authorized	169,546	—	—	—	—	—	—	—
Granted	(493,990)	493,990	17.37	—	—	—	—	—
Exercised/vested	—	—	—	—	—	—	—	—
Forfeited/cancelled	519,995	(424,235)	11.78	—	(95,760)	10.87	—	—
Balance as of December 31, 2016	3,587,692	3,331,418	12.72	25,828	636,120	10.90	—	—
Increase in shares authorized	1,349,475	—	—	—	—	—	—	—
Granted	(433,700)	213,200	19.70	—	220,500	22.42	—	—
Exercised/vested	—	(138,878)	10.83	—	(218,040)	10.95	—	—
Forfeited/cancelled	227,650	(202,450)	11.54	—	(25,200)	10.87	—	—
Balance as of December 31, 2017	4,731,117	3,203,290	13.34	890,433	613,380	15.02	—	—
Increase in shares authorized	1,360,826	—	—	—	—	—	—	—
Granted	(451,212)	9,652	22.67	—	149,012	23.37	292,548	22.67
Exercised/vested	—	(354,153)	12.10	—	(298,036)	13.03	—	—
Forfeited/cancelled	339,874	(258,095)	14.72	—	(38,480)	21.51	(43,299)	22.67
Balance as of December 31, 2018	<u>5,980,605</u>	<u>2,600,694</u>	13.41	1,415,948	<u>425,876</u>	18.75	<u>249,249</u>	22.67

The grant date fair value of RSUs which vested during the years ended December 31, 2018 and 2017 was \$3.9 million and \$2.4 million, respectively. In addition, during 2018 and 2017, we repurchased 100,891 and 68,815 shares for \$2.9 million and \$1.3 million, respectively, related to tax withholding requirements on vested RSU awards.

The following table summarizes the outstanding and exercisable stock option awards as of December 31, 2018:

Range of Exercise Prices:	Options Outstanding			Options Exercisable	
	Shares	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
\$8.49	16,397	1.6	\$ 8.49	16,397	\$ 8.49
\$10.87	1,603,722	6.4	10.87	859,549	10.87
\$11.00 to \$16.53	495,601	7.1	16.10	331,800	16.31
\$17.68 to \$18.70	276,107	7.5	18.67	150,833	18.67
\$18.77 to \$22.67	208,867	8.7	19.97	57,369	19.93
\$8.49 to \$22.67	<u>2,600,694</u>	6.8	13.41	<u>1,415,948</u>	13.32

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The following table contains a dditional information pertaining to stock options for the years ended December 31:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
	<u>(in thousands)</u>		
Total intrinsic value of stock options outstanding	\$ 29,045	\$ 22,804	\$ 12,251
Total intrinsic value of stock options exercisable	15,949	6,688	195
Cash received from the exercise of stock options	4,284	1,430	—
Fair value of stock options vested	4,566	4,931	—

As of December 31, 2018, the unamortized cost of the outstanding RSUs and PSUs was \$3.4 million and \$3.1 million, respectively, which we expect to recognize in the consolidated financial statements over weighted-average periods of approximately 1.6 years and 2.2 years, respectively. Additionally, the total unrecognized cost related to non-vested stock option awards was \$1.6 million, which we expect to recognize in the consolidated financial statements over a weighted-average period of approximately 1.4 years.

As of December 31, 2017, the unamortized cost of the outstanding RSUs was \$5.0 million, which we expected to recognize in the consolidated financial statements over a weighted-average period of approximately 1.5 years. Additionally, the total unrecognized cost related to non-vested stock option awards was \$4.8 million, which we expected to recognize in the consolidated financial statements over a weighted-average period of approximately 1.8 years.

As of December 31, 2016, the unamortized cost of the outstanding RSUs was \$2.8 million, which we expected to recognize in the consolidated financial statements over a weighted-average period of approximately 1.8 years. Additionally, the total unrecognized cost related to non-vested stock option awards was \$7.3 million, which we expected to recognize in the consolidated financial statements over a weighted-average period of approximately 2.1 years.

The fair value of the stock options granted during the years ended December 31 were calculated using the Black-Scholes option pricing model with the following assumptions:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Weighted-average fair value	\$ 10.36	\$ 9.10	\$ 5.14
Expected volatility	42.8%	45.0%	45.2%
Expected life	6.3 years	6.3 years	6.3 years
Risk-free interest rate	2.7%	1.5%	0.9%
Dividend yield	0.0%	0.0%	0.0%

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 12. Long-Term Debt, Net of Debt Issuance Costs and Current Maturities

Long-term debt, net of debt issuance costs and current maturities, as of December 31 consisted of the following:

	2018	2017
	(in thousands)	
Senior term loan—U.S.	\$ —	\$ 71,250
Senior revolving loan—US	90,414	2,820
Accounts receivable financing—EMEAI	14,524	14,100
Equipment financing—EMEAI	12,197	16,901
Equipment capital lease—U.S.	111	536
Equipment capital lease—EMEAI	6,738	5,058
Equipment capital lease—Mexico	14,517	12,844
Equipment loan—Mexico	—	47
Total debt - principal	138,501	123,556
Less: Debt issuance costs	(878)	(2,171)
Total debt, net of debt issuance costs	137,623	121,385
Less: Current maturities of long-term debt	(27,058)	(35,506)
Long-term debt, net of debt issuance costs and current maturities	<u>\$ 110,565</u>	<u>\$ 85,879</u>

Senior Financing Agreements (U.S.):

In December 2017, we amended our previous credit facility (the Credit Facility) to consent to the restructuring of our parent and subsidiaries, decreased the variable interest rate to LIBOR, with a 1.0% floor, plus 5.25% and the amendment of certain capital expenditure and other financial covenants. In connection with this amendment, the amendment fee of \$0.4 million was recorded as a debt issuance cost and was being amortized to interest expense over the remaining term of the Credit Facility (36 months) using the effective interest method. As of December 31, 2017, the aggregate outstanding balance under the Credit Facility was \$74.1 million.

In April 2018, we entered into a new credit agreement (the Credit Agreement) with four lenders consisting of a multi-currency, revolving credit facility in an aggregate principal amount of \$150.0 million, including a \$25.0 million letter of credit sub-facility. On the closing date we drew down \$75.4 million on the revolving credit facility in connection with the closing of the transactions contemplated by the Credit Agreement and used the proceeds to pay all outstanding amounts due and payable under the Credit Facility, various fees and expenses and accrued interest. All borrowings and amounts outstanding under the Credit Agreement are scheduled to mature in April 2023.

In connection with the Credit Agreement, we expensed \$2.0 million of deferred financing costs associated with the Credit Facility and a \$1.4 million prepayment penalty within the caption “Loss on extinguishment of debt” in the accompanying consolidated income statements. In addition, we incurred debt issuance costs related to the Credit Agreement totaling \$1.0 million which will be amortized to interest expense over the five-year term of the Credit Agreement using the effective interest method.

Interest accrues at a variable rate equal to LIBOR plus an initial margin of 1.5% (4.0% as of December 31, 2018), which may vary based on our total net leverage ratio as defined in the Credit Agreement. Interest is paid monthly and we are not obligated to make any principal repayments prior to the maturity date provided we are not in default under the Credit Agreement. We may prepay the borrowings under the Credit Agreement without penalty.

In April 2018, we also entered into an interest rate swap arrangement to fix a notional amount of \$75.0 million of the Credit Agreement at an effective interest rate of 4.2% for a period of five years.

As of December 31, 2018, there was \$90.4 million outstanding under the Credit Agreement.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Due to the revolving credit facility's variable interest rate of LIBOR plus a competitive spread, we estimate that fair-value approximates the face value of these notes.

Accounts Receivable, Secured and Unsecured Financing:

EMEA: During 2014, we renewed a general credit agreement, as amended, with a financial institution in Turkey to provide up to 21.0 million Euro of short-term collateralized financing on invoiced accounts receivable of one of our customers in Turkey. Interest accrues annually at a fixed rate of 9.1% and is paid quarterly. In December 2014, and later amended, we obtained an additional \$5.0 million of unsecured financing in Turkey under the credit agreement, increasing the total facility. All credit agreement terms remained the same. The credit agreement does not have a maturity date, however the limits are reviewed in September of each year. As of December 31, 2017, there was \$6.8 million of accounts receivable financing and no unsecured financing outstanding. During the fourth quarter of 2018, we replaced the accounts receivable financing facility with the accounts receivable assignment agreement discussed below. As of December 31, 2018, there were no amounts outstanding under the unsecured financing facility.

In 2014, we entered into a credit agreement with a Turkish financial institution to provide up to \$16.0 million of short-term financing of which \$10.0 million is collateralized financing on invoiced accounts receivable of one of our customers in Turkey, \$5.0 million is unsecured financing and \$1.0 million is related to letters of guarantee. Interest accrues at a variable rate of the three month Euro Interbank Offered Rate (EURIBOR) plus 6.5%. During the first quarter of 2018, the collateralized financing on invoiced accounts receivables and unsecured financing facilities were retired and the letters of guarantee limit was decreased to \$0.6 million. No amounts were outstanding under this agreement as of December 31, 2018 or 2017.

In 2016, we entered into a general credit agreement, as amended, with a Turkish financial institution to provide up to 31.0 million Euro (approximately \$35.5 million as of December 31, 2018) of short-term financing of which 15.0 million Euro (approximately \$17.2 million as of December 31, 2018) is collateralized financing based on invoiced accounts receivables of two of our customers in Turkey, 15.0 million Euro (approximately \$17.2 million as of December 31, 2018) for the collateralized financing of capital expenditures and 1.0 million Euro (approximately \$1.2 million as of December 31, 2018) related to letters of guarantee. Interest on the collateralized financing based on invoiced accounts receivables of two of our customers in Turkey accrues at a fixed rate of 9.0% as of December 31, 2018 and is paid quarterly with a maturity date equal to four months from the applicable invoice date. Interest on the collateralized capital expenditures financing accrues at the one month EURIBOR plus 6.75% (6.75% as of December 31, 2018) with monthly principal repayments beginning in October 2017 with a final maturity date of December 2021. Interest on the letters of guarantee accrues at 2.00% annually with an amended final maturity date of December 2018. As of December 31, 2018 and 2017, there was \$12.2 million and \$16.9 million outstanding under the collateralized financing of capital expenditures line, respectively. Additionally, as of December 31, 2018 and 2017, there was \$14.5 million and \$7.3 million, respectively, outstanding under the collateralized financing based on invoiced accounts receivables.

In the fourth quarter of 2018, we entered into a credit agreement with a Turkish financial institution to provide up to 100 million Turkish Lira (approximately \$18.9 million as of December 31, 2018) of collateralized financing on invoiced accounts receivable of one of our customers in Turkey. Interest accrues at a fixed rate of 4.5% and is paid quarterly. The credit agreement does not have a maturity date, however the limit will be reviewed in October of each year. No amounts were outstanding under this agreement as of December 31, 2018.

Due to the short-term nature of the unsecured financings in the EMEA segment, we estimate that fair-value approximates the face value of the notes.

Asia: In February 2017, we entered into a credit agreement, as amended, with a Chinese financial institution to provide an unsecured credit line of up to 210.0 million Renminbi (approximately \$30.6 million as of December 31, 2018) which can be used for the purpose of domestic and foreign currency loans, issuing customs letters of guarantee or other transactions approved by the lender. Interest on the credit line accrues at the Chinese central bank interest rate plus an applicable margin (4.8% as of December 31, 2018) and can be paid monthly, quarterly or at the time of the debt's maturity (extended to January 2020). As of December 31, 2018 and 2017, there were 92.8 million Renminbi (approximately \$13.5 million) and 127.0 million Renminbi (approximately \$19.5 million) of letters of guarantee used for customs clearance outstanding, respectively.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

In March 2018, we entered into a credit agreement with a Chinese financial institution to provide an unsecured credit line of up to 100.0 million Renminbi (approximately \$14.6 million as of December 31, 2018) of which 70.0 million Renminbi (approximately \$10.2 million as of December 31, 2018) can be used as customs letters of guarantee and 30.0 million Renminbi (approximately \$4.4 million as of December 31, 2018) can be used for working capital. Interest on the credit line accrues at the Chinese central bank interest rate plus an applicable margin (4.8% at December 31, 2018) and can be paid monthly, quarterly or at the time of the debt's maturity (in March 2023). As of December 31, 2018, there were no amounts outstanding under this credit agreement.

Equipment Leases and Other Arrangements:

U.S.: In 2014, we entered into a lease agreement, as amended, with a leasing company for the lease of up to \$5.4 million of machinery and equipment at our Iowa facility. The lease included an implied effective interest rate of 4.3% annually and required monthly payments during each 24 month term. The amounts outstanding under this agreement as of December 31, 2018 and 2017, were \$0.1 million and \$0.5 million, respectively.

EMEA: In 2013, we entered into a finance lease agreement with a financial institution in Turkey for the initial lease of up to \$4.9 million of machinery, equipment and building improvements at our first Turkey facility. The term of the lease was for four years at an effective interest rate of 6.0%. The loan was to be repaid in monthly installments through 2017. The financing agreement was subsequently amended in 2017 to include our second Turkey facility and increase the amount of machinery, equipment and building improvements available for lease to \$10.0 million. As a result of the amendment, the loan is to be repaid in monthly installments through 2022. All other financing agreement terms remained the same. The balance outstanding as of December 31, 2018 and 2017 was \$6.7 million and \$5.1 million, respectively.

Mexico: In 2016, we entered into a lease agreement, as amended, with a leasing company for the lease of up to \$10.0 million of machinery and equipment at our second Mexico facility. The lease includes an implied effective interest rate of 4.3% annually and requires monthly payments during each 24 month term. The amounts outstanding under this agreement as of December 31, 2018 and 2017 were \$0.7 million and \$5.0 million, respectively.

In March 2017, we entered into a sale-lease agreement with a leasing company for the initial lease of up to \$12.0 million of machinery and equipment at our third Mexico facility. The lease includes an implied effective interest rate of 4.3% annually and requires monthly payments during each 24 month term. The amounts outstanding under this agreement as of December 31, 2018 and 2017 were \$3.2 million and \$7.4 million, respectively.

In March 2018, we entered into a sale-lease agreement with a leasing company for the initial lease of up to \$15.0 million of machinery and equipment at our Matamoros, Mexico facility. The lease includes an implied effective interest rate of 6.7% annually and requires monthly payments during each 48 month term. The amount outstanding under this agreement as of December 31, 2018 was \$10.5 million.

Costs associated with the issuance of debt are presented net of the related debt and are amortized over the term of the debt using the effective interest rate method. For the years ended December 31, 2018, 2017 and 2016, \$0.3 million, \$0.6 million and \$1.7 million of debt issuance costs were amortized to interest expense in our consolidated income statements, respectively.

The average interest rate on our short-term borrowings as of December 31, 2018 and 2017 was approximately 7.7% and 5.9%, respectively.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The future aggregate annual principal maturities of debt at December 31, 2018, are as follows (in thousands):

2019	\$	27,058
2020		8,370
2021		8,423
2022		3,938
2023		90,712
Total debt - principal	\$	<u>138,501</u>

Note 13. Commitments and Contingencies

(a) Operating Leases

We lease various facilities and equipment under noncancelable operating leases with terms ranging from 12 months to 120 months. Scheduled rent increases are recorded on a straight-line basis over the entire term of the lease.

Rental expense charged under all operating leases (including leases with terms of less than one year) was \$25.5 million, \$19.3 million and \$11.5 million for the years ended December 31, 2018, 2017 and 2016, respectively. Future minimum lease payments under noncancelable operating leases with terms of one year or more as of December 31, 2018 are as follows (in thousands):

2019	\$	28,173
2020		26,871
2021		22,942
2022		22,065
2023		21,583
Thereafter		61,049
Total future minimum lease payments	\$	<u>182,683</u>

(b) Common Stock Warrants

In connection with the note purchase agreement dated December 29, 2014, for the purchase of \$10.0 million of subordinated convertible promissory notes, a minimum of 160,424 warrants were issued to purchase common stock with an exercise price equal to the lesser of \$24.30 or 85% of the IPO price of \$11.00 per share, accordingly, after the IPO, the exercise price was \$9.35. The warrants were immediately exercisable and expired no later than eight years from the date of issuance. The unamortized fair value of the warrants was expensed upon conversion of the convertible promissory notes concurrent with the IPO. These warrants were all exercised during 2018.

(c) Legal Proceedings

From time to time, we may be involved in disputes or litigation relating to claims arising out of its operations.

In March 2015, a complaint was filed against us in the Superior Court of the State of Arizona (Maricopa County) by a former employee, alleging that we had agreed to compensate the employee upon any future sale of the Company. We filed a motion to dismiss the complaint in April 2015, which was denied. We subsequently filed an answer to the complaint in July 2015 denying the substantive allegations of the complaint. The parties completed court-ordered mediation in December 2015 but were not able to reach a settlement. We filed a motion for summary judgment to dismiss the complaint in April 2016 and the court denied the motion in August 2016. The court has set a trial date for June 2019. We continue to deny the substantive allegations of the complaint and intend to vigorously defend this lawsuit; however, we are currently unable to determine the ultimate outcome of this case.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

In August 2015, we entered into a transition agreement with our former Senior Vice President – Asia, pursuant to which that individual transitioned out of this role at the end of 2015 and was to serve in a consulting capacity in 2016 and 2017. In January 2016, following our discovery that the individual had materially violated the terms of the transition agreement, we terminated the consultancy for cause. In April 2016, an arbitration claim was filed in China by the individual with the Taicang Labor and Personnel Dispute Arbitration Committee alleging that we improperly terminated the transition agreement. The individual is demanding that we honor the terms of the transition agreement and pay compensation and fees under the transition agreement, which in the aggregate totals approximately \$2.6 million. In addition, the individual is also challenging the validity of our termination of an option to purchase 164,880 shares of our common stock and 77,760 restricted stock units awarded under the 2015 Plan, which were canceled in January 2016 when the consultancy was terminated. The Taicang Labor and Personnel Dispute Arbitration Committee awarded damages to the individual of approximately \$1.2 million but rejected the claims regarding the termination of the stock option and restricted stock unit awards. We subsequently appealed the arbitration award in favor of the individual to the Taicang Municipal People’s Court, which affirmed the arbitration award in June 2018. We appealed this judgment to an appellate level court in the Jiangsu Province and the appellate court affirmed the judgment of the Taicang Municipal People’s court and we paid the judgement award in the fourth quarter of 2018. We currently are evaluating whether to further appeal this matter.

In June 2018, Iowa OSHA, a division of the Iowa Department of Labor, issued a citation and notification of penalty to us alleging that certain of our workplace practices and conditions at our Newton, Iowa wind blade manufacturing facility had violated the Iowa Occupational Safety and Health Act. Specifically, the citation cited us for multiple alleged violations and proposed that we pay an aggregate penalty of \$0.2 million. In June 2018, we notified Iowa OSHA that we were contesting all of the alleged violations and proposed penalties. In June 2018, the Labor Commissioner of the Iowa Department of Labor subsequently filed a complaint with the State of Iowa Employment Appeal Board, petitioning the appeal board to affirm the citation and notification of penalty that Iowa OSHA issued to us. In July 2018, we then filed a response with the appeal board denying the substantive allegations of the complaint. A hearing date has been set for June 2019 and the matter remains pending.

From time to time, we are party to various lawsuits, claims, and other legal proceedings that arise in the ordinary course of business, some of which are covered by insurance. Upon resolution of any pending legal matters, we may incur charges in excess of presently established reserves. Our management does not believe that any such charges would, individually or in the aggregate, have a material adverse effect on our financial condition, results of operations or cash flows.

(d) Insurance/Self-Insurance

We use a combination of insurance and self-insurance for a number of risks, including claims related to our employee health care, workers’ compensation and general liability. Liabilities associated with these risks are estimated based on, among other things, historical claims experience, severity factors, and other actuarial assumptions. Our loss exposure related to self-insurance is limited by stop loss coverage on a per occurrence and aggregate basis. We regularly analyze our reserves for incurred but not reported claims, and for reported but not paid claims related to our self-funded insurance programs. While we believe our reserves are adequate, significant judgment is involved in assessing these reserves such as assessing historical paid claims, average lags between the claims’ incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are included in expense once a probable amount is known.

(e) Dividend Restrictions

Certain of our subsidiaries are limited in their ability to declare dividends without first meeting statutory restrictions of the People’s Republic of China, including retained earnings as determined under Chinese-statutory accounting requirements. Until 50% (\$21.6 million) of registered capital is contributed to a surplus reserve, our Chinese operations can only pay dividends equal to 90% of after-tax profits (10% must be contributed to the surplus reserve). Once the surplus reserve fund requirement is met, we can pay dividends equal to 100% of after-tax profit assuming other conditions are met. At December 31, 2018, the amount of the surplus reserve fund was \$6.5 million.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(f) Collective Bargaining Agreements

In 2016, we entered into a three-year collective bargaining agreement with certain of our employees at our first Turkey facility. The agreement resulted in an average increase in pay of approximately 20% for employees covered by the agreement. In addition, beginning in July 2017, this collective bargaining arrangement also covered similarly situated employees at our second Turkey facility. In March 2018, we entered into a collective bargaining agreement with a labor union for certain of our employees at the Matamoros, Mexico facility. Currently, there are no other employees covered by collective bargaining agreements. We believe that our relations with employees are good, and there have been no major work stoppages in recent years.

Note 14. Defined Contribution Plan

We maintain a 401(k) plan for all of our U.S. employees. Under the 401(k) plan, eligible employees may contribute, subject to statutory limitations, a percentage of their salaries. We currently match 50 percent of the participants' contributions up to eight percent of eligible compensation.

Participant vesting occurs in our matching contributions according to the schedule below:

<u>Years of service</u>	<u>Vesting Percentage</u>
1-year anniversary	34%
2-year anniversary	66%
3-year anniversary	100%

Our matching contributions to the 401(k) plan were \$0.6 million, \$0.6 million and \$0.3 million for the years ended December 31, 2018, 2017 and 2016, respectively. Our matching contributions are accrued and recorded as expense during each payroll period. Effective January 1, 2017, we changed the 401(k) plan to include an auto enrollment feature, increased our match from 25% of the first 8% to 50% of the first 8% and reduced the vesting period from six years to three years.

In Mexico, we maintain an annual savings fund, which matches the employee contribution each week, based on the Mexican statutory maximum of 13% of actual minimum salary rates. The savings fund period runs from November to October each year, and is distributed to employees in full, during the first week of November each year. For the years ended December 31, 2018, 2017 and 2016, we incurred matched savings expense of \$0.2 million, \$1.3 million and \$0.6 million, respectively.

In Turkey, we maintain a retirement fund that is based on a formula of annual salary multiplied by the number of years of service with us. We accrue a retirement fund liability for this each month. As of December 31, 2018 and 2017, we accrued \$1.0 million and \$1.5 million, respectively, based on the service periods of eligible employees greater than one year.

Note 15. Income Taxes

Geographic sources of income (loss) before income taxes are as follows for the years ended December 31:

	2018	2017	2016
	(in thousands)		
United States	\$ (33,034)	\$ 6,272	\$ 19,907
China	(4)	44,563	17,518
Turkey	31,955	56	(7,896)
Mexico	3,329	3,641	1,169
Total income before income taxes	\$ 2,246	\$ 54,532	\$ 30,698

2017 Tax Reform

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

During the fourth quarter of 2017, we recorded a net tax expense of \$0.1 million (net of valuation allowance) related to the enactment of the Tax Cuts and Jobs Act (Tax Reform). The expense was primarily related to applying the federal income tax rate change to certain of our deferred tax liabilities, and the realization of a benefit from our alternative minimum tax credit carryover. This provisional amount was subject to adjustment during the measurement period of up to one year following the December 2017 enactment of Tax Reform, as provided by SEC guidance.

As of December 31, 2018, we completed the accounting for the enactment-date income tax effects of Tax Reform, which resulted in an immaterial impact to our financial statements. Upon further analyses of certain aspects of Tax Reform, and refinement of calculations during 2018, we increased our provisional amount of previously untaxed foreign earnings by \$13.8 million, to \$88.1 million. This resulted in no change to our U.S. federal income tax expense due to the impact of foreign tax credits. In addition, the provisional net tax expense discussed above was unchanged.

Tax Reform enacted a new minimum tax on U.S. companies' foreign operations called Global Intangible Low Tax Income (GILTI). Beginning in 2018, GILTI provisions will be applied providing an incremental tax on low taxed foreign income. The GILTI provisions require us to include in our U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. We have made a policy election to account for any ongoing impacts of GILTI tax in the period in which it is incurred. At December 31, 2018, we provided no net amount for the federal income tax impacts of GILTI, made up of \$12.1 million in income taxes related to the GILTI inclusion, which were fully offset by net operating loss carryforwards, and the income tax expense increase in the rate reconciliation related to the GILTI inclusion was reduced by the release of the previously provided valuation allowance on U.S. deferred tax assets.

Undistributed earnings of certain of our foreign subsidiaries amounted to approximately \$111.1 million at December 31, 2018, and we consider those earnings reinvested indefinitely. As a result of the deemed mandatory repatriation provision pursuant to Tax Reform, we included undistributed earnings in income subject to U.S. tax at reduced tax rates in 2017. In addition, we recognized GILTI income reduced by net operating losses in 2018 as part of the changes from Tax Reform. As a result, we do not have material basis differences related to cumulative unremitted earnings for U.S. income tax purposes.

The income tax provision includes U.S. federal, state, and local taxes, Turkey, China and Mexico taxes currently payable and those deferred because of temporary differences between the financial statement and the tax bases of assets and liabilities. The components of the income tax provision for the years ended December 31 are as follows:

	2018	2017	2016
	(in thousands)		
Current:			
U.S. federal	\$ —	\$ (49)	\$ —
U.S. state and local taxes	4	(3)	(196)
Foreign	11,875	14,200	9,973
Total current	<u>11,879</u>	<u>14,148</u>	<u>9,777</u>
Deferred:			
U.S. federal	(7,596)	(20)	51
U.S. state and local taxes	(36)	—	—
Foreign	(7,280)	1,670	(6,174)
Total deferred	<u>(14,912)</u>	<u>1,650</u>	<u>(6,123)</u>
Total income tax provision (benefit)	<u>\$ (3,033)</u>	<u>\$ 15,798</u>	<u>\$ 3,654</u>

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The following is a reconciliation from the U.S. statutory income tax rate to our effective income tax rate for the years ended December 31:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
United States statutory income tax rate	21.0%	35.0%	34.0%
Foreign rate differential	(14.4)	(7.2)	4.4
Foreign permanent differences	31.7	1.2	1.6
China rate change	—	—	(2.6)
U.S. rate change	—	10.3	—
Withholding taxes	27.3	5.2	4.6
Foreign tax credits	—	(5.2)	(5.4)
Subpart F / GILTI income	539.8	—	1.3
IRC Section 965 dividend	—	21.1	—
Foreign tax credits - 965 dividend	—	(13.7)	—
Share-based compensation	(89.0)	—	—
Nondeductible interest	—	—	7.8
Valuation allowance	(483.1)	(16.6)	(27.7)
State taxes	(1.7)	—	(0.4)
Deferred tax adjustments	4.6	3.8	(5.4)
Research and development	(59.8)	(1.2)	(2.0)
Turkey incentive credits	—	(5.5)	—
Foreign currency / inflationary adjustments	(90.6)	—	—
Other	(20.8)	1.8	1.7
Effective income tax rate	<u>(135.0)%</u>	<u>29.0%</u>	<u>11.9%</u>

The following is a summary of the components of deferred tax assets and liabilities at December 31:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
	<u>(in thousands)</u>		
Deferred tax assets:			
Net operating loss and credit carry forwards	\$ 17,360	\$ 18,913	\$ 25,354
Deferred revenue	149	178	4,075
Non-deductible accruals	10,850	9,860	8,651
Equity compensation	3,607	3,489	3,503
Equity investment	—	390	633
Amortization of intangible assets	—	320	472
Non-deductible interest	1,452	—	—
Tax credits	2,212	4,760	2,914
Other	4,548	3,424	1,248
Total deferred tax assets	<u>40,178</u>	<u>41,334</u>	<u>46,850</u>
Valuation allowance	(8,520)	(18,680)	(23,618)
Net deferred tax assets	<u>31,658</u>	<u>22,654</u>	<u>23,232</u>
Deferred tax liabilities:			
Deferred revenue	(13,781)	(15,564)	(18,859)
Depreciation	(2,636)	(3,489)	(1,714)
Other	(406)	(1,972)	(423)
Total deferred tax liabilities	<u>(16,823)</u>	<u>(21,025)</u>	<u>(20,996)</u>
Net deferred tax assets	<u>\$ 14,835</u>	<u>\$ 1,629</u>	<u>\$ 2,236</u>

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The deferred tax valuation allowance at December 31 consisted of the following:

	2018	2017	2016
	(in thousands)		
Allowance at beginning of year	\$ (18,680)	\$ (23,618)	\$ (31,100)
Benefits obtained	10,160	4,938	7,482
Allowance at end of year	<u>\$ (8,520)</u>	<u>\$ (18,680)</u>	<u>\$ (23,618)</u>

The valuation allowance as of December 31, 2018 primarily relates to certain state net operating losses (NOLs) that we believe do not meet the more-likely-than-not criteria for recording the related benefits.

During 2018, we released the valuation allowance recorded against deferred tax assets reported in the United States. The release of this valuation allowance resulted in the recognition of a non-cash tax benefit of \$10.8 million for the year. Additionally, during 2018, there was an increase in the valuation allowance of \$0.6 million primarily related to state NOLs.

We have U.S. federal NOL of approximately \$25.8 million, state NOLs of approximately \$118.5 million, foreign NOLs of approximately \$14.6 million and foreign tax credits of approximately \$1.9 million available to offset future U.S. and China taxable income. The U.S. federal and state net operating loss carryforwards expire in varying amounts through 2038 and the foreign tax credits expire in 2026. We also have Turkey investment tax incentives of approximately \$0.3 million which do not expire and foreign NOLs that expire in 2023.

Sections 382 and 383 of the Internal Revenue Code of 1986, contain rules that limit the ability of a company that undergoes an “ownership change” to utilize its net operating loss and tax credit carry forwards and certain built-in losses recognized in years after the “ownership change.” An “ownership change” is generally defined as any change in ownership of more than 50% of a corporation’s stock over a rolling three-year period by stockholders that own (directly or indirectly) 5% or more of the stock of a corporation, or arising from a new issuance of stock by a corporation. If an ownership change occurs, Section 382 generally imposes an annual limitation on the use of pre-ownership change NOLs to offset taxable income earned after the ownership change. The annual limitation is equal to the product of the applicable long-term tax exempt rate and the value of our stock immediately before the ownership change. This annual limitation may be adjusted to reflect any unused annual limitation for prior years and certain recognized built-in gains and losses for the year. In addition, Section 383 generally limits the amount of tax liability in any post-ownership change year that can be reduced by pre-ownership change tax credit carryforwards.

In June of 2018, we experienced an ownership change. The pre-ownership change NOLs existing at the date of change of \$47.7 million are subject to an annual limitation. We do not believe that the Section 382 and 383 annual limitation will materially impact our ability to utilize the tax attributes that existed as of the date of the ownership change. Certain of these NOLs may be at risk of limitation in the event of a future ownership change.

We recognize the impact of a tax position in its financial statements if that position is more-likely-than-not to be sustained on audit, based on the technical merits of the position. We disclose all unrecognized tax benefits, which includes the reserves recorded for uncertain tax positions on filed tax returns and the unrecognized portion of affirmative claims. Our policy regarding uncertain tax positions is to recognize potential accrued interest and penalties related to unrecognized tax benefits as a component of income tax expense. As of December 31, 2018, we had not identified any unrecognized tax benefits.

We operate in and file income tax returns in various jurisdictions in China, Mexico, Turkey, the U.S., Denmark and Switzerland, which are subject to examination by tax authorities.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 16. Concentration of Customers

Revenues from certain customers (in thousands) in excess of 10 percent of total consolidated Company revenues for the years ended December 31 are as follows:

Customer	2018		2017		2016	
	Revenues	% of Total	Revenues	% of Total	Revenues	% of Total
Customer 1 - Vestas	\$ 329,472	32.0%	\$ 266,276	27.9%	\$ 170,764	22.2%
Customer 2 - GE	325,962	31.7%	426,133	44.6%	372,294	48.4%
Customer 3 - Nordex	195,156	19.0%	153,227	16.0%	138,228	18.0%
Customer 4 - Siemens Gamesa	115,779	11.2%	92,394	9.7%	78,324	10.2%
Other	63,255	6.1%	17,168	1.8%	9,409	1.2%
Total	<u>\$ 1,029,624</u>	<u>100.0%</u>	<u>\$ 955,198</u>	<u>100.0%</u>	<u>\$ 769,019</u>	<u>100.0%</u>

Trade accounts receivable from certain customers in excess of 10 percent of total consolidated Company trade accounts receivable at December 31 are as follows:

Customer	2018	2017
	% of Total	% of Total
Customer 1 - Vestas	46.7%	52.4%
Customer 2 - GE	5.0%	18.9%
Customer 3 - Nordex	25.7%	19.5%

Note 17. Segment Reporting

FASB ASC Topic 280, *Segment Reporting*, establishes standards for the manner in which companies report financial information about operating segments, products, services, geographic areas and major customers. In managing our business, management focuses on growing our revenues and earnings in select geographic areas serving primarily the wind energy market. We have operations in the United States, China, Turkey and Mexico. Our operating segments are defined geographically as the United States, Asia, EMEA and Mexico. Financial results are aggregated into four reportable segments based on quantitative thresholds. All of our segments operate in their local currency except for the Mexico and Asia segments, which both include a U.S. parent company.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The following tables set forth certain information regarding each of our segments for the years ended December 31:

	2018	2017	2016
	(in thousands)		
Net sales by segment:			
U.S.	\$ 163,716	\$ 191,025	\$ 191,863
Asia	306,255	372,520	309,561
Mexico	268,756	206,563	128,020
EMEI	290,897	185,090	139,575
Total net sales	<u>\$ 1,029,624</u>	<u>\$ 955,198</u>	<u>\$ 769,019</u>
Net sales by geographic location (1):			
United States	\$ 163,716	\$ 191,025	\$ 191,863
China	306,255	372,520	309,561
Mexico	268,756	206,563	128,020
Turkey	290,897	185,090	139,575
Total net sales	<u>\$ 1,029,624</u>	<u>\$ 955,198</u>	<u>\$ 769,019</u>
Depreciation and amortization:			
U.S.	\$ 6,795	\$ 4,822	\$ 3,335
Asia	6,765	6,272	4,690
Mexico	7,891	5,994	2,462
EMEI	4,978	4,610	2,699
Total depreciation and amortization	<u>\$ 26,429</u>	<u>\$ 21,698</u>	<u>\$ 13,186</u>
Capital expenditures			
U.S.	\$ 21,305	\$ 10,575	\$ 4,056
Asia	11,218	7,000	3,287
Mexico	18,928	20,033	5,565
EMEI	1,237	7,220	17,599
Total capital expenditures	<u>\$ 52,688</u>	<u>\$ 44,828</u>	<u>\$ 30,507</u>
Income (loss) from operations:			
U.S.	\$ (67,357)	\$ (33,231)	\$ (19,154)
Asia	28,147	76,332	67,127
Mexico	12,154	14,430	10,060
EMEI	51,774	12,567	(5,059)
Total income from operations	<u>\$ 24,718</u>	<u>\$ 70,098</u>	<u>\$ 52,974</u>
Tangible long-lived assets:			
U.S.	\$ 34,825	\$ 24,575	
Asia (China)	31,924	28,887	
Mexico	65,981	39,756	
EMEI (Turkey and India)	26,693	30,262	
Total tangible long-lived assets	<u>\$ 159,423</u>	<u>\$ 123,480</u>	
Total assets:			
U.S.	\$ 115,435	\$ 157,208	
Asia	194,088	186,842	
Mexico	142,412	89,754	
EMEI	152,920	111,933	
Total assets	<u>\$ 604,855</u>	<u>\$ 545,737</u>	

(1) Net sales are attributable to countries based on the location where the product is manufactured or the services are performed.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 18. Selected Quarterly Financial Data (Unaudited)

The following tables set forth certain unaudited financial information for each quarter of 2018 and 2017. The unaudited quarterly information includes all normal recurring adjustments that, in the opinion of management, are necessary for the fair presentation of the information for the periods presented. The operating results for any quarter are not necessarily indicative of the results for any future period. The unaudited quarterly results are as follows:

	2018			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in thousands, except per share data)			
Net sales	\$ 253,981	\$ 230,610	\$ 254,976	\$ 290,057
Gross profit	28,258	15,051	16,967	12,565
Net income (loss)	8,648	(4,053)	9,532	(8,848)
Net income (loss) per common share:				
Basic (1)	\$ 0.25	\$ (0.12)	\$ 0.28	\$ (0.26)
Diluted (1)	\$ 0.24	\$ (0.12)	\$ 0.26	\$ (0.26)

	2017			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in thousands, except per share data)			
Net sales	\$ 208,615	\$ 239,582	\$ 253,498	\$ 253,503
Gross profit	19,918	29,925	30,306	30,322
Net income	5,213	9,577	21,737	2,207
Net income per common share:				
Basic (1)	\$ 0.15	\$ 0.28	\$ 0.64	\$ 0.06
Diluted (1)	\$ 0.15	\$ 0.28	\$ 0.62	\$ 0.06

- (1) The sum of the quarterly net income (loss) per common share amounts may not equal the annual net income (loss) per common share amount due to rounding.

Note 19 – Adjustments to Previously Reported Financial Statements from the Adoption of an Accounting Pronouncement

As discussed in Note 1, *Summary of Operations and Significant Accounting Policies*, Topic 606 and ASUs 2016-15 and 2016-18 were adopted by us as of January 1, 2018 with retrospective application to January 1, 2016 through December 31, 2017. The December 31, 2017 balance sheet retrospectively restated for the adoption of Topic 606 presented below differs from that previously disclosed in the 2018 Quarterly Reports on Form 10-Q due to the correction of the income tax effect of the adoption of Topic 606. The effect of these changes are decreases in total assets, total liabilities and total stockholders' equity at December 31, 2017 of \$10.8 million, \$1.5 million and \$9.3 million, respectively.

The following tables summarize the effects of adopting Topic 606 and ASU 2016-18 had on our previously reported financial statements.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Consolidated Balance Sheet
(In thousands, except par value data)

	December 31, 2017		
	As Reported	Adoption of Topic 606	As Adjusted
Assets			
Current assets:			
Cash and cash equivalents	\$ 148,113	\$ —	\$ 148,113
Restricted cash	3,849	—	3,849
Accounts receivable	121,576	—	121,576
Contract assets	—	105,619	105,619
Inventories	67,064	(62,952)	4,112
Inventories held for customer orders	64,858	(64,858)	—
Prepaid expenses and other current assets	27,507	—	27,507
Total current assets	432,967	(22,191)	410,776
Property, plant, and equipment, net	123,480	—	123,480
Goodwill	2,807	—	2,807
Intangible assets and deferred costs, net	150	958	1,108
Other noncurrent assets	14,130	(6,564)	7,566
Total assets	<u>\$ 573,534</u>	<u>\$ (27,797)</u>	<u>\$ 545,737</u>
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable and accrued expenses	\$ 166,743	\$ —	\$ 166,743
Accrued warranty	29,163	1,256	30,419
Deferred revenue	81,048	(81,048)	—
Customer deposits and customer advances	10,134	(9,702)	432
Contract liabilities	—	2,763	2,763
Current maturities of long-term debt	35,506	—	35,506
Total current liabilities	322,594	(86,731)	235,863
Long-term debt, net of debt issuance costs, discount and current maturities	85,879	—	85,879
Other noncurrent liabilities	4,444	(1,003)	3,441
Total liabilities	412,917	(87,734)	325,183
Commitments and contingencies			
Stockholders' equity:			
Common shares, \$0.01 par value, 100,000 shares authorized and 34,049 shares issued and 34,021 shares outstanding	340	—	340
Paid-in capital	301,543	—	301,543
Accumulated other comprehensive loss	(558)	—	(558)
Accumulated deficit	(140,197)	59,937	(80,260)
Treasury stock, at cost, 28 shares	(511)	—	(511)
Total stockholders' equity	160,617	59,937	220,554
Total liabilities and stockholders' equity	<u>\$ 573,534</u>	<u>\$ (27,797)</u>	<u>\$ 545,737</u>

The primary effects of the adoption of Topic 606 on our consolidated balance sheet include 1) amounts being recognized as revenue for work performed as production takes place over time as contract assets, which differs from the prior practice of including the balances in inventory; 2) no longer reporting inventory held for customer orders or deferred revenue since revenue is now being recognized over the course of the production process, and before the product is delivered to the customer; 3) that contract liabilities are reported for amounts collected from customers in advance of the production of products, similar to our prior practice of recording customer deposits; 4) the impact of the retrospective adjustment on deferred income taxes; and 5) the cumulative amount of the effect to prior periods' net income related to the adoption of Topic 606 through December 31, 2017 is reflected in retained earnings.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

**Consolidated Income Statement
(In thousands, except per share data)**

	Year Ended December 31, 2017		
	As Reported	Adoption of Topic 606	As Adjusted
Net sales	\$ 930,281	\$ 24,917	\$ 955,198
Cost of sales	776,944	27,155	804,099
Startup and transition costs	40,628	—	40,628
Total cost of goods sold	817,572	27,155	844,727
Gross profit	112,709	(2,238)	110,471
General and administrative expenses	40,373	—	40,373
Income from operations	72,336	(2,238)	70,098
Other income (expense):			
Interest income	95	—	95
Interest expense	(12,381)	—	(12,381)
Realized loss on foreign currency remeasurement	(4,471)	—	(4,471)
Miscellaneous income	1,191	—	1,191
Total other expense	(15,566)	—	(15,566)
Income before income taxes	56,770	(2,238)	54,532
Income tax provision	(13,080)	(2,718)	(15,798)
Net income	\$ 43,690	\$ (4,956)	\$ 38,734
Weighted-average common shares outstanding:			
Basic	33,844	33,844	33,844
Diluted	34,862	34,862	34,862
Net income per common share:			
Basic	\$ 1.29	\$ (0.15)	\$ 1.14
Diluted	\$ 1.25	\$ (0.14)	\$ 1.11

The primary effects of the adoption of Topic 606 on our consolidated income statement relate to amounts being recognized as revenue for work performed as production takes place over time, which differs from the prior practice of recognizing revenue when the product was delivered to the customer.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

**Consolidated Income Statement
(In thousands, except per share data)**

	Year Ended December 31, 2016		
	As Reported	Adoption of Topic 606	As Adjusted
Net sales	\$ 754,877	\$ 14,142	\$ 769,019
Cost of sales	659,745	4,281	664,026
Startup and transition costs	18,127	—	18,127
Total cost of goods sold	677,872	4,281	682,153
Gross profit	77,005	9,861	86,866
General and administrative expenses	33,892	—	33,892
Income from operations	43,113	9,861	52,974
Other income (expense):			
Interest income	344	—	344
Interest expense	(17,614)	—	(17,614)
Loss on extinguishment of debt	(4,487)	—	(4,487)
Realized loss on foreign currency remeasurement	(757)	—	(757)
Miscellaneous income	238	—	238
Total other expense	(22,276)	—	(22,276)
Income before income taxes	20,837	9,861	30,698
Income tax provision	(6,995)	3,341	(3,654)
Net income	13,842	13,202	27,044
Net income attributable to preferred stockholders	5,471	—	5,471
Net income attributable to common stockholders	\$ 8,371	\$ 13,202	\$ 21,573
Weighted-average common shares outstanding:			
Basic	17,530	17,530	17,530
Diluted	17,616	17,616	17,616
Net income per common share:			
Basic	\$ 0.48	\$ 0.75	\$ 1.23
Diluted	\$ 0.48	\$ 0.74	\$ 1.22

The primary effects of the adoption of Topic 606 on our consolidated income statement relate to amounts being recognized as revenue for work performed as production takes place over time, which differs from the prior practice of recognizing revenue when the product was delivered to the customer.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

**Consolidated Statement of Comprehensive Income
(In thousands)**

	Year Ended December 31, 2017		
	As Reported	Adoption of Topic 606	As Adjusted
	<u> </u>	<u> </u>	<u> </u>
Net income	\$ 43,690	\$ (4,956)	\$ 38,734
Other comprehensive income:			
Foreign currency translation adjustments	3,304	—	3,304
Comprehensive income	<u>\$ 46,994</u>	<u>\$ (4,956)</u>	<u>\$ 42,038</u>
	Year Ended December 31, 2016		
	As Reported	Adoption of Topic 606	As Adjusted
	<u> </u>	<u> </u>	<u> </u>
Net income	\$ 13,842	\$ 13,202	\$ 27,044
Other comprehensive loss:			
Foreign currency translation adjustments	(3,837)	—	(3,837)
Comprehensive income	<u>\$ 10,005</u>	<u>\$ 13,202</u>	<u>\$ 23,207</u>

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

**Consolidated Statements of Changes in Stockholders' Equity
(In thousands)**

	Common		Paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Treasury stock, at cost	Total stockholders' equity (deficit)
	Shares	Amount					
Balance at December 31, 2015 - as reported	4,238	\$ —	\$ —	\$ (25)	\$ (191,172)	\$ —	\$ (191,197)
Cumulative-effect adjustment of the adoption of Topic 606 on January 1, 2016	—	—	—	—	51,691	—	51,691
Balance at December 31, 2015 - as adjusted	4,238	—	—	(25)	(139,481)	—	(139,506)
Year ended December 31, 2016 activity - as reported	29,499	337	292,833	(3,837)	8,371	—	297,704
Effect of the adoption of Topic 606	—	—	—	—	13,202	—	13,202
Balance at December 31, 2016 - as adjusted	33,737	337	292,833	(3,862)	(117,908)	—	171,400
Year ended December 31, 2017 activity - as reported	312	3	8,710	3,304	42,604	(511)	54,110
Effect of the adoption of Topic 606	—	—	—	—	(4,956)	—	(4,956)
Balance at December 31, 2017 - as adjusted	34,049	\$ 340	\$ 301,543	\$ (558)	\$ (80,260)	\$ (511)	\$ 220,554

The adoption of Topic 606 increased our total stockholders' equity in 2015 by \$51.7 million.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Consolidated Statement of Cash Flows
(In thousands)

	Year Ended December 31, 2017			
	As Reported	Adoption of Topic 606	Adoption of ASU 2016-18	As Adjusted
Cash flows from operating activities:				
Net income	\$ 43,690	\$ (4,956)	\$ —	\$ 38,734
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization	20,878	820	—	21,698
Share-based compensation expense	7,124	—	—	7,124
Amortization of debt issuance costs	573	—	—	573
Loss on disposal of property and equipment	334	—	—	334
Deferred income taxes	(1,068)	2,718	—	1,650
Changes in assets and liabilities:				
Accounts receivable	(53,734)	(493)	—	(54,227)
Contract assets and liabilities	—	(4,423)	—	(4,423)
Inventories	(26,519)	27,483	—	964
Prepaid expenses and other current assets	3,150	—	—	3,150
Other noncurrent assets	7,487	3,392	(8,063)	2,816
Accounts payable and accrued expenses	51,248	—	—	51,248
Accrued warranty	9,251	79	—	9,330
Customer deposits	8,744	(8,518)	—	226
Deferred revenue	11,480	(11,480)	—	—
Other noncurrent liabilities	25	(4,622)	—	(4,597)
Net cash provided by operating activities	82,663	—	(8,063)	74,600
Cash flows from investing activities:				
Purchases of property and equipment	(44,828)	—	—	(44,828)
Proceeds from sale of assets	850	—	—	850
Net cash used in investing activities	(43,978)	—	—	(43,978)
Cash flows from financing activities:				
Repayments of term loans	(3,750)	—	—	(3,750)
Net repayments of accounts receivable financing	(1,020)	—	—	(1,020)
Proceeds from working capital loans	9,936	—	—	9,936
Repayments of working capital loans	(14,574)	—	—	(14,574)
Net proceeds from other debt	1,313	—	—	1,313
Debt issuance costs	(454)	—	—	(454)
Proceeds from exercise of stock options	1,430	—	—	1,430
Repurchase of common stock including shares withheld in lieu of income taxes	(1,264)	—	—	(1,264)
Restricted cash	(1,590)	—	1,590	—
Net cash used in financing activities	(9,973)	—	1,590	(8,383)
Impact of foreign exchange rates on cash, cash equivalents and restricted cash	335	—	—	335
Net change in cash, cash equivalents and restricted cash	29,047	—	(6,473)	22,574
Cash, cash equivalents and restricted cash, beginning of year	119,066	—	10,797	129,863
Cash, cash equivalents and restricted cash, end of year	\$ 148,113	\$ —	\$ 4,324	\$ 152,437

The primary effects of the adoption of Topic 606 on our consolidated statement of cash flows include 1) the establishment of contract assets and liabilities; 2) the reduction of inventory and elimination of inventory held for customer orders; 3) the impact of the retrospective adjustment on deferred income taxes; and 4) the elimination of deferred revenue. For more details on these items, see the disclosure related to the effect of the adoption of Topic 606 on our consolidated balance sheet.

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Consolidated State ment of Cash Flows
(In thousands)

	Year Ended December 31, 2016			
	As Reported	Adoption of Topic 606	Adoption of ASU 2016-18	As Adjusted
Cash flows from operating activities:				
Net income	\$ 13,842	\$ 13,202	\$ —	\$ 27,044
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization	12,897	289	—	13,186
Share-based compensation expense	9,902	—	—	9,902
Amortization of debt issuance costs and debt discount	4,681	—	—	4,681
Loss on extinguishment of debt	4,487	—	—	4,487
Loss on disposal of property and equipment	2	—	—	2
Deferred income taxes	(2,782)	(3,341)	—	(6,123)
Changes in assets and liabilities:				
Accounts receivable	5,071	493	—	5,564
Contract assets and liabilities	—	(17,227)	—	(17,227)
Inventories	(4,967)	3,788	—	(1,179)
Prepaid expenses and other current assets	681	—	—	681
Other noncurrent assets	(8,291)	(1,400)	6,001	(3,690)
Accounts payable and accrued expenses	14,959	3,341	—	18,300
Accrued warranty	6,316	393	—	6,709
Customer deposits	(7,515)	6,639	—	(876)
Deferred revenue	4,048	(4,048)	—	—
Other noncurrent liabilities	510	(2,129)	—	(1,619)
Net cash provided by operating activities	53,841	—	6,001	59,842
Cash flows from investing activities:				
Purchases of property and equipment	(30,507)	—	—	(30,507)
Net cash used in investing activities	(30,507)	—	—	(30,507)
Cash flows from financing activities:				
Proceeds from issuance of common stock sold in initial public offering, net of underwriters discount and offering costs	67,199	—	—	67,199
Repayments of term loans	(930)	—	—	(930)
Net repayments of accounts receivable financing	(5,385)	—	—	(5,385)
Proceeds from working capital loans	15,813	—	—	15,813
Repayments of working capital loans	(20,103)	—	—	(20,103)
Net repayments of other debt	(4,765)	—	—	(4,765)
Proceeds from customer advances	2,000	—	—	2,000
Repayments of customer advances	(2,000)	—	—	(2,000)
Restricted cash	(499)	—	499	—
Net cash provided by financing activities	51,330	—	499	51,829
Impact of foreign exchange rates on cash, cash equivalents and restricted cash	(1,515)	—	—	(1,515)
Net change in cash, cash equivalents and restricted cash	73,149	—	6,500	79,649
Cash, cash equivalents and restricted cash, beginning of year	45,917	—	4,297	50,214
Cash, cash equivalents and restricted cash, end of year	\$ 119,066	\$ —	\$ 10,797	\$ 129,863

TPI COMPOSITES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The primary effects of the adoption of Topic 606 on our consolidated statement of cash flows include 1) the establishment of contract assets and liabilities; 2) the reduction of inventory and elimination of inventory held for customer orders; 3) the impact of the retrospective adjustment on deferred income taxes; and 4) the elimination of deferred revenue. For more details on these items, see the disclosure related to the effect of the adoption of Topic 606 on our consolidated balance sheet.

As part of our adoption of Topic 606, we have elected to use the following practical expedients:

- for completed contracts that have variable consideration, we have used the transaction price at the date on which the contract was completed, rather than estimating amounts for variable consideration in each comparative reporting period.
- for modified contracts, we did not separately evaluate the effects of the contract modifications before the beginning of the earliest period presented. Instead, we reflected the aggregate effect of all of the modifications that occur before the beginning of the earliest period presented in determining the transaction price, identifying the satisfied and unsatisfied performance obligations, and allocating the transaction price to the performance obligations.
- for all periods presented before the date of initial application, we did not disclose the amount of the transaction price allocated to remaining performance obligations, nor an explanation of when we expect to recognize that amount as revenue.

The impact of applying the above practical expedients may change the period of revenue recognition but not the total amount to be recognized under the contract; therefore, we believe that the application of the practical expedients is not material to the comparability of the information presented above and the accounting and financial reporting related to the adoption of Topic 606.

Exhibit Index

Number	Description
3.1	<u>Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on July 11, 2016)</u>
3.2	<u>Second Amended and Restated By-laws of the Registrant, as currently in effect (incorporated by reference to Exhibit 3.4 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on July 11, 2016)</u>
4.1	<u>Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on July 11, 2016)</u>
4.2	<u>Third Amended and Restated Investor Rights Agreement by and among the Registrant and the investors named therein, dated June 17, 2010, as amended (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
4.3	<u>Form of senior indenture, to be entered into between the Registrant and the trustee designated therein (incorporated by reference to Exhibit 4.3 to the Registrant's Registration Statement on Form S-3 (File No. 333-220307) filed on September 1, 2017)</u>
4.4	<u>Form of subordinated indenture, to be entered into between the Registrant and the trustee designated therein (incorporated by reference to Exhibit 4.5 to the Registrant's Registration Statement on Form S-3 (File No. 333-220307) filed on September 1, 2017)</u>
10.1†	<u>2008 Stock Option and Grant Plan, as amended by Amendment No. 1, dated August 14, 2008 and Amendment No. 2, dated December 30, 2008, and forms of award agreements thereunder (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.2†	<u>Amended and Restated 2015 Stock Option and Incentive Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.3†	<u>Amendment No. 5 to Financing Agreement dated as of August 19, 2014, entered into as of December 30, 2016, by and among the Registrant, certain of its domestic subsidiaries, HPS Investment Partners, LLC as Administrative Agent and Collateral Agent, Capital One, N.A., as Revolving Loan Representative and the lenders from time to time party thereto, as amended (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K/A (File No. 001-37839) filed on May 5, 2017)</u>
10.4†	<u>Amended and Restated Financing Agreement entered into as of December 30, 2016, by and among the Registrant, certain of its domestic subsidiaries, HPS Investment Partners, LLC as Administrative Agent and Collateral Agent, Capital One, N.A., as Revolving Loan Representative and the lenders from time to time party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K/A (File No. 001-37839) filed on April 20, 2017)</u>
10.5†	<u>Supply Agreement between General Electric International, Inc. and TPI Mexico III, LLC, entered into as of October 4, 2016 (incorporated by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K/A (File No. 001-37839) filed on April 20, 2017)</u>
10.6†	<u>Amended and Restated Supply Agreement between General Electric International, Inc. and TPI Iowa, LLC, entered into as of October 4, 2016 (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K/A (File No. 001-37839) filed on April 20, 2017)</u>
10.7†	<u>Supply Agreement between General Electric International, Inc. and TPI Mexico, LLC, entered into as of October 18, 2013, as amended (incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>

Number	Description
10.8 †	<u>First Amendment to Supply Agreement between General Electric International, Inc. and TPI Mexico, LLC, entered into as of October 4, 2016 (incorporated by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K/A (File No. 001-37839) filed on April 20, 2017)</u>
10.9	<u>Lease between TPI Iowa, LLC and Opus Northwest L.L.C., dated November 13, 2007, as amended (incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.10	<u>Commencement Date Memorandum between TPI Iowa LLC and Opus Northwest, L.L.C., entered into as of July 25, 2008 (incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.11	<u>Lease between TPI Kompozit Kanat Sanayi ve Ticaret A.S. and Med Union Containers A.S., dated March 16, 2012 (incorporated by reference to Exhibit 10.13 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.12	<u>Lease between TPI Wind Blade Dafeng Company Limited and Jiangsu Erhuajie Energy Equipment Co., Ltd, dated November 27, 2013, as amended (incorporated by reference to Exhibit 10.14 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.13	<u>Lease between the Registrant (f/k/a LCSI Holding, Inc.) and Gainey Center II LLC, dated June 12, 2007, as amended (incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.14	<u>Lease between TPI, Inc. (f/k/a TPI Composites, Inc.) and Borden & Remington Fall River LLC, dated as of December 1, 2008, as superseded by Standard Industrial Lease between TPI, Inc. and Borden & Remington Fall River LLC, dated June 28, 2010, as amended (incorporated by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.15	<u>Lease between Composite Solutions, Inc. and TN Realty, LLC, dated September 30, 2004, as amended (incorporated by reference to Exhibit 10.17 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.16	<u>Lease between TPI-Composites S. de R.L. de C.V. and Deutsche Bank México, S.A. Institución de Banca Múltiple, Division Fiduciaria, as Trustee of Trust F/1638, dated April 15, 2013, as amended (incorporated by reference to Exhibit 10.18 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.17*	<u>Amendment Agreement, among Macquarie Mexico Real Estate Management S.A. de C.V., TPI-Composites, S. de R.L. de C.V. and TPI Composites, Inc., dated November 27, 2018</u>
10.18	<u>Lease between TPI-Composites S. de R.L. de C.V. and The Bank of New York Mellon, S.A., as Trustee in the Trust F/00335, dated September 25, 2013 (incorporated by reference to Exhibit 10.19 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.19	<u>Lease between TPI Mexico, LLC and Trailer Transfer, Inc., dated October 16, 2013 (incorporated by reference to Exhibit 10.20 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.20	<u>Lease between TPI Mexico, LLC and Lanestone 1, LLC, dated April 14, 2014 (incorporated by reference to Exhibit 10.21 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.21	<u>Plant and Equipment Lease between TPI Composites (Taicang) Co., Ltd. and Suzhou Tianneng Power Wind Mold Co., Ltd, dated May 1, 2014 (incorporated by reference to Exhibit 10.22 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>

Number	Description
10.22‡	<u>Form of Employment Agreement between the Registrant and each of its executive officers (incorporated by reference to Exhibit 10.23 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.23	<u>Form of Indemnification Agreement (incorporated by reference to Exhibit 10.24 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.24	<u>Contract between TPI Composites (Taicang) Co. Ltd. and Mr. Jun Ji, dated August 4, 2015 (incorporated by reference to Exhibit 10.25 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.25	<u>Lease between TPI Composites, S. de R.L. de C.V. and Vesta Baja California, S. de R.L. de C.V., dated November 20, 2015 (incorporated by reference to Exhibit 10.26 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.26	<u>Lease between TPI Turkey IZBAS, LLC and Dere Konstruksiyon Demir Celik Insaat Taahhut Muhendislik Musavirlik Sanayi ve Ticaret Anonim Sirketi, dated December 9, 2015 (incorporated by reference to Exhibit 10.27 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.27	<u>Lease between TPI Composites (Taicang) Co., Ltd. and Suzhou Suchen Chemical & Plastics Co., Ltd., dated August 5, 2014 (incorporated by reference to Exhibit 10.28 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.28	<u>Lease between TPI Wind Blade Dafeng Co., Ltd. and Jiangsu Jianhao Transmission Machinery Co., Ltd., commencing January 1, 2016 (incorporated by reference to Exhibit 10.29 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.29	<u>Lease between TPI Kompozit Kanat San. ve Tic. A.S. and BORO Insaat Yatirim Sanayi ve Ticaret A.S., dated October 16, 2015 (incorporated by reference to Exhibit 10.30 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.30	<u>Sublease between TPI Inc. and Nordex Energy GmbH, dated April 24, 2015 (incorporated by reference to Exhibit 10.31 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.31†	<u>Settlement Agreement and Release between the Registrant and Nordex SE, dated June 3, 2016 (incorporated by reference to Exhibit 10.32 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)</u>
10.32	<u>Senior Executive Cash Incentive Bonus Plan (incorporated by reference to Exhibit 10.34 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on July 11, 2016)</u>
10.33	<u>Lease between Phoenix Newton LLC and TPI Iowa II, LLC, dated January 5, 2018 (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K (File No. 001-37839) filed on March 8, 2018)</u>
10.34	<u>Master Lease Agreement Subject to Condition between TPI Composites II, S. de R.L. de C.V. and QVC II, S. de R.L. de C.V. dated May 25, 2017, as amended (incorporated by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K (File No. 001-37839) filed on March 8, 2018)</u>
10.35*	<u>Amended and Restated Non-Employee Director Compensation Policy</u>
10.36*	<u>Agreement to Lease between Aarush (Phase III) Logistics Park Private Limited, Aarush (Phase IV) Logistics Parks Private Limited, Aarush (Phase V) Logistics Parks Private Limited, Aarush Logistics Parks Private Limited, Aarush (Phase II) Logistics Parks Private Limited and Prospect One Manufacturing LLP, dated February 4, 2019</u>

Number	Description
10.37	Credit Agreement entered into as of April 6, 2018, by and among the Registrant, JPMorgan Chase Bank, N.A., as Administrative Agent, and Well Fargo Bank, National Association and Capital One National Association, as Co-Syndication Agents, and the lenders from time to time party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
10.38	Form of Employee Restricted Stock Unit Award (Time-Based Vesting) under the Amended and Restated 2015 Stock Option And Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
10.39	Form of Executive Restrictive Stock Unit Award (Time-Based Vesting) under the Amended and Restated 2015 Stock Option And Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
10.40	Form of Employee Restricted Stock Unit Award (Adjusted EBITDA Performance-Based Vesting) under the Amended and Restated 2015 Stock Option And Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
10.41	Form of Executive Restricted Stock Unit Award (Adjusted EBITDA Performance-Based Vesting) under the Amended and Restated 2015 Stock Option And Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
10.42	Form of Employee Restricted Stock Unit Award (Stock Price Performance-Based Vesting) under the Amended and Restated 2015 Stock Option And Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
10.43	Form of Executive Restricted Stock Unit Award (Stock Price Performance-Based Vesting) under the Amended and Restated 2015 Stock Option And Incentive Plan (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37839) filed on May 3, 2018)
21.1	List of Subsidiaries (incorporated by reference to Exhibit 21.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-212093) filed on June 17, 2016)
23.1*	Consent of KPMG LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K)
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document

Number	Description
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
*	Filed herewith.
**	The certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.
†	Confidential treatment has been requested for certain provisions of this Exhibit pursuant to Rule 406 promulgated under the Securities Act of 1933.
‡	Indicates compensatory plan or arrangement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

TPI COMPOSITES, INC.

Date: March 4, 2019

By: /s/ William E. Siwek

William E. Siwek

Chief Financial Officer

(Principal Financial and Accounting Officer)

We, the undersigned officers and directors of TPI Composites, Inc., hereby severally constitute and appoint Steven C. Lockard and William E. Siwek, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him or her and, place and stead, and in any and all capacities, to sign conformed for us and in our names in the capacities indicated below any and all signatures and amendments to this report, and to file the same, with all exhibits thereto, filing date and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated .

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Steven C. Lockard</u> Steven C. Lockard	President, Chief Executive Officer and Director (Principal Executive Officer)	March 4, 2019
<u>/s/ William E. Siwek</u> William E. Siwek	Chief Financial Officer (Principal Financial and Accounting Officer)	March 4, 2019
<u>/s/ Stephen B. Bransfield</u> Stephen B. Bransfield	Director	March 4, 2019
<u>/s/ Michael L. DeRosa</u> Michael L. DeRosa	Director	March 4, 2019
<u>/s/ Jayshree S. Desai</u> Jayshree S. Desai	Director	March 4, 2019
<u>/s/ Philip J. Deutch</u> Philip J. Deutch	Director	March 4, 2019
<u>/s/ Paul G. Giovacchini</u> Paul G. Giovacchini	Director and Chairman of the Board	March 4, 2019
<u>/s/ Jack A. Henry</u> Jack A. Henry	Director	March 4, 2019
<u>/s/ James A. Hughes</u> James A. Hughes	Director	March 4, 2019
<u>/s/ Tyrone M. Jordan</u> Tyrone M. Jordan	Director	March 4, 2019
<u>/s/ Daniel G. Weiss</u> Daniel G. Weiss	Director	March 4, 2019

CONVENIO MODIFICATORIO (el “Convenio” o el “Modificadorio”) de fecha 27 de noviembre de 2018 celebrado por y entre:

(1) Macquarie México Real Estate Management, S.A. de C.V. en representación de CIBanco, S.A., Institución de Banca Múltiple, como fiduciario del fideicomiso irrevocable de administración identificado como F/00922 MMREIT Industrial Trust III (en lo sucesivo el “Arrendador”);

(2) TPI-Composites, S. de R.L. de C.V. (en lo sucesivo la “Arrendataria”); y,

(3) TPI-Composites, Inc. (en delante, el “Fiador”).

De conformidad con los siguientes Antecedentes, Declaraciones y Cláusulas; en el entendido de que a menos que se definan en forma distinta en este Convenio, los términos definidos en el Contrato de Arrendamiento a que se refiere el Antecedente I de este Convenio se usan en el presente Convenio en la misma forma en que fueron definidos conforme a dicho Contrato de Arrendamiento.

ANTECEDENTES

- I. El Arrendador (en ese entonces DEUTSCHE BANK MÉXICO, S.A., INSTITUCIÓN DE BANCA MÚLTIPLE, DIVISIÓN FIDUCIARIA COMO FIDUCIARIO DEL FIDEICOMISO F/1638) y la Arrendataria tienen celebrado un contrato de arrendamiento de fecha 15 de abril de 2013 (en lo sucesivo y según éste se ha modificado de tiempo en tiempo, el “Contrato de Arrendamiento”), respecto de un edificio industrial identificado como CJS-JZ-08 (ahora JUA030) el cual se encuentra construido sobre inmueble identificado como Lote A y Lote B localizados en Avenida Ramón Rayón No. 9988 en Ciudad Juárez, Chihuahua, México (conjuntamente al edificio y a los lotes de terreno se les denominará la “Propiedad Arrendada”); y,

AMENDMENT AGREEMENT (the “Agreement” or the “Amendment”) dated November 27, 2018, executed by and among:

(1) Macquarie México Real Estate Management, S.A. de C.V. in representation of CIBanco, S.A., Institución de Banca Múltiple, as trustee under the irrevocable administration trust identified as F/00922 MMREIT Industrial Trust III (hereinafter referred to as “Landlord”);

(2) TPI-Composites, S. de R.L. de C.V. (hereinafter referred to as “Tenant”); and,

(3) TPI-Composites, Inc. (hereinafter, the “Guarantor”).

Pursuant to the following Preliminary Statements, Recitals and Clauses; provided that, unless otherwise defined hereunder, the terms defined in the Lease Agreement referred to in Preliminary Statement I herein below, are used herein in the same form as defined thereunder:

PRELIMINARY STATEMENTS

- I. Landlord (then DEUTSCHE BANK MÉXICO, S.A., INSTITUCIÓN DE BANCA MÚLTIPLE, DIVISIÓN FIDUCIARIA AS TRUSTEE OF TRUST F/1638) and Tenant have an executed lease agreement dated April 15, 2013 (hereinafter, as amended from time to time, the “Lease Agreement”), regarding an industrial building identified as CJS-JZ-08 (Now JUA030) built on a property identified as Lot A and Lot B located on Avenida Ramón Rayón No. 9988 in Ciudad Juárez, Chihuahua, México (jointly the building and the plots of land shall be identified as the “Leased Property”); and,

II. El 13 de septiembre de 2017 mediante Convenio de Aportación con Derecho de Reversión se transfirió la titularidad de la Propiedad Arrendada a Banco Nacional de México, Sociedad Anónima, integrante del Grupo Financiero Banamex, División Fiduciaria como fiduciario del Fideicomiso Irrevocable Traslative de Dominio, de Garantía y Medio de Pago Número 17285-3, cuyo fideicomitente y fideicomisario en segundo lugar es CIBanco, S.A., Institución de Banca Múltiple, como fiduciario del fideicomiso irrevocable de administración identificado como F/00922.

DECLARACIONES

Cada una de las partes declaran, a través de sus representantes legales, que:

- (a) La persona que suscribe este Convenio en su representación cuenta con capacidad legal y las facultades suficientes para celebrar el mismo en su nombre y su representación, mismas que no le han sido modificadas, restringidas o revocadas a la fecha del presente Convenio. Por lo que hace al Arrendador, su apoderado cuenta con los poderes y facultades necesarias y suficientes para la celebración del presente Convenio, y que los apoderados que actúan en representación de su apoderado cuentan con los poderes y facultades necesarias y suficientes para actuar en representación de dicho apoderado en este Convenio, los cuales no le han sido revocados, limitados, ni restringidos en forma alguna a la firma del mismo;
- (b) La celebración, entrega y cumplimiento por las partes del presente Convenio, han sido debidamente autorizados por cualesquiera de los órganos corporativos competentes que se requiera y no violan cualquier ley o restricción contractual alguna que la obligue o afecte;

II. Effective September 13, 2017, by means of a Transfer of Ownership Agreement with Right of Reversion, the ownership of the Leased Property was transferred to *Banco Nacional de Mexico, S.A.*, Integrante del Grupo Financiero Banamex, Fiduciary Division as fiduciary in the Irrevocable Transfer of Ownership, Guaranty and Payment Trust Number 17285-3, whose trustor and beneficiary in second place is CIBanco, S.A., Institución de Banca Múltiple, as fiduciary of the Irrevocable Administration Trust identified as F/00922.

RECITALS

Each of the parties state through their legal representatives that:

- (a) The person executing this Amendment has legal capacity and sufficient authority to enter into this Agreement on its behalf, and such authority has neither been limited nor revoked in any manner whatsoever as of the date hereof. As for Landlord, its attorney-in-fact has all necessary powers and authorities to execute this Agreement, and that the attorneys-in-fact acting on behalf of its attorney-in-fact, have all necessary powers and authorities to act on such attorneys in fact's behalf in executing this Agreement, which powers and authorities have not been revoked, limited, or restricted in any manner whatsoever as of this date;
 - (b) This Agreement's execution, delivery and compliance by the parties have been duly authorized by any required corporate bodies and do not violate any law or contractual restriction that obligates or affects to;
-

(c) Este Convenio constituye para las partes una obligación legal y válida, exigible en su contra de conformidad con sus respectivos términos; y,

(d) El Arrendador, la Arrendataria y el Fiador declaran, conjuntamente, que desean celebrar el presente Convenio con el fin de modificar el Contrato de Arrendamiento.

EN VIRTUD DE LO ANTES EXPUESTO , las partes convienen en sujetarse a lo dispuesto en las siguientes:

CLÁUSULAS

PRIMERA. El Arrendador y la Arrendataria han acordado prorrogar el Término del Contrato de Arrendamiento a su vencimiento y por ende han acordado modificar e incluir ciertas definiciones de la Cláusula Primera del Contrato de Arrendamiento, para quedar éstas redactadas como se indica a continuación:

“Inciso 1.01. Definiciones .-...

(1) *“Arrendador” significa CIBanco, S.A., Institución de Banca Múltiple, como fiduciario del fideicomiso F/00922 MMREIT Industrial Trust III.*

(6) *“Depósito de Garantía” significa la cantidad de \$61,922.91 Dólares.*

(c) This Agreement constitutes for the parties a legal and binding obligation, enforceable against them in accordance with its respective terms; y,

(d) Landlord, Tenant and Guarantor jointly represent that they wish to enter into this Agreement in order to modify the Lease Agreement.

AS CONSEQUENCE OF THE EXPRESSED ABOVE , the parties agree to comply with the following:

CLAUSES

FIRST. Landlord and Tenant have agreed to extend the Term of the Lease Agreement upon its expiration and thus, have agreed to amend and include certain definitions in the First Clause of the Lease Agreement for such definitions to be read as follows:

“Section 1.01. Definitions .-...

(1) *“Landlord” means CIBanco, Sociedad Anónima, Institución de Banca Múltiple as trustee of Trust F/00922 MMREIT Industrial Trust III.*

(6) *“Security Deposit” means the amount of \$61,922.91 Dollars.*

- (10) “ Domicilio del Arrendador ” significa Macquarie México Real Estate Management, S.A. de C.V., como apoderado de CIBanco, S.A., Institución de Banca Múltiple (antes The Bank of New York Mellon, S.A., Institución de Banca Múltiple), fiduciario del Fideicomiso F/00922 MMREIT Industrial Trust III. Pedregal 24, Piso 21, Col. Molino del Rey, Del. Miguel Hidalgo, Ciudad de México, 11040. Atención: Director Jurídico y Jefe de Operaciones Inmobiliarias. Con copia (sin constituir notificación) para: MMREIT Property Administration, A.C., David Alfaro Siqueiros No. 104 Piso 10, Colonia Valle Oriente, San Pedro Garza García, Nuevo León, México, 66269. Respecto a cualquier notificación, una copia puede ser enviada a las siguientes direcciones de correo electrónico: monica.ardila@mpagroup.mx y peter.gaul@mpagroup.mx .
- (11) “ Edificio ” significa el edificio construido sobre el Terreno e identificado como JUA030 (compuesto por el Espacio A y Espacio B) el cual cuenta con un área total de construcción de 133,167.55 pies cuadrados y demás construcciones ubicadas sobre el Terreno y que se describe en el Anexo “A” del presente Contrato de Arrendamiento.
- (14) “ Fecha de Inicio ” será el **25 de enero de 2019** .
- (15) “ Fecha de Vencimiento ” será el **31 de enero de 2024** .
- (40) “ Fideicomisario ” significará Metropolitan Life Insurance Company.
- (10) “ Landlord’s Address ” means Macquarie México Real Estate Management, S.A. de C.V., as attorney-in-fact of CIBanco, Sociedad Anónima, Institución de Banca Múltiple (formerly The Bank of New York Mellon, S.A., Institución de Banca Múltiple), as trustee of Trust F/00922 MMREIT Industrial Trust III. Pedregal 24, Piso 21, Col. Molino del Rey, Del. Miguel Hidalgo, Ciudad de México, 11040. Attention: General Counsel and Head of Real Estate Operations. With a copy (without constituting notice) to: MMREIT Property Administration, A.C., David Alfaro Siqueiros No. 104, 10th Floor, Col. Valle Oriente, San Pedro Garza García, Nuevo Leon, Mexico, 66269. As to all notices, a copy may be sent to the following email addresses: monica.ardila@mpagroup.mx and peter.gaul@mpagroup.mx .
- (11) “ Building ” means the building constructed on the Land and identified as JUA030 (comprised by Space A and Space B) which has a total construction area 133,167.55 square feet and any other constructions located on the Land and which is described in Exhibit “A” of this Lease Agreement.
- (14) “ Commencement Date ” shall be **January 25, 2019** .
- (15) “ Expiration Date ” shall be **January 31, 2024** .
- (40) “ Trust Beneficiary ” shall mean Metropolitan Life Insurance Company.
-

- (41) "Fideicomiso de "Garantía"" significará cierto fideicomiso de garantía número F/17285-3 de fecha 29 de noviembre de 2012, celebrado entre CIBanco, S.A., Institución de Banca Múltiple (antes The Bank of New York Mellon, Sociedad Anónima, Institución de Banca Múltiple) como fiduciario del Fideicomiso de Administración F/00922 MMREIT Industrial Trust III, como fideicomitente y fideicomisario en segundo lugar, el Fideicomisario, y Banco Nacional de México, S.A., Integrante del Grupo Financiero Banamex, como fiduciario.
- (42) "Fiduciario" significará Banco Nacional de México, S.A., Integrante del Grupo Financiero Banamex, en su carácter de fiduciario del Fideicomiso de Garantía.
- (43) "GOE" significa Gastos de Operación del Edificio según se señalan en el Inciso 3.03 del presente.
- (44) "Impuestos" se referirá a todos los impuestos, derechos o contribuciones que en cualquier momento impongan a la Propiedad Arrendada las autoridades mexicanas, ya sea federales, estatales o locales, incluyendo, entre otros, el impuesto predial de la Propiedad Arrendada, pero excluyendo el impuesto sobre la renta atribuible al dueño de la Propiedad Arrendada (en lo sucesivo denominado el "Impuesto" o los "Impuestos") de conformidad con el Inciso 3.03 del presente.
- (45) "Pagos Adicionales" tiene el significado que se le atribuye en el Inciso 3.03 del presente.
- (41) "Security Trust Agreement" shall mean that certain security trust agreement number F/17285-3 dated November 29, 2012 entered into by and between CIBanco, S.A., Institución de Banca Múltiple (previously The Bank of New York Mellon, Sociedad Anónima, Institución de Banca Múltiple), as trustee of Irrevocable Administration Trust number F/00922 MMREIT Industrial Trust III, as settlor and beneficiary in second place, Trust Beneficiary and Banco Nacional de Mexico, S.A., Integrante del Grupo Financiero Banamex, as trustee.
- (42) "Trustee" shall mean Banco Nacional de Mexico, S.A., Integrante del Grupo Financiero Banamex, in its capacity as trustee of the Security Trust Agreement.
- (43) "POE" means Property Operating Expenses as such are indicated in Section 3.03 hereof.
- (44) "Taxes" shall refer to all taxes, duties or rights, imposed from time to time to the Leased Property by any federal, state or local Mexican authorities, including without limitation, the property tax (impuesto predial) of the Leased Property except the income tax attributable to the owner of the property (hereinafter referred to as "Tax" or "Taxes") pursuant to Section 3.03 hereof.
- (45) "Additional Payments" has the meaning set forth in Section 3.03 hereof.
-

(46) “ Seguros ” se refiere a los seguros que deberán contratar las partes de conformidad con las coberturas y en los términos y condiciones señalados en el Inciso 3.07 del presente.”

Independientemente de las modificaciones aquí hechas a las definiciones de *Fecha de Inicio* y *Fecha de Vencimiento*, el Contrato de Arrendamiento continuará vigente hasta la conclusión del Término actual el 24 de enero de 2019; todas las demás definiciones entrarán en vigor a partir de la fecha de firma del presente.

Asimismo, y para los efectos legales a que haya lugar, las partes están conformes y manifiestan que continuarán vigentes las opciones de Prórroga que señala el Contrato de Arrendamiento en su Inciso 2.07 independientemente de las modificaciones realizadas por medio del presente.

SEGUNDA . El Arrendador y la Arrendataria en este acto acuerdan modificar el Inciso 2.04 del Contrato de Arrendamiento, para quedar dicho inciso redactado íntegramente a partir del 2 de febrero de 2019, como se señala a continuación:

(46) “ Insurance ” refers to the insurance that the parties must contract according to the coverages and per the terms and conditions stipulated in Section 3.07 hereof.”

Irrespective of the modifications made to the definitions of *Commencement Date* and *Expiration Date*, the Lease Agreement shall remain valid until the conclusion of the current Term on January 24, 2019; all other definitions shall be in force as of the execution date hereof.

Also, and for all legal effects, the parties hereby agree and state Tenant's Options to Extend foreseen in Section 2.07 of the Lease Agreement shall remain effective irrespective of the amendments agreed hereunder.

SECOND . Landlord and Tenant hereby agree to amend Section 2.04 of the Lease Agreement, as for such section to read in its entirety as of February 2, 2019, as indicated below:

“ Inciso 2.04 . Renta . A menos que el Fiduciario instruya de otra forma por escrito (de acuerdo y conforme a las instrucciones del Fideicomisario), La Arrendataria pagará al Arrendador por el arrendamiento de la Propiedad Arrendada una renta mensual de \$0.4650 Dólares por pie cuadrado del Edificio, esto es, un monto mensual de \$61,922.91 Dólares (la “ Renta ”) o, sujeto al pago de la cuota administrativa que se señala más adelante, su equivalente en pesos al tipo de cambio que el Banco de México publique en el Diario Oficial de la Federación (para cumplir obligaciones denominadas en moneda extranjera en México), en vigor en la fecha de pago o en el Día Hábil inmediatamente anterior (en caso de que la fecha de pago no sea un Día Hábil) más el IVA correspondiente. En caso de que, la Arrendataria elija pagar cualquier monto por pagar conforme a este Contrato de Arrendamiento en Pesos, se obligará a pagar, además y como cuota administrativa, un monto igual a 10% (diez por ciento) del monto pertinente, más el IVA correspondiente; sin embargo, el Arrendador liberará a la Arrendataria del pago de dicha cuota si en o antes de la fecha en que el pago correspondiente sea pagadero, la Arrendataria ha entregado al Arrendador los detalles de depósito para cualquier pago realizado en Pesos, el cual deberá incluir la fecha de pago, cantidad pagada, y cuenta a la que dicha cantidad fue depositada.

La Renta deberá pagarse por adelantado al Arrendador o a quien el Fiduciario instruya, dentro de los primeros 5 Días Hábiles de cada mes en el Domicilio del Arrendador o en cualquier otro lugar que el Arrendador indique previamente a la Arrendataria por escrito.

Si la Fecha de Inicio no fuere en el primer día de un mes natural, o si el Término no venciere o terminare en el último día de un mes natural, la Renta o cualquier otro monto por pagar se prorratearán para el mes parcial considerando un mes de 30 (treinta) días.

En caso de que la Arrendataria incumpla con el pago puntual de la Renta en términos de este Contrato de Arrendamiento, entonces la Arrendataria deberá pagar al Arrendador, un interés moratorio equivalente al 1% (uno por ciento) sobre la Renta total mensual, por cada día de retraso en el pago de la Renta.

Las partes expresamente convienen que la Arrendataria no deducirá ni compensará ningún monto de los pagos de la Renta por ningún motivo.

“ Section 2.04 . Rent . Unless otherwise instructed by the Trustee in writing (in accordance with and pursuant to the instructions of the Trust Beneficiary), Tenant shall pay Landlord, for the lease of the Leased Property, a monthly rent of \$0.4650 Dollars per square foot of the Building, that is, a monthly amount of \$61,922.91 Dollars (the “ Rent ”) or, subject to payment of the administrative fee referenced below, its equivalent in Pesos at the exchange rate published by the Banco de México in the Federal Official Gazette (to satisfy obligations denominated in foreign currency in Mexico) in effect on the payment date or on the immediately preceding Business Day (in the event that the payment date is not a Business Day), plus the corresponding VAT. If Tenant elects to pay any amount payable under this Lease Agreement in Pesos, Tenant will be obligated to pay, in addition thereto and as an administrative fee, an amount equal to ten percent (10%) of any such amount, plus applicable VAT; however, Landlord will agree to waive this fee if on or prior to the due date of the corresponding payment, Tenant has provided Landlord with deposit details for any payment made in Pesos, which shall include the date of payment, amount of payment, and account to which the payment was deposited.

The Rent shall be paid to Landlord or to whom Trustee instructs, within the first 5 Working Days of each month at Landlord’s Address or any other place previously indicated in writing by Landlord to Tenant.

If the Commencement Date does not occur on the first day of a calendar month or if the Term does not expire or terminate on the last day of a calendar month, the Rent or any other payable amount hereunder shall be prorated for such partial month on the basis of a thirty (30) day month.

In the event Tenant does not comply with the punctual payment of Rent in terms of this Lease Agreement, then the Tenant shall pay Landlord a moratory interest equivalent to 1% (one percent) over the total monthly Rent, for each day of delay in the payment of the Rent.

The parties expressly agree that Tenant shall neither deduct nor set off any amount from the payments of the Rent for any reason whatsoever.

El Arrendador es actualmente un fideicomiso no empresarial y transparente para efectos fiscales, y el beneficiario final de cada una de las obligaciones de pago de la Arrendataria bajo este contrato es CIBanco, S.A., Institución de Banca Múltiple, en su carácter de fiduciario de F/1622 FIBRA Macquarie México (en lo sucesivo referido como “FIBRA Macquarie México”), y, por lo tanto, mientras el Arrendador sea un fideicomiso no empresarial y transparente para efectos fiscales y el beneficiario final de cada una de las obligaciones de la Arrendataria bajo este Contrato de Arrendamiento sea FIBRA Macquarie México, el Arrendador deberá procurar que FIBRA Macquarie México emita a la Arrendataria las facturas por cada pago que reciba el Arrendador de parte de la Arrendataria en términos del presente, cumpliendo con todos los requerimientos fiscales y legales.

Las partes acuerdan que, en caso de que la Arrendataria decida ejercer cualquiera de las opciones de Prórroga de conformidad con lo establecido en el Inciso 2.07 del presente Contrato de Arrendamiento, la Renta que corresponderá a cada periodo de Prórroga será determinada por el Arrendador y la Arrendataria a partir de la fecha en la que la Arrendataria ejerza la Prórroga, pero en todos los casos a más tardar dentro de los 180 días previos a la Fecha de Vencimiento, en el entendido de que, en todos los casos la Renta deberá ser lo que resulte mayor entre la Renta vigente al momento en el que la Prórroga sea aplicable (incluyendo cualquier incremento aplicable en la Renta) y por lo menos el 95% (noventa y cinco por ciento) del valor anual de mercado de una renta para renovaciones para edificios industriales similares en Ciudad Juárez, Chihuahua multiplicado por los pies cuadrados del Edificio (la “Renta a Valor Mercado”).

Landlord is currently a non-business and transparent trust for tax purposes, and the ultimate beneficiary of the payment obligations of Tenant under this agreement is CIBanco, S.A., Institución de Banca Múltiple, as trustee of F/1622 FIBRA Macquarie México (hereinafter referred to as “Macquarie Mexican REIT”), and, therefore, for so long as Landlord is a non-business and transparent trust for tax purposes and the ultimate beneficiary of the payment obligations of Tenant under this Lease Agreement is Macquarie Mexican REIT, Landlord shall procure that Macquarie Mexican REIT issues to Tenant invoices for each payment to be received by Landlord from Tenant hereunder, complying with all tax and legal requirements.

The parties agree that, in the event that Tenant exercises the Renewal options pursuant to what is set in Section 2.07 of this Lease Agreement, the Rent that will be applicable for such Renewal, the Rent shall be determined by Landlord and Tenant as of the date on which Tenant exercises the Renewal, but in any event, , at least 180 days prior to the Expiration Date, provided that, in all cases the Rent shall be the higher of the current Rent (including any applicable Rent escalations) at the time the Renewal is exercised by Tenant and at least 95% (ninety five percent) of the annual market rental rate per square foot for renewals for comparable industrial buildings in Ciudad Juárez, Chihuahua, multiplied by the square feet of the Building (the “Market Rental Rate”).

Las partes acuerdan que el proceso para determinar el precio final de renta a valor mercado para la Prórroga será el siguiente:

1.- Dentro de los 30 días naturales siguientes a la fecha en que el Arrendador reciba de la Arrendataria la notificación para ejercer la Prórroga, el Arrendador deberá proponer a la Arrendataria el precio de renta a valor mercado para ser aplicado durante la Prórroga (la "Propuesta de Renta del Arrendador"), en el entendido de que, la Arrendataria, dentro de los 30 días naturales siguientes a la recepción de la Propuesta de Renta del Arrendador (el "Término de Respuesta de la Arrendataria"), deberá ya sea (a) aceptar la Propuesta de Renta del Arrendador mediante aviso por escrito entregado al Arrendador; o (b) notificar por escrito al Arrendador una contrapropuesta del precio de renta a valor mercado a ser aplicado durante la Prórroga. En caso de que la Arrendataria no notifique al Arrendador por escrito ya sea, su aceptación a la Propuesta de Renta del Arrendador o su contrapropuesta al precio de renta a valor mercado dentro del Término de Respuesta de la Arrendataria, entonces, la Propuesta de Renta del Arrendador deberá ser considerada como aceptada por la Arrendataria.

2.- En caso de que la Arrendataria entregue al Arrendador una contrapropuesta del precio de renta a ser aplicado durante la Prórroga (la "Propuesta de Renta de la Arrendataria"), el Arrendador dentro de los 30 días naturales siguientes a la recepción de la Propuesta de Renta de la Arrendataria (el "Término de Respuesta del Arrendador"), deberá ya sea (y) aceptar la Propuesta de Renta de la Arrendataria mediante aviso por escrito entregado a la Arrendataria o (z) notificar a la Arrendataria por escrito su rechazo a la contrapropuesta de la Arrendataria. En caso de que el Arrendador no notifique a la Arrendataria por escrito ya sea, su aceptación o rechazo de la Propuesta de Renta de la Arrendataria dentro del Término de Respuesta del Arrendador, entonces, la Propuesta de Renta de la Arrendataria deberá ser considerada como aceptada por el Arrendador como la Renta a Valor Mercado para la Prórroga.

The parties agree that the process for determining a final market rental rate for the Renewal will be as follows:

1.- Within 30 calendar days from the date on which Landlord receives notice from Tenant exercising the Renewal, Landlord will propose to Tenant the market rental rate for purposes of such Renewal ("Landlord's Rental Rate Proposal"), provided that, Tenant shall within the following 30 calendar days after receiving Landlord's Rental Rate Proposal ("Tenant's Response Term"), either (a) accept Landlord's Rental Rate Proposal as the market rental rate through written notice delivered to Landlord or (b) notify Landlord in writing of a counterproposal of the market rental rate to be used for purposes of such Renewal. In the event that Tenant does not notify Landlord in writing of either its acceptance of Landlord's Rental Rate Proposal or its counterproposal for the market rental rate within the Tenant's Response Term, then Landlord's Rental Rate Proposal shall be deemed accepted by Tenant as the market rental rate for purposes of the Renewal.

2.- In the event Tenant provides Landlord a counterproposal of the Market Rental Rate for purposes of the Renewal ("Tenant's Rental Rate Proposal"), Landlord shall within the following 30 calendar days after receiving Tenant's Rental Rate Proposal ("Landlord's Response Term"), either (y) accept Tenant's Rental Rate Proposal as the Market Rental Rate through written notice delivered to Tenant or (z) notify Tenant in writing its rejection of Tenant's Rental Rate Proposal. In the event Landlord does not notify Tenant in writing of either its acceptance or rejection of Tenant's Rental Rate Proposal within Landlord's Response Term, then, Tenant's Rental Rate Proposal shall be deemed as accepted by Landlord as the Market Rental Rate for purposes of the Renewal.

3.- Si el Arrendador rechaza la Propuesta de Renta de la Arrendataria en términos del presente inciso, cada una de las partes estará obligada a designar, a su solo costo y gasto, un despacho valuador el cual deberá (i) tener una buena reputación para la realización de avalúos de inmuebles industriales en México y con por lo menos 5 (cinco) años de experiencia en avalúos industriales y de almacén en México, y (ii) llevar a cabo su valuación utilizando el estándar establecido por el IVSC (International Valuation Standards Council). Cada uno de los despachos de valuadores designados por las partes deberá enviar su propuesta de precio de Renta a Valor Mercado dentro de los siguientes 30 (treinta) días naturales a la notificación del Arrendador a la Arrendataria en términos del párrafo 2 anterior.

4.- En caso de que, dentro de los siguientes 10 días naturales a la recepción de las propuestas de precio de renta a valor mercado de los respectivos despachos de valuadores del Arrendador y la Arrendataria (los "Avalúos Iniciales"), el Arrendador y la Arrendataria no hubieran logrado acordar la Renta a Valor Mercado para ser aplicada a la Prórroga, entonces los despachos de valuadores del Arrendador y la Arrendataria deberán designar a un tercer despacho de valuadores (cumpliendo con los mismos parámetros utilizados por los despachos valuadores tanto del Arrendador como de la Arrendataria) quien dentro de los siguientes 15 días naturales a la fecha de su designación, deberá decidir cuál de los Avalúos Iniciales (ya sea la propuesta de precio de renta a valor mercado del despacho de valuadores del Arrendador o de la Arrendataria) será el precio de renta final a valor mercado de la Prórroga (la "Renta a Valor Mercado Final"). La Renta a Valor Mercado Final será obligatoria, final y concluyente para las partes.

5.- Todos los costos y gastos que deriven de la designación del tercer despacho de valuadores deberán ser compartidos en partes iguales por el Arrendador y la Arrendataria. Durante la Prórroga todos los incrementos anuales acordados bajo el presente Contrato de Arrendamiento continuarán en pleno vigor y efecto."

3.- If Landlord rejects Tenant's Rental Rate Proposal in terms of this section, each party shall be obligated to appoint, at its own cost and expense, an appraiser firm which shall (i) have a good reputation for the performance of industrial property appraisals in Mexico and with at least 5 (five) years of experience in industrial and warehouse appraisals in Mexico, and (ii) carry out its appraisals based on the standard established by the IVSC (International Valuation Standards Council). Each appraiser firm appointed by the parties shall provide its Market Rental Rate recommendation within the following 30 (thirty) calendar days after Landlord's notice to Tenant in terms of subsection 2 above.

4.- In the event that, within a period of 10 calendar days following receipt of Landlord's and Tenant's appraiser firms' appraisals of market rental rates (the "Initial Appraisals"), Landlord and Tenant cannot agree on the Market Rental Rate to be used for purposes of the Renewal, then, Landlord's and Tenant's appraiser firms shall appoint a third appraiser firm (meeting the same criteria as those set forth above for the Landlord's and Tenant's appraisal firms), who within the following 15 calendar days after its appointment, shall decide which of the Initial Appraisals (either Landlord's or Tenant's appraiser firms' appraisals of market rental rates) shall be final market rental rate for purposes of the Renewal (the "Final Rental Rate"). The Final Rental Rate as herein defined shall be binding, final and conclusive for the parties.

5.- All costs and expenses resulting for the appointment of a third appraiser firm shall be shared equally by Landlord and Tenant. All applicable annual escalations provided hereunder during the Term of this Lease Agreement shall remain in force and effect during the Renewal."

TERCERA . El Arrendador y la Arrendataria en este acto acuerdan modificar íntegramente el inciso 2.06 del Contrato de Arrendamiento para quedar el mismo redactado a partir de esta fecha como se señala a continuación:

“ Inciso 2.06 . Cumplimiento con las Leyes . La Arrendataria acuerda que en la fecha de firma del presente Contrato de Arrendamiento entregará al Arrendador copia de los documentos y/o información listada en el Anexo “F” que se adjunta al presente Contrato de Arrendamiento. Asimismo, la Arrendataria, mientras ocupe la Propiedad Arrendada, será responsable, a su propio costo y gasto, de obtener y mantener en vigor todos los certificados, autorizaciones, licencias, concesiones y/o permisos gubernamentales que las Leyes requieran para establecer y llevar a cabo sus operaciones comerciales en la Propiedad Arrendada enunciativa más no limitativamente, licencia de operación, licencia de emisiones a la atmósfera, licencia de descargas de aguas residuales, cédula de operación anual, así como el manifiesto de impacto ambiental; la Arrendataria entregará copia de dichos certificados, autorizaciones, licencias, concesiones y permisos al Arrendador dentro de un plazo de 5 (cinco) Días Hábiles después de haber recibido por parte de las autoridades correspondientes dichos certificados, autorizaciones, licencias, concesiones y/o permisos que sean requeridos para establecer y llevar a cabo las operaciones de la Arrendataria en la Propiedad Arrendada, incluyendo sin limitar la licencia de operación. Asimismo, la Arrendataria deberá entregar al Arrendador toda aquella información requerida por el Arrendador a fin de dar cumplimiento con las Leyes, incluyendo sin limitar, cualquier regulación o disposición relacionada con Lavado de Dinero (“AML”); en el entendido que, en caso de que dicha información AML entregada al Arrendador cambie, la Arrendataria deberá dentro de los 3 Días Hábiles siguientes a dicho cambio, entregar al Arrendador la información correspondiente a dicho cambio.

THIRD . Landlord and Tenant hereby agree to entirely amend section 2.06 of the Lease Agreement for such to read as of this date, as indicated below:

“ Section 2.06 . Compliance with Laws . Tenant agrees to deliver Landlord on the date hereof copy of the documents and/or information listed on Exhibit “F” attached hereto. Likewise, during the time Tenant occupies the Leased Property, Tenant shall be liable, at its own cost and expense, for obtaining and maintaining in full force and effect all certificates, authorizations, licenses, concessions and/or governmental permits that are required by the Laws to establish and to carry out Tenant’s business operations in the Leased Property including without limitation, operation license, atmosphere emissions license, wastewater discharge license, annual operation license, declaration of environmental impact; Tenant shall deliver a copy of said certificates, authorizations, licenses, concessions and permits to Landlord within five (5) Business Days after receiving from the corresponding authorities such certificates, authorizations, licenses, concessions, authorizations and/or governmental permits that are required to establish and carry out Tenant’s operations in the Leased Property, including without limitation operation license. Likewise, Tenant shall deliver to Landlord all information required by Landlord in order to comply with the Laws, including without limitation any Anti Money Laundering (“AML”) regulations; provided that, in the event that such AML information delivered to Landlord changes, Tenant, within the following three (3) Business Days of such change, shall deliver to Landlord the information related to such change.

Adicionalmente, la Arrendataria declara, garantiza, se compromete y acuerda que en todo momento:

(a) La Arrendataria llevará a cabo sus operaciones de manera ética y de conformidad con las Leyes, incluyendo sin limitar, leyes que prohíban el soborno y el lavado de dinero (las "Leyes Anticorrupción"), leyes que requieran el cumplimiento con legislación fiscal local, regulaciones relacionadas con la importación y exportación y con el pago de cuotas aduanales y derechos aplicables (las "Leyes de Importación/Exportación") y leyes de derechos humanos (las "Leyes de Derechos Humanos").

(b) La Arrendataria y sus directores, funcionarios, empleados, agentes, subcontratistas y representantes estarán familiarizados con y deberán cumplir en todos sus aspectos con las Leyes Anticorrupción, las Leyes de Importación/Exportación, Leyes de AML y Leyes de Derechos Humanos.

(c) Ni la Arrendataria ni sus directores, funcionarios, empleados, agentes, subcontratistas o representantes autorizarán o realizarán ningún pago o regalo o ofrecerán o prometerán ningún pago o regalo de ninguna naturaleza, ya sea directa o indirectamente, en relación con este Contrato de Arrendamiento o con la Propiedad Arrendada a:

(i) ningún funcionario gubernamental para influenciarlo para la obtención de o realización de algún negocio o asegurar alguna ventaja ilegal; o

(ii) ningún empleado de una empresa privada para efecto de inducirlo ilegalmente para obtener una ventaja competitiva; y

In addition to the foregoing, Tenant represents, warrants, undertakes and agrees that at all times:

(a) Tenant will conduct its operations ethically and in accordance with all Laws, including but not limited to laws that prohibit commercial bribery, payments to government officials, and money laundering (the "Anti-Corruption Laws"), laws requiring compliance with local tax laws, import/export regulations and payment of applicable customs and duties (the "Import/Export Laws") and human rights laws ("Human Rights Laws").

(b) Tenant and its directors, officers, employees, agents, subcontractors and representatives are familiar with, and will comply in all respects with, Anti-Corruption Laws, Import/Export Laws, AML Laws and Human Rights Laws.

(c) Neither the Tenant nor its directors, officers, employees, agents, subcontractors or representatives will authorize or make any payments or gifts or any offers or promises of payments or gifts of any kind, directly or indirectly, in connection with this Lease Agreement or the Leased Property to:

(i) any government official to influence the official for the purpose of obtaining or retaining business or securing some other improper advantage; or

(ii) any employee of a private company in order to improperly induce that employee to provide any competitive advantage; and

(d) ni la Arrendataria ni ninguno de sus empleados, agentes, subcontratistas o representantes es un funcionario de gobierno, incluyendo sin limitar, un oficial o empleado de cualquier gobierno, un funcionario de un partido político, o candidato a un puesto público, o director, funcionario, empleado o "afiliado" (según dicho término se define en el U.S. Securities Exchange Act of 1934) de una dependencia gubernamental. La Arrendataria entiende que para efectos del presente inciso, "funcionario de gobierno" puede incluir un empleado o funcionario de una empresa comercial o Universidad o instituto de educación superior en la cual un órgano de gobierno tenga alguna participación o ejerza algún control sobre las actividades de dicha empresa, así como funcionarios y empleados de organizaciones públicas internacionales."

CUARTA. El Arrendador y la Arrendataria acuerdan en este acto eliminar el Inciso 3.01 de la Cláusula Tercera del Contrato de Arrendamiento.

QUINTA. El Arrendador y la Arrendataria en este acto acuerdan modificar el Inciso 3.03 del Contrato de Arrendamiento, para quedar éste redactado a partir de esta fecha, como sigue:

" Inciso 3.03. Pagos Adicionales, Reparaciones y Mantenimiento .

Pagos Adicionales . Además de la Renta, la Arrendataria pagará al Arrendador todos los Impuestos, Seguros y Cargos de GOE (según se definieron dichos términos en la Cláusula Primera del Contrato de Arrendamiento), más el IVA correspondiente, como sigue:

(a) Impuestos según estos quedaron definidos en la Cláusula Primera del presente.

(d) neither the Tenant nor any of his employees, agents, subcontractors or representatives is a government official, including without limitation an official or employee of any government, an official of a political party, or a candidate for political office, or a director, officer, employee, or "affiliate" (as defined in regulations under the U.S. Securities Exchange Act of 1934) of a government department. The Tenant understands that for purposes of this section, a "government official" may include an employee or official of a commercial entity or a university or institute of higher learning in which a government body has an ownership interest or exerts control over the activities of such entity, as well as officials and employees of public international organizations."

FOURTH . Landlord and Tenant hereby agree to delete Section 3.01 of the Third Clause of the Lease Agreement.

FIFTH . Landlord and Tenant hereby agree to amend Section 3.03 of the Lease Agreement so that such section shall be read as of this date, as follows:

" Section 3.03 . Additional Payments, Repairs and Maintenance .

Additional Payments . In addition to the Rent, Tenant shall pay Landlord all Taxes, Insurance and POE Charges (as such terms are defined in the First Clause of the Lease Agreement), plus applicable VAT, as follows:

(a) Taxes as such were defined in the First Clause hereunder.

(b) Seguros. Incluirán, entre otros, todas las pólizas de seguros para la Propiedad Arrendada pagadas por el Arrendador pero que serán reembolsadas por la Arrendataria como se prevé en este Contrato de Arrendamiento, incluyendo, entre otros, primas, coaseguros y deducibles (en lo sucesivo denominados los "Seguros"). Además, en caso

de que el uso de la Arrendataria de la Propiedad Arrendada resulte en un incremento en las primas para los Seguros del Arrendador, la Arrendataria pagará al Arrendador, a solicitud, como Pago Adicional, un monto igual a dicho incremento en las primas. Los pagos de los Seguros serán adicionales a todas las primas de seguros que la Arrendataria esté obligada a contratar conforme al Inciso 3.07 de este Contrato de Arrendamiento.

(c) GOE. Los cargos por mantenimiento según quedaron definidos éstos en la Cláusula Primera del presente.

(d) Liquidación de Montos Adicionales. El Arrendador tendrá el derecho a facturar a la Arrendataria en forma mensual, trimestral o en cualquier otra, los Impuestos, Seguros y gastos de GOE a pagar por la Arrendataria conforme a este Contrato de Arrendamiento, más el IVA correspondiente; la Arrendataria pagará al Arrendador, como Pagos Adicionales, los montos que se le facturen en un plazo de 30 (treinta) días después de recibir la factura pertinente; en el entendido de que el efectivo que la Arrendataria pague con antelación al Arrendador no devengará intereses. Después del cierre anual de cada ejercicio fiscal, el Arrendador entregará un estado a la Arrendataria que contendrá la diferencia entre los Impuestos, Seguros y/o gastos de GOE reales y el monto total de los pagos mensuales realizados por la Arrendataria al Arrendador. Dentro de un plazo de 30 (treinta) días después de recibir dicho estado, la Arrendataria pagará al Arrendador el monto total de cualquier diferencia entre las obligaciones reales de la Arrendataria menos el monto total de los pagos realizados previamente de Impuestos, Seguros y/o GOE. En caso de que los pagos de la Arrendataria excedan las obligaciones reales, el Arrendador le reembolsará el excedente o lo acreditará contra las próximas obligaciones de Pagos Adicionales mensuales.

(b) Insurance. Insurance shall include, without limitation, all insurance policies in connection with the Leased Property, paid by Landlord but that must be reimbursed by Tenant as provided hereunder, including without limitation, any premiums, co-insurances and deductibles (hereinafter referred to as "Insurance"). In addition thereto, in the event Tenant's use of the Leased Property shall result in an increase in the premiums for any Landlord's Insurance, Tenant shall pay to Landlord, upon demand, as Additional Payment, an amount equal to such increase in premiums. Such payments of Insurance shall be in addition to all premiums of insurance which Tenant is required to carry pursuant to Section 3.07 of this Lease Agreement.

(c) POE. Property operating expenses as these were defined in the First Clause hereunder.

(d) Payment of Additional Amounts. Landlord shall have the right to invoice Tenant monthly, quarterly, or otherwise from time to time, Taxes, Insurance and POE expenses payable by Tenant under this Lease Agreement plus applicable VAT; and Tenant shall pay to Landlord, as Additional Payments, those amounts for which Tenant is so invoiced within thirty (30) days after receipt of said invoice; provided that, any monies paid in advance to Landlord by Tenant shall not accrue interest thereon. Following the end of each property fiscal year, Landlord shall deliver a statement to Tenant setting forth the difference between Tenant's actual Taxes, Insurance and/or POE expenses and the total amount of monthly payments paid by Tenant to Landlord. Within thirty (30) days after receipt of said statement, Tenant shall pay to Landlord the full amount of any difference between Tenant's actual obligation less the total amount of Tenant's payments previously paid of Taxes, Insurance and/or POE. In the event Tenant's payments exceed Tenant's actual obligation, Landlord shall either refund the overpayment to Tenant or credit said overpayment against Tenant's next monthly Additional Payment obligation(s).

Si la Arrendataria no cumpliere con la liquidación oportuna de los Pagos Adicionales, entonces pagará al Arrendador un cargo por intereses de penalización igual a 0.5% del monto total de cada uno de los Pagos Adicionales, según corresponda, por cada día de incumplimiento en dichos Pagos Adicionales.

El Arrendador mantendrá registros completos y precisos de todos los Impuestos, Seguros y gastos de GOE que hubiere pagado y que deban ser reembolsados por la Arrendataria como se prevé en este Contrato de Arrendamiento en relación con la Propiedad Arrendada.

If Tenant defaults in the timely payment of any Additional Payments, then Tenant shall pay to Landlord a penalty interest charge equal to 0.5% of the total amount of each of the Additional Payments, as applicable, per each day of default in any of such Additional Payments.

Landlord shall maintain complete and accurate records of all Taxes, Insurance and POE expenses paid by Landlord that must be reimbursed by Tenant as provided herein in connection with the Leased Property.

Derecho de Inspección. Dentro de los 90 (noventa) días siguientes a cada año del arrendamiento, el Arrendador proporcionará a la Arrendataria una declaración (la "Declaración") en la cual se establezca la cantidad real de Impuestos, Seguros y/o gastos GOE del año anterior (el "Período de Revisión") así como cualquier diferencia entre dichas cantidades reales y los pagos estimados hechos por la Arrendataria para dicho período. La Arrendataria tendrá la oportunidad de contratar los servicios de una empresa independiente de servicios de contabilidad pública para revisar la información de soporte del Arrendador para dichos gastos durante el Período de Revisión para verificar que dichos gastos se encuentren adecuadamente documentados y calculados de conformidad con los términos y disposiciones de este Contrato de Arrendamiento y la ley aplicable, incluyendo, sin limitación, el cumplimiento de cualquier cap o limitación a dichos gastos. Una vez recibida la notificación de que la Arrendataria ha contratado los servicios de dicha empresa, el Arrendador deberá, dentro de los siguientes 30 (treinta) días, proporcionar a la Arrendataria información de soporte (la "Documentación") para justificar los diversos gastos y cálculos establecidos en la Declaración. La Arrendataria hará que dicha empresa de contabilidad y sus agentes y em

pleados mantengan toda la información contenida en la Declaración y en la Documentación del Arrendador en estricta confidencialidad. La Arrendataria podrá, dentro de los 30 (treinta) días siguientes a la recepción de la Documentación, notificar al Arrendador por escrito (la "Notificación de Controversia") que la Arrendataria disputa cualquier cantidad incluida en la Declaración. La falta de la Arrendataria de entregar la Notificación de Controversia dentro de los 30 (treinta) días siguientes a la recepción de la Documentación se entenderá como la aprobación de la Arrendataria de la Declaración, y la Arrendataria a partir de entonces renuncia a su derecho de disputar las cantidades incluidas en dicha Declaración. Después de la presentación de una Notificación de Controversia, la empresa de contabilidad de la Arrendataria proporcionará una certificación de que ciertos gastos establecidos en la Declaración eran inexactos y excesivos, y en caso de ausencia de evidencia por parte del Arrendador o sus contadores de dichos gastos en controversia, el Arrendador deberá, a elección de la Arrendataria, reembolsar dichos gastos excesivos a la Arrendataria o proporcionar un crédito contra la Renta. Si dicho exceso excede de 5% (cinco por ciento) de los gastos reales para el Período de Revisión, entonces el costo de los contadores y el costo de la mencionada certificación deberá ser pagada por el Arrendador. La Arrendataria acuerda que lo establecido en este inciso será el único método que podrá ser utilizado por la Arrendataria para disputar cualquier cantidad de cualesquier gastos pagaderos por la Arrendataria de conformidad con lo establecido en este Contrato de Arrendamiento y en este acto renuncia cualquier otro derecho que pueda tener por ley en relación con este asunto.

Reparaciones y Mantenimiento.

(A) Obligaciones del Arrendador.

Inspection Right. Within 90 (ninety) days after the end of each lease year, Landlord will furnish to Tenant a statement ("Statement") setting forth the actual amount of Tenant's Taxes, Insurance and/or POE expenses for the preceding year ("Review Period") as well as any difference between such actual amounts and the estimated payments made by Tenant for such period. Tenant shall have the opportunity to engage the services of an independent certified public accounting firm to examine Landlord's supporting documentation for such expenses during the Review Period to verify that such expenses are properly documented and calculated in accordance with the terms and provisions of the Lease Agreement and applicable law, including, without limitation, compliance with any caps or limitation on any such expenses. Upon notice to Landlord that Tenant has engaged the services of such firm, Landlord shall, within 30 (thirty) days, provide to Tenant supporting documentation ("Documentation") to substantiate the various expenses and calculations set forth in the Statement. Tenant shall cause such accounting firm and its agents and employees to maintain all information contained in the Statement and in Landlord's Documentation in strict confidence. Tenant may, within 30 (thirty) days after receipt of the Documentation, notify Landlord in writing ("Dispute Notice") that Tenant disputes any amounts in the Statement. Tenant's failure to deliver the Dispute Notice within 30 (thirty) days after receipt of the Documentation shall be deemed to constitute Tenant's approval of the Statement and Tenant thereafter waives the right or ability to dispute the amounts set forth in such Statement. Following the submission of a Dispute Notice, Tenant's accounting firm will provide a certification that certain expenses set forth in the Statement were inaccurate and overstated, and in the event of absent substantiation for such challenged expenses from Landlord or its accountants, Landlord shall refund such overstated amount to Tenant or provide a credit against Rent, at Tenant's option. If such overstatement exceeds 5% (five percent) of the actual expenses for such Review Period, then the cost of the accountant and the cost of such certification shall be paid for by Landlord. Tenant agrees that the provisions established in this section shall be the sole method to be used by Tenant to dispute the amount of any expenses owed by Tenant pursuant to the terms of this Lease Agreement, and Tenant hereby waives any other rights at Laws relating thereto.

Repairs and Maintenance.

(A) Landlord's Obligations.

a. Obligaciones No Reembolsables del Arrendador. El Arrendador, a su solo costo y gasto, y debido al uso y desgaste normales del Edificio, deberá conservar, reparar y reemplazar los cimientos y losas, la estructura de muros y techos del Edificio, incluyendo muros exteriores y de carga, toda la tubería subterránea (excepto por los desagües tapados), componentes estructurales del pavimento del patio de maniobras, el estacionamiento y accesos, y pasillos de la Propiedad Arrendada (excluyendo pavimentación de asfalto), siempre y cuando las reparaciones no sean atribuibles a culpa, negligencia o conducta dolosa de la Arrendataria o sus representantes, empleados, contratistas, subcontratistas, funcionarios, proveedores, invitados y licenciatarios, en cuyo caso la Arrendataria será responsable de cualquier reemplazo o reparación. Todas las reparaciones y reemplazos a ser realizados o llevados a cabo por el Arrendador deberán ser realizados en forma profesional y correcta de conformidad con las Leyes y parámetros de la industria para cada tipo de sistema, equipo o mejora y las disposiciones de este Contrato de Arrendamiento, y tendrán al menos la misma calidad y diseño original de sistema, equipo o mejoras.

a. Landlord's Non Reimbursable Obligations. Landlord, at its sole cost and expense, and due to the Building's normal wear and tear, shall keep, repair and replace the foundations and slabs, wall structure, and roof structure of the Building, including exterior and load-bearing walls, all below-ground plumbing (except for clogged drains), structural components of all parking facilities, driveways, truck ways, sidewalks and passageways (excluding asphalt paving), provided that such repairs or replacements are not imputable to the fault, negligence, or willful misconduct of Tenant or its agents, employees, contractors, subcontractors, officers, suppliers, invitees, and licensees, in which case Tenant shall be responsible for any required repair or replacement. All repairs and replacements to be made or performed by Landlord shall be performed in a good and workmanlike manner in accordance with the Laws and industry standards for each kind of system, equipment or improvement and the provisions of this Lease Agreement and shall be of at least the same quality and character as the original system, equipment or improvement.

b. Obligaciones Reembolsables del Arrendador. El Arrendador, a costo y gasto de la Arrendataria, también será responsable de realizar todas las reparaciones no estructurales a la Propiedad Arrendada, el Edificio para cumplir con las Leyes (diferentes a aquellas que de acuerdo con el presente Contrato de Arrendamiento sean obligación de la Arrendataria realizar) o que sean apropiados para la operación continua de la Propiedad Arrendada o el Edificio de acuerdo con lo señalado en el presente Contrato de Arrendamiento, y cualesquiera otros gastos documentados en los que incurra el Arrendador para la Propiedad Arrendada incluyendo, mantenimiento o reparaciones del laminado del techo o de la membrana del techo, reparación y mantenimiento del aislamiento del techo, mantenimiento del techo, incluyendo asegurar la impermeabilidad, limpieza y pintura del techo, llevar a cabo inspecciones anuales por parte de un consultor del Arrendador, reparaciones y mantenimiento de las canaletas y ductos de drenaje pluvial del Edificio. El Arrendador también será responsable de la pintura exterior, así como del pago de todos los costos, gastos, cargos y valoraciones de asociaciones a los cuales la Propiedad Arrendada esté sujeto incluyéndolas cuotas del Parque Industrial, en caso de ser aplicable. Lo anterior estará sujeto a la obligación de la Arrendataria para reembolsar al Arrendador por dicho trabajo o costos (GOE, según se describe en el presente Contrato de Arrendamiento).

b. Landlord's Reimbursable Obligations: Landlord, at Tenant's cost and expense, will also be responsible for carrying out all non-structural repairs, to the Leased Property or the Building in order to comply with Laws (other than those expressly required herein to be made by Tenant) or that are appropriate to the continued operation of the Leased Property or the Building as provided in this Lease Agreement, and all other documented expenses incurred by Landlord for or on behalf of the Leased Property including maintaining or repairing roof laminate or roof membrane, repairs and maintenance of roof insulation, maintenance of the roof, including ensuring roof water tightness, cleaning and painting of the roof, performance of an annual roof inspection by Landlord's consultant, repairs and maintenance of rain drainage gutters and pipelines of the Building. Landlord shall also be responsible for exterior painting, as well as for paying all costs, expenses, charges or assessments related to any association to which the Leased Property is subject including Industrial Park fees, if applicable. All of the above is subject to Tenant's obligation to reimburse Landlord for such work or expense (POE, as hereinbefore described).

La Arrendataria conviene en notificar de inmediato al Arrendador de cualquier condición defectuosa o desperfecto que sea de su conocimiento y que el Arrendador esté obligado a reparar y el Arrendador deberá proceder con diligencia y sin demora injustificada, siempre y cuando dichas reparaciones no sean imputables a la Arrendataria, sus empleados, contratistas, subcontratistas, proveedores, oficiales, invitados y licenciarios por culpa, negligencia o mala fe; en cuyo caso la Arrendataria será responsable de dicha condición defectuosa o falla; en el entendido que, la Arrendataria será responsable, a su costo y gasto, de realizar cualquier reparación necesaria de cualquier componente no estructural, y el Arrendador, a costo y gasto de la Arrendataria, realizará la reparación de cualquier componente estructural, con excepción de los comprendidos dentro de las Obligaciones No Reembolsables del Arrendador. La Arrendataria deberá otorgar al Arrendador, sus empleados y contratistas acceso a la Propiedad Arrendada durante Días Hábiles y horas hábiles solicitado mediante aviso con al menos dos días hábiles de anticipación para realizar los trabajos de reparación de acuerdo a lo señalado en el presente inciso; no obstante lo anterior, el

Arrendador no será responsable por cualquier daño, pérdida, reclamación, acción legal, multa, sanción o siniestro a la Propiedad Arrendada, la Arrendataria, sus agentes, empleados, contratistas, subcontratistas, oficiales, proveedores, invitados, licenciarios y/o el equipo de la Arrendataria que resulten de una condición defectuosa que el Arrendador este obligado a reparar o reemplazar si la Arrendataria no proporcionó al Arrendador acceso a la Propiedad Arrendada.

Salvo lo dispuesto en el presente Contrato de Arrendamiento, el Arrendador no estará obligado a proporcionar mantenimiento, reparaciones, o cualquier otro servicio adicional a la Arrendataria o a la Propiedad Arrendada, incluyendo sin limitar todo lo relacionado al HVAC (calefacción, ventilación y aire acondicionado).

Las Obligaciones Reembolsables del Arrendador estarán sujetas a los términos y condiciones de los reembolsos de los Pagos Adicionales.

Tenant agrees to notify Landlord promptly of any defective condition or disrepair known to Tenant which Landlord is obligated to repair, and Landlord shall proceed to make the repairs diligently and without unjustified delay; provided that such faulty condition is not attributable to the fault, negligence, or willful misconduct of Tenant or its agents, employees, contractors, subcontractors, officers, suppliers, invitees, and licensees; in which case Tenant shall be responsible for such defective condition or disrepair; in the understanding that Tenant shall be responsible, at its own cost and expense, to perform any required repair of non-structural component, and Landlord shall, at Tenant's cost and expense, perform any required repair of any structural component with exception of Landlord's Non Reimbursable Obligations. Tenant shall grant Landlord, its employees and contractors access to the Leased Property during Business Days and hours, which access was requested with at least two business days notice in order to carry out repair works pursuant to this Section; notwithstanding the foregoing, Landlord shall not be responsible for any damage, loss, claim, legal action, fine, sanction or casualty to the Leased Property, Tenant, Tenant's agents, employees, contractors, subcontractors, officers, suppliers, invitees, and licensees, and/or Tenant's equipment as a result of the any defective condition that Landlord is obligated to repair or replace if Tenant did not provide Landlord with access to the Leased Property.

Except as provided herein, Landlord shall not be obligated to provide any additional maintenance, repairs, or services to Tenant or the Leased Property, including without limitation anything related to HVAC Systems (Heat, Ventilation and Air Conditioning).

Landlord's Reimbursable Obligations shall be subject to the terms and conditions related to the reimbursement of the Additional Payments herein.

(B) Obligaciones de la Arrendataria. Excepto por las obligaciones del Arrendador antes previstas, la Arrendataria, a su costo y gasto exclusivos, mantendrá, reparará, reemplazará y conservará (excluyendo las Obligaciones Reembolsables del Arrendador) la Propiedad Arrendada, así como todo el equipo y todos los elementos fijos en el mismo, incluyendo, entre otros, juntas de pisos, selladores epóxicos relacionados con losas de pisos y muros, tubería expuesta, todos los sistemas, elementos fijos, calefacción, aire acondicionado, eléctricos, de gas, agua, drenaje y otros similares, sistemas de HVAC (Calefacción y Aire Acondicionado) y cualquier transformador eléctrico, mobiliario y equipo así como el mantenimiento del interior de la Propiedad Arrendada (incluyendo muros interiores, cubiertas de techos y pisos), muros exteriores (excluyendo la pintura de los muros exteriores la cual deberá ser realizada

por el Arrendador y reembolsada por la Arrendataria), mantenimiento a las plataformas de acceso y cualquier otro equipo de carga, vidrios de ventanas, carcasa de ventanas y umbrales, áreas de carga y plataformas de acceso, escaleras exteriores, puertas de acceso, marcos de las puertas (tanto afuera como adentro), azulejo del techo, y letreros de la Arrendataria en el exterior del Edificio en buenas condiciones de orden y funcionamiento (incluyendo realizar las reparaciones necesarias) y de conformidad con todas las Leyes, disponer de residuos de su producción, proporcionar remoción de residuos, disposición de residuos normales de oficina y residuos de comida, proporcionar sus propios servicios de limpieza. La Arrendataria deberá mantener la Propiedad Arrendada en buenas condiciones y en orden, y hará los acuerdos y pagará por el retiro completo de basura y desechos.

La Arrendataria, sus agentes, empleados, contratistas, subcontratistas, oficiales, invitados y/o licenciarios no accederá al techo del Edificio, con excepción del mantenimiento y/o reparaciones que la Arrendataria dará al equipo de calefacción y aire acondicionado (HVAC); en el entendido de que, dicho acceso será a su propio costo, riesgo y gasto. La Arrendataria no colocará ni mantendrá equipo u otros elementos en el techo sin la autorización por escrito del Arrendador, la cual puede ser otorgada o negada a entrega discreción del Arrendador.

(B) Tenant's Obligations. Except for Landlord's obligations set forth above, Tenant, at its sole cost and expense, shall keep, repair, replace and maintain the Leased Property and all fixtures and equipment therein, including, without limitation, the floor joints, epoxy seals relating to floor slabs and walls, above ground plumbing, heating, air-conditioning, electrical, gas, water, sewage and similar systems, HVAC systems (Heat, Ventilation and Air Conditioning) and any electric transformers, fixtures and equipment as well as the maintenance of the interior of the Leased Property (including interior walls, ceiling and floor coverings), maintenance and repairs of dock leveler and all other dock equipment, exterior walls (excluding exterior wall painting, which shall be performed by Landlord and reimbursed by Tenant), window glass, windows casing and sills, loading docks, exterior steps, entrance doors, door jambs (both inside and outside), ceiling tile and signs of Tenant on the outside of the Building in good repair, order, and condition (including making replacements as necessary) and in accordance with all Laws, dispose of its production waste, provide waste removal and disposal for normal office garbage and food waste, provide its own janitorial services. Tenant shall keep the Leased Property clean and in good order and shall arrange and pay for all garbage and refuse removal.

Tenant, Tenant's agents, employees, contractors, subcontractors, officers, suppliers, invitees, and licensees shall not access or enter upon the roof of the Building except to maintain and/or repair the heat, ventilation and air conditioning (HVAC); provided that, such access shall be at Tenant's sole cost, risk and expense. Tenant shall not place or maintain any equipment or other items on the roof, without Landlord's consent, which Landlord may grant or withhold at its sole and absolute discretion.

Todas las reparaciones, mantenimiento y reemplazos a ser realizados por la Arrendataria deberán ser en forma profesional y correcta de conformidad con las Leyes, parámetros de la industria para cada tipo de sistema, equipo o edificio y las disposiciones de este Contrato de Arrendamiento, y tendrán al menos la misma calidad y diseño que el trabajo o elemento original. La Arrendataria, a su gasto, celebrará un contrato de mantenimiento para el sistema de HVAC (Calefacción y Aire Acondicionado) y el transformador eléctrico que dan servicio a la Propiedad Arrendada y, a solicitud del Arrendador, celebrará contratos de mantenimiento para otros sistemas que dan servicio a la Propiedad Arrendada, en cada caso con un contratista razonablemente aprobado por el Arrendador; en el entendido de que, dicha solicitud del Arrendador, ya sea con respecto a uno o a todos los sistemas, no deberá constituir una renuncia o liberación de la Arrendataria de alguna de las obligaciones de la Arrendataria bajo el presente Contrato de Arrendamiento. En caso de que la Arrendataria no cumpla con esta obligación como se mencionó, además de los otros derechos y recursos, el Arrendador tendrá el derecho a entrar a la Propiedad Arrendada y subsanar el incumplimiento en cualquier momento sin notificación, en cuyo caso, la Arrendataria pagará al Arrendador el costo del mismo cuando se solicite.

La Arrendataria no será responsable por el costo de reparaciones, reconstrucciones y/o restauraciones de la Propiedad Arrendada derivadas de algún siniestro cubierto por las pólizas de seguro establecidas en el Inciso 3.07 del presente, siempre y cuando dicho siniestro no haya sido causado a consecuencia de la culpa o negligencia de la Arrendataria, sus empleados, representantes, proveedores, contratistas, subcontratistas o visitantes. No obstante lo anterior, la Arrendataria será responsable del pago de dicho siniestro cuando el mismo haya sido causado a consecuencia de la culpa o negligencia de la Arrendataria, sus empleados, representantes, proveedores, contratistas, subcontratistas o visitantes y la compañía de seguros no cubriera la indemnización correspondiente por causas imputables a la Arrendataria.

SEXTA. El Arrendador y la Arrendataria en este acto acuerdan modificar el inciso 3.07 para que el mismo quede redactado a partir de esta fecha, como se señala a continuación:

“Inciso 3.07. Seguros.

All repairs, maintenance and replacements to be made or performed by Tenant shall be performed in a good and workmanlike manner in accordance with the Laws, industry standards for each kind of system, equipment or building and the provisions of this Lease Agreement and shall be at least the same quality and design as the original work or item. Tenant shall, at Tenant's expense, enter into a maintenance contract with respect to the HVAC system (Heat, Ventilation and Air Conditioning) and the electric transformers serving the Leased Property and, at Landlord's request, shall enter into maintenance contracts with respect to other systems serving the Leased Property, in each case with a contractor reasonably approved by Landlord, provided that this request by Landlord either with respect to one system or all systems, shall not constitute a waiver or release of Tenant from any of Tenant's obligations hereunder. In the event that Tenant fails to comply with its obligations as aforesaid, in addition to its other rights and remedies hereunder, Landlord shall have the right to enter the Leased Property and cure such failure at any time without any notice, in which event Tenant shall repay to Landlord the cost thereof upon demand.

Tenant shall not be responsible for the cost of repairs, reconstruction and/or restorations of the Leased Property in connection with any casualty covered by the insurance policies established in Section 3.07 hereof, as long as such casualty was not caused by fault or negligence of Tenant, its employees, representatives, suppliers, contractors, subcontractors or visitors. Notwithstanding the foregoing, Tenant will be responsible for the cost of repairs, reconstruction and/or restorations of the Leased Property in connection with any casualty caused by fault or negligence of Tenant, its employees, representatives, suppliers, contractors, subcontractors or visitors and the insurance company refuses to indemnify due to causes attributable to Tenant.

SIXTH. Landlord and Tenant hereby agree to amend section 3.07 for such to read as of this date, as indicated below:

“Section 3.07. Insurance.

(A) Durante el Término de este Contrato el Arrendador contratará y mantendrá en vigor pólizas de seguro que cubran la Propiedad Arrendada, que serán reembolsadas por la Arrendataria, con la cobertura y las características que se mencionan a continuación; en el entendido de que en caso de que la Arrendataria no reembolse oportunamente los montos mencionados, entonces pagará al Arrendador un cargo por intereses de penalización equivalente a 0.5% del monto total a ser reembolsado, por cada día de demora hasta su reembolso.

(1) Seguros contra Todo Riesgo – Edificio del Arrendador. Los seguros contra Todo Riesgo que cubran el Edificio contra pérdidas o daños por incendios, rayos, explosiones, erupciones volcánicas, huelgas, eventos hidrometeorológicos (inundaciones, huracanes, tormentas, granizo, etc.), temblores, revueltas, daños de aeronaves y vehículos, daños por humo, vandalismo, daños en propiedad ajena realizados intencionalmente, incluyendo, entre otros, daños a cimientos, retiro de basura y otros riesgos que ahora o en el futuro abarque una póliza de cobertura ampliada en México, y los riesgos que estén cubiertos por un monto igual al valor total de reemplazo del Edificio; en el entendido de que dicho valor se ajustará anualmente en forma que represente en todo momento el costo total de reemplazo del Edificio. Esta póliza deberá incluir una renuncia a subrogación contra la Arrendataria.

(2) La cobertura de Pérdida de Rentas para las obligaciones de renta de la Arrendataria conforme a este Contrato de Arrendamiento o utilidades brutas del negocio de la Arrendataria por un periodo de 1 (un) año y en su caso, también incluirán la cobertura para Maquinaria y Equipo para maquinaria y equipo propiedad del Arrendador instalados en el Edificio.

(3) Cobertura de responsabilidad civil por un monto igual a \$5,000,000.00 Dólares.

(A) During the Term of this Lease Agreement, Landlord will obtain and maintain in force and effect insurance policies covering the Leased Property, which shall be reimbursed by Tenant, with the coverage and characteristics referred to hereinafter; provided that, in the event that Tenant fails to timely reimburse the above mentioned amounts, then, Tenant shall pay Landlord a penalty interest charge equivalent to 0.5% of the total amount to be reimbursed, per each day of delay until reimbursement of the same.

(1) All Risk Insurance – Landlord's Building. All Risk insurance covering the Building against loss or damage by fire, lightning, explosion, volcanic eruptions, strikes, hydro-meteorological events (flood, hurricanes, windstorm, hail, etc.), earthquake, riot, damage from aircraft and vehicles, smoke damage, vandalism, malicious mischief, including, but not limited to, damage to the foundations, rubbish removal and any other risks now or hereafter embraced by an extended coverage policy in Mexico, and such other risks as are covered in an amount equal to the full replacement value of the Building; provided that, such value shall be annually adjusted in such form to represent at all times the total replacement cost of the Building. This policy shall include a waiver of subrogation against Tenant.

(2) Loss of Rents coverage for rent obligations of Tenant hereunder or gross profit of business of Tenant for a period of one (1) year and, if applicable, will also include Machinery and Equipment coverage for Landlord-owned machinery and equipment installed in the Building.

(3) Civil liability coverage for an amount equal to \$5,000,000.00 Dollars.

(4) De ser aplicable a las operaciones de la Arrendataria, cobertura para daños o pérdidas provocados por la operación defectuosa de una caldera (o compresor) y/o la explosión interna de una caldera de alta presión (compresor).

(5) Coaseguro del 0%.

(6) El deducible será igual o menor que \$25,000.00 Dólares.

(B) Compañías de Seguros. Todos los seguros se contratarán con compañías de prestigio autorizadas para realizar operaciones en México de conformidad con las Leyes aplicables.

(C) Agravante de Riesgos. La Arrendataria no realizará actos en la Propiedad Arrendada ni almacenará objetos en el mismo, excepto como lo permitan ahora o en el futuro los departamentos de bomberos, consejos de aseguradoras de incendios u organizaciones de clasificación de seguros competentes u otras autoridades competentes, y solo entonces por la cantidad y en la forma de almacenamiento que no incrementen la tarifa existente, no afecten adversamente ni den lugar a cancelación, de las pólizas de seguro que cubren la Propiedad Arrendada. Durante el Término, la Arrendataria notificará oportunamente a su compañía aseguradora y al Arrendador de cualquier condición agravante de riesgos (incluyendo, entre otros, cambios del giro de la Arrendataria en la Propiedad Arrendada, el uso de Materiales Peligrosos y/o Materiales Peligrosos Prohibidos, el establecimiento de almacenes fiscalizados, etc.).

(4) If applicable to Tenant's operations, coverage for damages or losses caused by the defective operation of a boiler (or compressor) and/or the internal explosion of a high pressure boiler (compressor).

(5) Co-insurance of 0%.

(6) Deductible to be equal to or less than \$25,000.00 Dollars.

(B) Insurance Carriers. All insurance shall be placed with reputable companies licensed to do business in Mexico, in accordance with applicable Laws.

(C) Risk Aggravation. Tenant shall not carry out any act in the Leased Property or store any object therein except as now or hereafter permitted by any fire department, board of fire underwriters, or insurance rating organization having jurisdiction or other authority having jurisdiction and then only in such quantity and manner of storage as not to increase the existing rate of, or adversely affect, or cause a cancellation of, any insurance policies covering the Leased Property. During the Term, Tenant shall notify in a timely manner to his insurance company and to Landlord, about any risk aggravation condition (including without limitation, any modification of the line of business of Tenant in the Leased Property, the use of Hazardous Materials and/or Prohibited Hazardous Materials, the establishment of bonded warehouses, etc.).

(D) En caso de siniestros en la Propiedad Arrendada que provoquen daños o destrucción al mismo, incluyendo sin limitar cualquier asunto relacionado con el Sistema Contra Incendios en el cual la Arrendataria tenga conocimiento de que dicho Sistema Contra Incendios no se encuentra en buen funcionamiento, la Arrendataria notificará por escrito de inmediato al Arrendador y colaborará con éste para realizar acciones de inmediato o entregar notificaciones respecto al siniestro y la aplicación de los seguros de la Propiedad Arrendada con las compañías aseguradoras y/o autoridades competentes; en el entendido de que, dicha notificación deberá hacerse de manera simultánea por correo electrónico al Arrendador.

(E) La suma de los seguros pagados como resultado de daños o destrucción de la Propiedad Arrendada será pagada al Arrendador a fin de restablecer, reemplazar, reconstruir o reparar la Propiedad Arrendada en forma tan cercana como sea posible a la condición previa antes del daño o destrucción. Los productos de los seguros contratados por el Arrendador y que por cualquier razón la Arrendataria reciba se entregarán de inmediato al Arrendador, y en todo momento, dentro de un plazo de 5 (cinco) Días Hábiles a partir de que se reciban.

(F) La Arrendataria reembolsará al Arrendador los montos que éste haya pagado respecto a los seguros de la Propiedad Arrendada, incluyendo, entre otros, deducibles y coaseguros aplicables.

(D) In case of any casualty in the Leased Property causing damage or destruction to the same, including without limitation to any matter related to the Fire Protection System where Tenant becomes aware that the Fire Protection System is not working properly, then Tenant shall immediately notify Landlord in writing and shall assist Landlord to conduct any action immediately or to provide any notice in connection with said casualty and application of the insurance of the Leased Property with the insurance companies and/or competent authorities; provided that such notification shall be done immediately simultaneously also through an email to Landlord.

(E) The sum of the insurance amounts paid as a result of any damage or destruction of the Leased Property, shall be paid to Landlord for the purpose of restoring, replacing, rebuilding or repairing the Leased Property as nearly as possible to its former condition prior to said damage or destruction. Any insurance proceeds from insurance policies hired by Landlord and for any reason received by Tenant shall be immediately delivered to Landlord, and at all times, within five (5) Business Days following the receipt of said proceeds.

(F) Tenant shall reimburse Landlord any amount paid by Landlord in connection with the Leased Property insurance, including, but not limited to, applicable deductibles and co-insurance.

(G) Seguros contra Todo Riesgo – Bienes de la Arrendataria. La Arrendataria mantendrá durante toda el Término, a su gasto, un seguro contra Todo Riesgo que cubra maquinaria, equipo, materias primas y otros bienes personales de su propiedad, contra pérdidas o daños por incendios, rayos, explosiones, eventos hidrometeorológicos (inundaciones, tormentas, granizo, etc.), temblores, revueltas, daños de aeronaves y vehículos, daños por humo, vandalismo, daños en propiedad ajena realizados intencionalmente, y los riesgos que estén cubiertos por un monto igual al valor total de reemplazo de los bienes de la Arrendataria. Esta póliza de seguro incluirá la cobertura por Interrupción de negocios, entre otras cosas, para obligaciones monetarias generales de la Arrendataria excepto por las rentas mencionadas en el Inciso 3.07, subsección A número 2.

(H) Seguro de Responsabilidad Civil de la Arrendataria. Adicionalmente, la Arrendataria deberá contratar, a su costo y gasto, un seguro de responsabilidad civil por las actividades y operaciones de la Arrendataria en la Propiedad Arrendada que cubra reclamaciones por lesiones o muerte y/o daños en propiedad ajena por un monto igual a \$3,000,000.00 de Dólares. La Arrendataria deberá entregar al Arrendador, dentro de los siguientes 5 días naturales siguientes a la firma de este Contrato de Arrendamiento (y 5 días naturales antes del vencimiento de dichos seguros), evidencia en que conste que dichos seguros han sido contratados (o renovados, en su caso).

(I) Certificados de Seguros. La Arrendataria entregará al Arrendador una carta emitida por la compañía aseguradora antes de la Fecha de Inicio y de cada fecha de aniversario, o la fecha de renovación de la póliza correspondiente a partir de entonces. La carta debe contener un resumen de todas las coberturas de seguros y montos asegurados respectivos, deducibles, coaseguros, exclusiones y los endosos mencionados en la cláusula de seguros de este Contra, en un formato claro, explícito y fácil de leer, según lo requiera y exponga el Arrendador. En caso de que la Arrendataria no entregue en tiempo y forma al Arrendador la carta aquí señalada, el Arrendador tendrá el derecho a contratar dichas pólizas de seguros y renovarlas anualmente hasta la terminación del Contrato de Arrendamiento, y la Arrendataria acepta reembolsar el costo correspondiente a cada renovación, y además perderá el derecho a contratar dichas pólizas de seguro por sí misma.”

(G) All Risk Insurance – Tenant’s Property. Tenant shall maintain throughout the Term, at its expense, All Risk insurance covering Tenant-owned machinery, equipment, raw materials, and Tenant’s other personal property against loss or damage by fire, lightning, explosion, hydro-meteorological events (flood, windstorm, hail, etc.), earthquake, riot, damage from aircraft and vehicles, smoke damage, vandalism, malicious mischief and such other risks as are covered in an amount equal to the full replacement value of Tenant’s properties. This insurance policy shall include business Interruption coverage for, among other things, Tenant’s general monetary obligations except for the Rents pursuant to Section 3.07, subsection A number 2.

(H) Tenant’s Civil Liability Insurance. Tenant shall obtain, at its own cost and expense, a civil liability insurance to cover Tenant’s activities and operations in the Leased Property against injury or death claims and/or damage to third parties’ property in an amount equal at least \$3,000,000.00 Dollars. Tenant shall deliver to Landlord, within five (5) calendar days following execution hereof (and five (5) calendar days prior to the expiration of said insurance policies), the documents evidencing that said insurance policies have been contracted (or renewed, if applicable).

(I) Insurance Certificates. Tenant shall deliver to Landlord a letter issued by the insurance company prior to the Commencement Date and each anniversary date, or the corresponding policy renewal date thereafter. Such letter must contain an abstract of all insurance coverages and their respective insured amounts, deductibles, co-insurance, exclusions and the endorsements mentioned within the insurance clause of this Agreement, in a clear, explicit and easy to read format, as required and outlined by Landlord. In the event Tenant does not provide in time and manner to Landlord such letter required in this Agreement, Landlord will have the right to acquire such insurance policies and to renew them annually until the termination of the Agreement and Tenant accepts to reimburse the cost corresponding to each renewal, waiving Tenant the right to acquire such insurance policies itself.”

SÉPTIMA . El Arrendador y la Arrendataria en este acto acuerdan modificar el inciso 10.01 relativo al Sistema Contra Incendios, para que dicha sección quede redactada a partir de esta fecha, como se señala a continuación:

“ Inciso 10.01. Sistema Contra Incendio . Las partes reconocen que la Propiedad Arrendada cuenta con un sistema contra incendios de las especificaciones se encuentran descritas en el Anexo “C” que se adjunta al presente Contrato de Arrendamiento como parte integrante del mismo, mismo que será considerado como parte de la Propiedad Arrendada (en lo sucesivo el “Sistema Contra Incendios”).

Las partes acuerdan y reconocen que el Sistema Contra Incendios es compartido con un tercero, en el entendido que la Arrendataria cuenta con un convenio relativo al uso compartido del Sistema Contra Incendios y los términos y condiciones de dicho uso. Independientemente de lo anterior, la responsabilidad frente al Arrendador respecto de la administración, mantenimiento, monitoreo y reparación del Sistema Contra Incendios estará a cargo de la Arrendataria, de conformidad con lo siguiente:

1. La Arrendataria deberá mantener aquellas partes del Sistema Contra Incendios que se enlistan en el Anexo “C” en buenas condiciones de funcionamiento y llevar a cabo puntualmente todas las actividades de mantenimiento descritas en el Anexo “C-1” aquellas recomendadas por el fabricante del Sistema Contra Incendios, aquellas requeridas por las Leyes y cualesquier otras recomendaciones que puedan ser requeridas para efectos de mantener el Sistema Contra Incendios en buenas condiciones de mantenimiento.

SEVENTH . Landlord and Tenant hereby agree to amend section 10.01 related to the Fire Protection System, so that such section shall be read as of this date, as indicated below:

“ Section 10.01. Fire Protection System . The parties acknowledge that a Fire Protection System of the specifications described on Exhibit “C” attached hereto and made a part hereof is installed at the Leased Property and shall be considered as part of the Leased Property (hereinafter referred to as the “Fire Protection System”).

The parties hereby agree and recognize that the Fire Protection System is shared with a third party, in the understanding that the Tenant has an agreement relating to the shared use of the Fire Protection System and terms and conditions thereof. Regardless of the preceding, the responsibility before Landlord, for the management, maintenance, monitoring and repair of the Fire Protection System shall be responsibility of Tenant, pursuant to the following:

1. Tenant shall keep those portions of the Fire Protection System listed in Exhibit “C” in good working order and will timely perform all of the maintenance activities set forth in Exhibit “C-1”, those recommended by the Fire Protection System manufacturer, those required by Laws and any others that may be required in order to maintain the Fire Protection System in good working conditions.

2. La Arrendataria conviene en cubrir todos y cada uno de los gastos relacionados con el mantenimiento y operación del Sistema Contra Incendios, incluyendo cualesquier mantenimiento preventivo y el mantenimiento anual que deba realizarse al Sistema Contra Incendios de conformidad con las actividades de mantenimiento señaladas en el Anexo "C-1" del presente Contrato de Arrendamiento.

3. La Arrendataria dará acceso al Arrendador previo aviso del Arrendador con 24 horas de anticipación y de forma tal que se interfiera lo menos posible en las operaciones de la Arrendataria para efectos de permitir que el Arrendador lleve a cabo verificaciones periódicas al Sistema Contra Incendios, en el entendido de que, la Arrendataria deberá cooperar con el Arrendador en todos los aspectos de las verificaciones periódicas del Sistema Contra Incendios.

4. En caso de que el Arrendador o la Arrendataria consideren que el Sistema Contra Incendios no está funcionando de manera óptima, la Arrendataria acuerda que dará acceso al Arrendador, sin necesidad de previo aviso, para efectos de inspeccionar el Sistema Contra Incendios, asegurar el buen funcionamiento y/o ponerse de acuerdo con la Arrendataria para que se lleve a cabo a gasto y costa de la Arrendataria inmediatamente, cualquier actividad de mantenimiento que sea necesaria, prueba y/o, reparaciones."

OCTAVA. TÉRMINOS QUE PREVALECE. En caso de existir alguna discrepancia entre lo dispuesto por este Modificadorio y el Contrato de Arrendamiento, se estará a lo dispuesto por este Modificadorio. Igualmente, cualquier disposición que no se haya modificado mediante este Modificadorio, se deberá entender que continúa en vigor según originalmente acordada en el Contrato de Arrendamiento.

2. Tenant agrees to pay for each and every one of the costs and expenses related to the maintenance and operation of the Fire Protection System, including any preventive and annual maintenance that must be performed per the list of maintenance activities detailed in Exhibit "C-1" hereof.

3. Tenant shall provide Landlord with access to the Leased Property upon 24 hours' notice to allow Landlord, through its contractors, in a manner that least disturbs Tenant's operations, to perform periodic testing of the Fire Protection System; provided that, Tenant shall cooperate with Landlord in all respects in periodic testing of the Fire Protection System.

4. In the event that Landlord or Tenant believes that the Fire Protection System is not operating optimally, Tenant agrees to provide access to the Leased Property to Landlord without notice for the purpose of inspecting the Fire Protection System, ensuring its proper function, and/or to agree with Tenant the performance of any required maintenance activity, tests and/or repairs."

EIGHTH. PREVAILING TERMS. In the event of discrepancy between the provisions of this Amendment and the Lease Agreement, the provisions of this Amendment shall prevail. Also, any provision not modified by means of this Amendment shall be understood valid as originally agreed upon in the Lease Agreement.

NOVENA . GARANTÍA . TPI-Composites, Inc. comparece al presente a fin de manifestar que conoce y es conforme con los términos y condiciones en los que se modifica el Contrato de Arrendamiento mediante este Modificadorio, ratificando que sus respectivas obligaciones como Fiador permanecen vigentes y surtiendo efectos independientemente de las modificaciones realizadas al Contrato de Arrendamiento.

NINTH . GUARANTEE . TPI-Composites, Inc. hereby appears as to state and acknowledge the terms and conditions in which the Lease Agreement is amended by means of this Amendment, ratifying that its respective obligations as Guarantor remain valid and in force irrespective of the modifications made to the Lease Agreement.

DÉCIMA. DEPÓSITO EN GARANTÍA . Las partes en este acto acuerdan que, al momento de firma del presente, la Arrendataria deberá actualizar su Depósito en Garantía de acuerdo con la definición (6) del Inicio 1.01., la cual fue modificada en el presente Convenio.

DÉCIMA PRIMERA. NO NOVACIÓN . El Arrendador y la Arrendataria expresamente convienen en que en ningún caso deberá entenderse o interpretarse este Convenio, como novación o cumplimiento de las obligaciones de la Arrendataria conforme al Contrato de Arrendamiento, las que permanecerán en pleno vigor y efecto sin ninguna otra obligación o modificación que las modificaciones contenidas en este Convenio. Las partes por este medio confirman y ratifican en todos sus aspectos las disposiciones del Contrato de Arrendamiento que no sean expresamente modificadas en este Convenio.

DÉCIMA SEGUNDA. INTEGRACIÓN . Queda expresamente convenido que el presente Convenio es parte integrante del Contrato de Arrendamiento y, por consiguiente, todas las referencias que se hagan en o con respecto al Contrato de Arrendamiento, se entenderán que incluyen al presente Convenio.

EN TESTIMONIO DE LO ANTERIOR, las partes del presente Convenio lo suscriben por conducto de sus funcionarios o mandatarios debidamente autorizados para ello, en la fecha indicada al principio de este Convenio.

“ARRENDADORA” / “LANDLORD”:

Macquarie México Real Estate Management, S.A. de C.V. en representación de CIBanco, S.A., Institución de Banca Múltiple, como fiduciario del fideicomiso irrevocable de administración identificado como F/00922 MMREIT Industrial Trust III

TENTH . The parties hereby agree that, as of the execution hereof, the Lessee shall update its Security Deposit in accordance with definition (6) of Section 1.01., which was modified in herein below.

ELEVENTH . NON NOVATION . Landlord and Tenant expressly agree that in no event this Agreement shall be deemed as novation nor as compliance of the Tenant's obligations regarding the Lease Agreement that shall stay in fully valid and in force with no other obligation or amendment than the ones contained herewith. The parties, by these means confirm and ratify in every aspect the provisions of the Lease Agreement that are not expressly amended hereto.

TWELFTH . INTEGRATION . It is expressly agreed that this Agreement is an integral part of the Lease Agreement and, consequently, all the references thereto or therewith shall be deemed as including this Agreement.

IN WITNESS WHEREOF , this Agreement's parties execute it through their legal representatives duly authorized for such effect and to be effective as of the date mentioned at the beginning of this Agreement.

“ARRENDATARIA” / “TENANT”:

TPI-Composites, S. de R.L. de C.V.

/s/ Monica Ardila Villarreal

Por/By: Mónica Ardila Villarreal

Cargo/Title: Apoderado/Attorney-in-fact

/s/ Victor Manuel Saenz Saucedo

Por / By: Víctor Manuel Sáenz Saucedo.

Cargo / Title: Apoderado/Attorney-in-fact

/s/ Peter M. Gaul

Por/By: Peter M. Gaul

Cargo/Title: Apoderado/Attorney-in-fact

“ FIADOR ” / “ GUARANTOR ”:

TPI-Composites, Inc.

/s/ Steven C. Lockard

Por / By: Steven C. Lockard.

Cargo / Title: Apoderado/Attorney-in-fact

ANEXO/EXHIBIT "C"

ESPECIFICACIONES DEL SISTEMA CONTRA INCENDIOS/ FIRE PROTECTION SYSTEM SPECIFICATIONS

Tanque agua 250,000 galones
Bomba diesel 2,000 galones @ 125 psi
Bomba eléctrica de 2,000 galones a 125 psi
Bomba Jockey de 20 galones @ 130 psi

Hidrante interior: Mangueras de 1 1/2in x 30 metros, válvula angular, chiflón ajustable

CISJZ08:

Rociadores en Oficinas:

Tipo: Pendent
Factor K= 5.6
Npt: 1/2"
Riesgo: Ligero

Rociadores en Producción:

Tipo: Up-Right
Factor K= 11.2
Npt: 3/4"
Riesgo: Extra
Densidad. 0.48gpm/2500 ft2

Water tank 250,000 Gallons
Diesel pump 2,000 GPM @ 125 psi
Electric pump 2,000 GPM @ 125 psi
Jockey pump 20 GPM @ 130 psi

Interior hydrant: 1 1/2in x 100 ft. hoses, angular valve, nozzle.

CISJZ08:

Offices sprinklers:

Type: Pendent
Factor K= 5.6
Npt: 1/2"
Risk: Light

Production area sprinklers:

Type: Up-Right
Factor K= 11.2
Npt: 3/4"
Risk: Extra
Density: 0.48gpm/2500 ft2

ANEXO/EXHIBIT "C-1"

**ACTIVIDADES DE MANTENIMIENTO AL SISTEMA CONTRA INCENDIOS
(PREVENTIVO Y ANUAL)/
FIRE PROTECTION SYSTEM MAINTENANCE ACTIVITIES
(PREVENTIVE AND ANNUAL)**

- Deber á n llevarse a cabo pruebas de arranque de las bombas el é ctricas y los motores de combusti ó n interna.
 - Se deber á revisar el correcto funcionamiento de: hidrantes exteriores, mangueras, hidrantes de pared, detectores de humo y sensores de temperature / calor de acuerdo a las especificaciones del proveedor.
 - Las líneas del sistema contra incendio deber á n mantenerse libres de ó xidos y deber á n pintarse en caso de ser necesario.
 - Starting tests shall be carried out on electric pumps and diesel motors.
 - The good function of the following must be checked: sidewalk hydrants, hose extensions, wall hydrants, smoke detectors and temperature/heat sensors in accordance with the specifications of the manufacturer.
 - In the interior distribution lines of the fire system, rusted areas shall be located, repainted and noted with respect to the fire system, when needed.
-

ANEXO/EXHIBIT "F"

LISTADO DE DOCUMENTACIÓN Y/O INFORMACIÓN / LISTED DOCUMENTATION AND/OR INFORMATION

Customer's Checklist

Customer/Vendor shall deliver Landlord:

- Copy of Customer's/Vendor's insurance certificate (if applicable under the lease/contract)
- Copy of Customer's/Vendor's articles of Incorporation
- Copy of Customer's/Vendor's amendments to By-laws (if applicable)
- Copy of Customer's/Vendor's legal representative's power of attorney
- Copy of Customer's/Vendor's legal representative's ID
- Receipt of amount of the Security deposit prior or on the Commencement Date of the Lease (only applicable for lease related documents)
- Copy of Tax Payer's Registry (RFC) (applicable only to Mexican companies)
- Copy of Tax Address Receipt
- Deliver the contact person information with respect to Customer's/Vendor's invoicing (full name, email address and telephone number)

Guarantor/Jointly Guarantor (if applicable) shall deliver:

- Copy of Articles of Incorporation of Guarantor/Jointly Guarantor
- Copy of amendments to By-laws of Guarantor/Jointly Guarantor
- Copy of legal representative's Guarantor/Jointly Guarantor power of attorney (for Mexican entities) or Certificate of Incumbency (For US entities)
- Copy of legal representative's Guarantor/Jointly Guarantor ID

Listado para firma de Documentos

El Cliente/Proveedor deberá entregar:

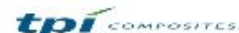
- Copia de póliza de seguro del Cliente/Proveedor (en caso de ser aplicable bajo el respectivo contrato)
 - Copia Escritura Constitutiva del Cliente/Proveedor
 - Copia Escrituras de reforma(s) a estatutos del Cliente/Proveedor (en caso de ser aplicable)
-

- Copia Escritura de poder de representante legal del Cliente/Proveedor
- Copia de Identificación Oficial de representante legal del Cliente/Proveedor
- Recibir Monto de Depósito de Garantía antes o en la Fecha de Inicio del Arrendamiento (solo para casos relacionados a arrendamientos)
- Copia de Cedula de identificación fiscal (aplicable a compañías mexicanas)
- Copia de Comprobante de Domicilio Fiscal
- Entregar datos de contrato de la persona encargada de facturación del Cliente/Proveedor (nombre completo, correo electrónico y número telefónico)

El Garante/Fiador/Obligado Solidario (en caso de aplicar) deberá entregar:

- Copia Escritura Constitutiva del Garante/Fiador/Obligado Solidario
- Copia Escrituras de reforma(s) a Garante/Fiador/Obligado Solidario
- Copia Escritura de poder de representante legal Garante/Fiador/Obligado Solidario (para empresas mexicanas) o un Reconocimiento de Facultades
- Copia de Identificación Oficial de representante legal del Garante/Fiador/Obligado Solidario

CORPORATE POLICY AND PROCEDURE



Policy Number: 900.32	Date: July 25, 2017	Revision Number: 3
Section : Policies and Procedures		Subject: Non-Employee Director Compensation Policy
Written by: Goodwin Procter LLP & Steve Fishbach		Approved by: Board of Directors
Title: Outside Counsel & General Counsel		Title: Directors

Amended and Restated Non-Employee Director Compensation Policy

The purpose of this Amended and Restated Non-Employee Director Compensation Policy (the “Policy”) of TPI Composites, Inc., a Delaware corporation (the “Company”), is to provide a total compensation package that enables the Company to attract and retain, on a long-term basis, high-caliber directors who are not employees or officers of the Company or its subsidiaries (“Outside Directors”). In furtherance of the purpose stated above, all Outside Directors shall be paid compensation for services provided to the Company as set forth below:

I. CASH RETAINERS

(a) Annual Retainer for Board Membership: \$60,000 for general availability and participation in in-person and telephonic meetings of our Board of Directors (the “Board”).

(b) Additional Annual Retainers for Committee Membership:

Audit Committee Chairperson:	\$20,000
Audit Committee member:	\$10,000
Compensation Committee Chairperson:	\$12,500
Compensation Committee member:	\$7,500
Nominating and Corporate Governance Committee Chairperson:	\$10,000
Nominating and Corporate Governance Committee member:	\$5,000

(c) Additional Annual Retainers for Chairperson of the Board: \$25,000 to acknowledge the additional responsibilities and time commitment of the Chairperson role.

(d) Additional Annual Retainers for Lead Director the Board (if not Chairperson): \$15,000 to acknowledge the additional responsibilities and time commitment of the Lead Director (if not Chairperson) role.

II. EQUITY RETAINERS

All grants of equity retainer awards to Outside Directors pursuant to this Policy will be automatic and nondiscretionary and will be made in accordance with the following provisions:

(a) Value. For purposes of this Policy, “Value” means with respect to (i) any award of stock options the grant date fair value of the option (i.e., Black-Scholes value) determined in accordance with the reasonable assumptions and methodologies employed by the Company for calculating the fair value of options under Accounting Standards Codification 718 “Compensation-Stock Compensation” (“ASC 718”) and (ii) any award of restricted stock or restricted stock units the product of (A) the fair market value of one share of the Company’s common stock on the grant date, and (B) the aggregate number of shares pursuant to such award.

(b) Revisions. The Compensation Committee in its discretion may change and otherwise revise the terms of awards to be granted under this Policy, including, without limitation, the number of shares subject thereto, for awards of the same or different type granted on or after the date the Compensation Committee determines to make any such change or revision.

(c) Sale Event Acceleration. In the event of a Sale Event (as defined in the Company’s Amended and Restated 2015 Stock Option and Incentive Plan, as amended from time to time (the “2015 Plan”)), the equity awards granted to Outside Directors pursuant to this Policy shall become 100% vested and/or exercisable.

(d) Initial Grant. Upon initial election to the Board, each new Outside Director will receive an initial, one-time stock option grant of common stock of the Company (the “Initial Grant”), with a Value of \$90,000, an exercise price equal to the closing price of the Company’s common stock on the date of the grant, and a term of ten years, that vests annually (25% per year) over four years; provided, however, that all vesting ceases if the director resigns from our Board or otherwise ceases to serve as a director, unless the Board determines that the circumstances warrant continuation of vesting. This Initial Grant applies to Outside Directors who are first elected to the Board subsequent to the Company’s initial public offering.

(e) Annual Grant. On the date of the Company’s Annual Meeting of Stockholders, each Outside Director who will continue as a member of the Board following such Annual Meeting of Stockholders will receive a grant of restricted stock units on the date of such Annual Meeting of Stockholders (the “Annual Grant”) with a Value of \$90,000, that vests in full on the earlier of (i) the one-year anniversary of the grant date or (ii) the next Annual Meeting of Stockholders; provided, however, that all vesting ceases if the director resigns from our Board or otherwise ceases to serve as a director, unless the Board determines that the circumstances warrant continuation of vesting. If a new Outside Director joins our Board on a date other than the date of the Company’s Annual Meeting of Stockholders, then such Outside Director will be granted a pro-rata portion of the Annual Grant based on the time between such Outside Director’s appointment and the next Annual Meeting of Stockholders, on the first eligible grant date following such Outside Director’s appointment to our Board.

III. EXPENSES

The Company will reimburse all reasonable out-of-pocket expenses incurred by Outside Directors in attending meetings of the Board or any committee thereof.

IV. MAXIMUM ANNUAL COMPENSATION

The aggregate amount of compensation, including both equity compensation and cash compensation, paid to any Outside Director in a calendar year period shall not exceed \$750,000 (or such other limit as may be set forth in Section 3(b) of the 2015 Plan or any similar provision of a successor plan). For this purpose, the "amount" of equity compensation paid in a calendar year shall be determined based on the grant date fair value thereof, as determined in accordance with ASC 718 or its successor provision, but excluding the impact of estimated forfeitures related to service-based vesting conditions.

V. EFFECTIVE DATE

The Amended and Restated Non-Employee Director Compensation Policy shall become effective as of August 1, 2017.

APPROVED: July 25, 2017

AGREEMENT TO LEASE

BETWEEN

1. **AARUSH (PHASE III) LOGISTICS PARKS PRIVATE LIMITED (AS LESSOR 1)**
2. **AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED (AS LESSOR 2)**
3. **AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED (AS LESSOR 3)**
4. **AARUSH LOGISTICS PARKS PRIVATE LIMITED (AS CONFIRMING PARTY No 1)**
5. **AARUSH (PHASE II) LOGISTICS PARKS PRIVATE LIMITED (AS CONFIRMING PARTY No 2)**
- 6.

AND

PROSPECT ONE MANUFACTURING LLP

DATED FEBRUARY 4, 2019

Privileged & Confidential

TABLE OF CONTENTS

1.	DEFINITIONS AND INTERPRETATIONS	5
2.	AGREEMENT TO LEASE	11
3.	DEVELOPMENT OF THE DEMISED PREMISES	11
4.	CHANGES AND CHANGE REQUESTS	14
5.	DELIVERY OF THE DEMISED PREMISES	15
6.	EXECUTION OF LEASE DEED	16
7.	TERM AND RENEWAL	17
8.	RENT FOR THE DEMISED PREMISES	17
9.	LESSEE IMPROVEMENTS AND IMPROVEMENT RENT	19
10.	SECURITY DEPOSIT	19
11.	REPRESENTATIONS, WARRANTIES AND COVENANTS	21
12.	USE OF THE DEMISED PREMISES	25
13.	ALTERATIONS AND REPAIRS	26
14.	MAINTENANCE	27
15.	INFRASTRUCTURE AND OTHER AMENITIES	28
16.	INSPECTION	30
17.	TAXES	30
18.	ASSIGNMENT AND SUBLETTING	30
19.	INSURANCE	31
20.	INDEMNITY	31
21.	SALE, MORTGAGE AND CHARGES	33
22.	LOCK IN AND TERMINATION	33
23.	REINSTATEMENT	35
24.	FORCE MAJEURE	36
25.	HARD OPTION	38
26.	CONFIDENTIALITY	38
27.	GOVERNING LAW, JURISDICTION AND DISPUTE RESOLUTION	39
28.	COSTS AND STAMP DUTY	39
29.	NOTICES	39
30.	MISCELLANEOUS	40
	SCHEDULE A – DESCRIPTION OF THE SCHEDULE LAND	48
	SCHEDULE B – DESCRIPTION OF THE BUILDING	49
	SCHEDULE C – TIMELINES SCHEDULE	50
	SCHEDULE D – WARM SHELL SPECIFICATIONS	52
	SCHEDULE E – LESSEE IMPROVEMENTS	54
	SCHEDULE F – HANDOVER CONDITION	55
	SCHEDULE G – DESCRIPTION OF THE MAINTENANCE SERVICES	56
	SCHEDULE H – RENTAL SCHEDULE	57
	SCHEDULE I – ADDITIONAL SPACE	60
	ANNEXURE 1 – MASTER PLAN OF THE PROJECT	61
	ANNEXURE 2 – SKETCH OF THE SCHEDULE LAND	62
	ANNEXURE 3 – DETERMINATION OF BUILT UP AREA AND LEASABLE AREA	63
	ANNEXURE 4 – FINAL DRAWINGS	64
	ANNEXURE 5 – SKETCH OF OPEN AREA	65
	ANNEXURE 6 – AGREED FORM OF LEASE DEED	66
	ANNEXURE 7 – LOCATION OF STORAGE AREA	66
	ANNEXURE 8 – AGREED FORM OF THE CORPORATE GUARANTEE	66
	ANNEXURE 9 – LIST OF APPROVALS	66

AGREEMENT TO LEASE

This AGREEMENT TO LEASE (“ **Agreement** ”) is made and executed at Chennai on February 4, 2019

BETWEEN

1. **AARUSH (PHASE III) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70109TN2017PTC114953, PAN No AAPCA1642J, represented by it’s authorized signatory Mr Navin Kumar, *vide* Board Resolution dated 24 January 2019 (hereinafter referred to as the “ **Lessor No 1** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE FIRST PART**;
2. **AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70109TN2017PTC114902, PAN No AAPCA1734K, represented by it’s authorized signatory Mr Navin Kumar, *vide* Board Resolution dated 24 January 2019 (hereinafter referred to as the “ **Lessor No 2** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE SECOND PART** ;
3. **AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70200TN2017PTC114901, PAN No AAPCA1733Q, represented by it’s authorized signatory Mr Navin Kumar, *vide* Board Resolution dated 24 January 2019 (hereinafter referred to as the “ **Lessor No 3** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE THIRD PART** ;

Each of the Lessor No 1, Lessor No 2 and Lessor No 3 are hereinafter, wherever the context so necessitates or admits, collectively referred to as the “ **Lessor** ”.

ALONG WITH

4. **AARUSH LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70100TN2016PTC113056, PAN No AAPCA0725Q, represented by it’s authorized signatory Mr Navin Kumar, *vide* Board Resolution dated 24 January 2019 (hereinafter referred to as the “ **Confirming Party No 1** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE FOURTH PART** ;

5. **AARUSH (PHASE II) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70109TN2017PTC114899, PAN No AAPCA1735J , represented by it's authorized signatory Mr Navin Kumar, vide Board Resolution dated 24 January 2019 (hereinafter referred to as the “ **Confirming Party No 2** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE FIFT H PART** ;

Each of the Confirming Party No 1 and Confirming Party No 2 are hereinafter, wherever the context so necessitates or admits, collectively referred to as the “ **Confirming Parties** ”.

AND

PROSPECT ONE MANUFACTURING LLP , a limited liability partnership incorporated under the provisions of the Limited Liability Partnership Act, 2008 and having its registered office at 156/1, Shop No 16. SMR Sartaz Plaza, Jupiter Colony, Sikh Road, Secunderbad, Hyderabad, Telangana 560 009, LLPIN AAN-4797, PAN AAWFP7794C , represented by its designated partner, vide resolution passed by its partner TPI Holdings Switzerland GmbH dated 30 January 2019 (hereinafter referred to as the “ **Lessee** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE SIXTH PART** ;

*(Each of the Lessors and the Lessee are hereinafter collectively referred to as the “ **Parties** ” and individually as a “ **Party** ”.)*

WHEREAS:

- A. The Lessor and the Confirming Parties is the absolute owner of land totally measuring about 124.5 acres in Sriperumbudur Taluk, Kancheepuram District, Chennai, Tamil Nadu, India (hereinafter referred to as the “ **Project Land** ”) and is in the process of developing upon the Land an industrial and logistics park which will comprise of manufacturing facilities and warehouses along with related services and amenities, known as "Aarush Logistics Park" (“ **Project** ”). The preliminary Master Plan of the Project is attached as **Annexure 1**.
- B. The Lessor has identified a portion thereof measuring approximately 41 acres comprised in Survey Nos 232/2A1, 2A2(part), 234/1, 2, 3(full), 4 to 11 (part), 12 to 17(full), 235/1 to 11(full), 236/1&2(full), 237/1(full), 239/1&2(full), 240/1A, 1B, 1C & 1D(full) of Mettupalayam Village, Sriperumbudur Taluk, Kancheepuram District and lands bearing Survey Nos 270/4&5(part), 7&8(full), 271/2A, 2B & 2C(part), 272/1A, 1B, 1C, 1D, 1E & 2(full), 273/4(full), 275/1 to 4(full), 276(full), 277/1&2(full), 278/1 to 3(full), 279/1(full) situated at Echoor Village, Sriperumbudur Taluk, Kancheepuram District, Chennai, Tamil Nadu, India (hereinafter referred to as the “ **Schedule Land** ” as more fully detailed in **Schedule A** and attached hereto as **Annexure 2**.) for construction and development of built to suit facility for the Lessee.
- C. Lessee is engaged in the business of manufacturing machineries and equipment, engineering and storage of composite wind blades and other composite structures as well as the manufacturing of tooling used for manufacturing of composite wind blades and other composite structures and activities incidental to the foregoing (“ **Permitted Use** ”).

- D. The Lessor has represented that it has the expertise to construct buildings and structures as per the requirements of the Lessee and grant the same on lease for the Lessee's Permitted Use and the Lessor has further represented that the Schedule Land and the Demised Premises (as defined below) to be developed thereon is permitted for industrial use as approved by the relevant authority, copies of which have been shared with the Lessee. The Lessee has approached the Lessor to take on lease the Demised Premises in the Project and the Lessor has agreed to grant on lease to the Lessee the Demised Premises for the Permitted Use. The Lessor and the Lessee have executed a Letter of Intent dated 22 November 2018 ("LOI") detailing the preliminary terms and conditions for the development of the Schedule Land *inter alia* with the Building thereon, for the Permitted Use.
- E. Accordingly, as part of the Project, the Lessor has agreed to design, develop and construct for the Lessee on the Schedule Land, a building admeasuring about 7,76,280 square feet of total Built Up Area (hereinafter referred to as the "**Building**" and more fully described in Item 1 of **Schedule B**) and open area admeasuring about 7,75,095 square feet (hereinafter referred to as the "Open Area" identified in blue colour in the sketch attached as **Annexure 5**), the Schedule B and the Open Area shall be collectively referred to as "**Demised Premises**" and thereafter grant on lease the Demised Premises along with the right to use internal roads formed within Project.
- F. The Lessor has informed the Lessee that the Schedule Land is permitted to be used for development of industrial buildings and that the Lessor has provided necessary title documents including permissions and approvals obtained as on date to the Lessee and the Lessee hereby confirms that it is satisfied with the same. The Lessor further represents to the Lessee that upon receipt of additional approvals, and permissions for construction and development of the Demised Premises the Lessor shall share a copy of the same with the Lessee within 7 (seven) days from the date of receipt of such Approvals in accordance with Applicable Law.
- G. Based on the aforesaid representations made by the Lessor, the Lessee is desirous of taking on lease the Demised Premises for its Permitted Use either through itself or its Affiliates. The Lessor has expressed its willingness to develop the Demised Premises as per the Lessee's specifications and grant on lease the Demised Premises to the Lessee and the Lessee, subject to fulfillment of the conditions set out hereinafter, has agreed to take on lease the Demised Premises.
- H. The Parties are executing this Agreement to reduce the terms and conditions agreed in respect of the development of the Demised Premises by the Lessor and subsequent lease of the Demised Premises in favour of the Lessee, to writing, superseding all previous agreements or arrangements oral or written including the LOI.

NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATIONS

1.1. DEFINITIONS

Unless the context herein otherwise provides and apart from the terms which may be defined elsewhere in this Agreement, the following terms shall have the meanings ascribed to them hereto:

- (a) “ **Additional Building** ” shall mean the building to be developed on the Additional Space for the Lessee as per the Warm Shell Specifications and in terms of Clause 25 ;
- (b) “ **Additional Space** ” shall mean the land located adjacent to the Schedule Land as detailed in **Schedule I** ;
- (c) “ **Agreement** ” shall mean this agreement to lease, the schedules and annexures and any amendments hereto;
- (d) “ **Affiliates** ” shall mean with respect to any Party, any other Person, which, directly or indirectly, Controls, is Controlled by, or is under common Control with such Party, such control being exercised by the controlling entity through its ability to direct the management and policies of the controlled entity through ownership of voting shares of the controlled entity, any group company, holding or subsidiary company, any transferee companies which have resulted from a merger;
- (e) “ **Anti-Corruption Laws** ” shall mean (i) the U S Foreign Corrupt Practices Act, (ii) the U K Bribery Act 2010, (iii) the OECD Anti-Bribery Convention, (iv) the (Indian) Prevention of Corruption Act, 1988 and (iv) any other Applicable Laws (as defined hereinafter) dealing with improper or illegal payment, gifts or gratuities or commercial or governmental bribery;
- (f) “ **Approvals** ” shall mean all necessary statutory approvals, consents and permissions required to construct and or occupy the Building as set out in **Annexure 9** ;
- (g) “ **Applicable Laws** ” shall mean any laws, statutes, rules, regulations, directives, bye laws, codes of conduct, mandatory guidelines which have legal effect, judgments, awards, decrees, writs, orders or requirements of any Governmental Authority and other binding actions or requirements of any government; department, agency or instrument of any government; regulatory authority, any court or arbitral tribunal in India for the time being in force;
- (h) “ **Anti-Money Laundering Laws** ” means Prevention of Money Laundering Act, 2002 and as amended from time to time and includes all applicable financial recordkeeping and reporting requirements and any related rules, regulations or guidelines, which in each case are issued, administered or enforced by any Governmental Authority having jurisdiction over the Parties, or to which the Parties are subject;
- (i) “ **Base Rent** ” shall have the meaning ascribed to the term in Clause 8.1(a);
- (j) “ **Building** ” shall have the meaning ascribed to the term in Recital E;
- (k) “ **Built Up Area** ” shall mean the total built up area of the Building and other structures developed on the Schedule Land for the Lessee, and shall be determined in the manner detailed in **Annexure 3** ;
- (l) “ **Business Days** ” shall mean a day other than Sunday on which scheduled commercial banks are open for normal banking business in Mumbai, Hyderabad and Chennai, India;
- (m) “ **Common Areas** ” shall mean those portions of the Project not intended to be leased to or used exclusively by any tenant or occupant, including pedestrian passageways, infrastructure, sewage treatment plant, effluent treatment plant, generators, sidewalks, ramps, landscaped areas, planted areas and the grounds of the Project and other areas used in common by occupants of the Project;

- (n) “ **Completion Certificate** ” shall mean the certificate issued by the Lessor’s Architect, certifying Substantial Completion of the Building in accordance with the Sanctioned Plan ;
- (o) “ **Control** ” (together with its correlative meanings, “ **Controlled by** ”, “ **Controlling** ” or “under common Control with”) in relation to an entity (only for the purposes of the definition of the “ **Affiliate** ”), means (i) the possession, directly or indirectly, of more than 50 (fifty) percent of the voting rights of the Affiliate, and/or (ii) the possession, directly or indirectly and either by contract or otherwise, of the power to direct or cause the direction of the management, affairs or policies of the Affiliate, and/or (iii) controlling, directly or indirectly, the majority of the composition of the board of directors of the Affiliate;
- (p) “ **Demised Premises** ” shall have the meaning ascribed to the term in Recital E of this Agreement;
- (q) “ **Encumbrance** ” shall mean, (i) a security interest of whatsoever kind or nature including any mortgage, charge (whether fixed or floating), pledge, lien (including negative lien), hypothecation, assignment, deed of trust, title retention, or other encumbrance of any kind securing, or conferring any priority of payment in respect of, any obligation of any Person including without limitation, any right granted by a transaction which, in legal terms, is not the granting of security but which has an economic or financial effect similar to the granting of security under Applicable Laws, (ii) any interest, option, right of first offer, or refusal or transfer restriction in favour of any person, and (iii) any adverse claim as to title, possession, access or use affecting the rights of the Lessee to take on lease the Demised Premises and/or use and occupy the Demised Premises by the Lessee;
- (r) “ **Environmental Laws** ” shall mean and include Environment (Protection) Act, 1986, Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and any other applicable laws, and the rules, notifications etc. made thereunder and their amendments made from time to time;
- (s) “ **Final Drawings** ” shall have the meaning ascribed to the term in Clause 3.2;
- (t) “ **Force Majeure** ” shall have the meaning ascribed to the term in Clause 24.1;
- (u) “ **Governmental Authority** ” shall mean the Government of India or of any state or Union Territory in India, or any department thereof, any semi-governmental or judicial or quasi-judicial person in India or any person/authority (whether autonomous or not) who is charged with the administration of an Indian law;
- (v) “ **Government Official** ” shall mean an officer, employee or representative of any government entity, Governmental Authority, agency, instrumentality, political party or multilateral agency;
- (w) “ **GST** ” shall mean the Goods and Services Tax applicable in India;
- (x) “ **Handover Condition** ” shall mean the portion of the Lessor’s Work to be completed to enable the Lessee to commence its fit outs, as detailed in **Schedule F**;
- (y) “ **Handover Date** ” shall mean the date of completion of the Handover Condition at the Demised Premises by the Lessor, as certified by the Lessor’s Architect upon joint inspection and handover of possession of the Demised Premises by the Lessor to the Lessee for carrying out the fit-out work;

- (z) “ **Initial Term** ” shall have the meaning ascribed to the term in Clause 7.1;
- (aa) “ **Leasable Area** ” shall mean the total built up area of the Building and other structures developed on the Schedule Land for the Lessee, for which Rent will be payable by the Lessee, and shall be determined in the manner detailed in **Annexure 3**;
- (bb) “ **Lease Commencement Date** ” shall mean the Handover Date;
- (cc) “ **Lease Deed** ” shall mean the lease deed to be executed by the Lessor in favour of the Lessee and duly registered in furtherance of the terms contained in this Agreement in respect of the Demised Premises and shall include any schedules and annexures attached thereto and any amendments thereto. The agreed form of the Lease Deed is attached hereto as **Annexure 6**;
- (dd) “ **Lease Term** ” shall mean the Initial Term and the Renewal Term, where applicable;
- (ee) “ **Lessee Delay** ” shall include any one or more of the following:
- (1) The Lessee's representative upon receipt of written communication fails to take any action required to be taken by the Lessee hereunder within three (3) Business Days;
 - (2) Additional time required for construction / implementation of any Change Requests/ Improvement Change Request;
 - (3) The Lessee's delay in reviewing, revising or approving plans and specifications, including the Final Drawings beyond the periods set forth herein;
 - (4) The Lessee's delay in providing information critical to the normal progression of the Project. The Lessee shall provide such information as soon as reasonably possible, but in no event longer than five (5) Business Days after receipt of any request for such information from the Lessor; and
 - (5) Any other material act or omission solely attributable to the Lessee or any Lessee's representatives, agents, officers, employees, contractors, etc that causes delay in Target Completion Date;
- (ff) “ **Lessee Improvements** ” shall mean all improvements to the Demised Premises to be carried out by the Lessor, at the request of the Lessee, as shown on the Final Drawings and detailed in **Schedule E** and in accordance with the provisions detailed in Clause 3 below;
- (gg) “ **Lessor's Architect** ” shall mean the architect appointed by the Lessor for the development of the Schedule Land and the Building to be constructed thereon;
- (hh) “ **Lessor's Work** ” shall mean the completion of the Warm Shell Specifications and the Lessee Improvements at the Demised Premises, at the Lessor's cost, as per the Sanctioned Plan and Final Drawings, respectively in accordance with the provisions detailed in Clause 3 below;
- (ii) “ **Lock in Period** ” shall have the meaning ascribed to the term in Clause 22.2;
- (jj) “ **LOI** ” shall have the meaning ascribed to the term in Recital D;

- (kk) “ **Maintenance Charges** ” shall have the meaning ascribed to the term in Clause 14.2 ;
- (ll) “ **Maintenance Services** ” shall mean the maintenance services to be provided by the Lessor to the Common Areas of the Project as more fully detailed in **Schedule G** hereunder;
- (mm) “ **Minor Variations** ” shall mean any modifications reasonably required: (i) to comply with all applicable legal requirements and/or to obtain or to comply with any required permit, if applicable, issued by the relevant Governmental Authority; (ii) to comply with any request by Lessee for change/modifications to Lessor’s Work provided such request has been accepted by the Lessor; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of Lessor’s Work with prior written intimation to the Lessee;
- (nn) “ **Major Repairs** ” shall mean and include any structural repairs to the Warm Shell Specifications, including but not limited to the interior and exterior part of the structure of the Demised Premises, leakage or seepage and replacement of all articles and equipment after the normal useful life has expired or when they cease to function as expected, roof space, exterior walls, load bearing walls, support beams, foundation, columns, parking facilities, exterior doors and windows, plumbing lines;
- (oo) “ **Open Areas** ” shall mean the open portion of the Schedule Land admeasuring approximately 7,75,095 square feet, identified in blue colour in the sketch attached hereto as **Annexure 5** ;
- (pp) “ **Open Area Rent** ” shall have the meaning ascribed to the term in Clause 8.1(b);
- (qq) “ **Permitted Use** ” shall have the meaning ascribed to the term in Recital C;
- (rr) “ **Person** ” means an individual, a limited liability company, joint venture, a corporation, a partnership, an association, a trust, a division or operating group of any of the foregoing or other entity or organization.
- (ss) “ **Project** ” shall have the meaning ascribed to the term in Recital A and the preliminary master plan of the Project is attached hereto as **Annexure 1** ;
- (tt) “ **Project Land** ” shall have the meaning ascribed to the term in Recital A;
- (uu) “ **Renewal Term** ” shall have the meaning ascribed to the term in Clause 7.2;
- (vv) “ **Rent** ” shall have a collective reference to the Base Rent, Open Area Rent, Improvement Rent;
- (ww) “ **Rent Commencement Date** ” shall mean the 61st day from the Handover Date or the date of the Lessor providing Completion Certificate, whichever is later;
- (xx) “ **Sanctioned Plan** ” shall mean the plan of the Building in conformity with the Final Drawings, and sanctioned by the concerned Governmental Authority, and shall include any modifications to the Sanctioned Plan as agreed between the Lessee and the Lessor in writing from time to time and approved by the concerned Governmental Authority;
- (yy) “ **Security Deposit** ” shall have the meaning ascribed to the term in Clause 10.1;
- (zz) “ **Schedule Land** ” shall have the meaning ascribed to the term in Recital B;

- (aaa) “ **Substantial Completion** ” shall mean the date on which the Lessor shall substantially complete or cause to be substantially completed the Lessor’s Work in a good and workmanlike manner, certified by the Lessor’s Architect subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with the use and occupation of the Demised Premises and the term “ **Substantially Complete** ” shall be construed accordingly;
- (bbb) “ **Target Completion Date** ” shall mean the date that is 60 (sixty) days from the Handover Date;
- (ccc) “ **Target Handover Date** ” shall mean January 15, 2020;
- (ddd) “ **Timelines Schedule** ” shall have the meaning ascribed to the term in Clause 3.1;
- (eee) “ **Utility Charges** ” shall have the meaning ascribed to the term in Clause 15.1; and
- (fff) “ **Warm Shell Specification** ” shall mean the minimum specifications to be provided to the Schedule Land and Building as more fully detailed in **Schedule D**.

1.2. INTERPRETATION

- (a) Unless the context otherwise requires in this Agreement:
 - (i) words importing persons or parties shall include firms and corporations and any organisations having legal capacity;
 - (ii) words importing the singular include the plural and vice versa where the context so requires;
 - (iii) reference to any Applicable Law shall include such Applicable Law as from time to time enacted, amended, supplemented or re-enacted;
 - (iv) reference to any gender includes a reference to all other genders;
 - (v) reference to the words “include” or “including” shall be construed without limitation;
 - (vi) reference to this Agreement or any other agreement, deed or other instrument or document shall be construed as a reference to this Agreement or such other agreement, deed or other instrument or document as the same may from time to time be validly amended, varied, supplemented or novated;
 - (vii) the provisions of this Agreement shall be read and interpreted in conjunction with the schedules and annexures hereto and the schedules and annexures hereto shall be a part and parcel of this Agreement; and
 - (viii) the headings and titles in this Agreement are indicative only and shall not be deemed part thereof or be taken into consideration in the interpretation or construction hereof.

2. AGREEMENT TO LEASE

- 2.1 In consideration of the Lessee agreeing to pay the Rent, the Security Deposit and other charges to the Lessor as set out in this Agreement and the Lessee agreeing to comply with the covenants and conditions set out herein, the Lessor hereby agrees to design, develop and construct the Demised Premises for the Lessee in the manner provided herein and thereafter grant by way of lease the Demised Premises to the Lessee.
- 2.2 The Lessee based on the representations and warranties of the Lessor and the Lessor agreeing to comply with the terms and conditions and fulfil the obligations as set forth in this Agreement, hereby agrees to take on lease from the Lessor the Demised Premises subject to the terms and conditions of this Agreement .
- 2.3 The Demised Premises shall have access to the public road through the internal roads formed in the Project.

3. DEVELOPMENT OF THE DEMISED PREMISES

- 3.1 The Parties agree that the Lessor shall provide the Lessor's Work including Warm Shell Specifications and the Lessee Improvements to the Demised Premises as per the Final Drawings and the Sanctioned Plan in the manner detailed in this Clause 3 and within the timelines detailed in **Schedule C** (" **Timelines Schedule** ") and handover the Demised Premises to the Lessee in Handover Condition. Other than Lessor's Work, the Lessor shall not have any obligation whatsoever with respect to the Lessee's Permitted Use and operation of Lessee's business therefrom.
- 3.2 The Lessor and Lessee acknowledge and agree that the final designs, plans and specifications prepared by the Lessor's Architect along with the details of the Lessor's Work attached hereto as **Annexure 4** (collectively, the " **Final Drawings** ") have been approved by both the Lessor and the Lessee and that the same details the Lessee's requirements for the Lessor's Work. The Final Drawings attached as **Annexure 4** separately details the requirements of the Warm Shell Specifications and Lessee Improvements. The Lessee may request for any changes to the Final Drawings by submitting a Change Request or an Improvement Change Request as detailed in Clause 4 below.
- 3.3. The Lessor shall cause the Lessor's Architect to prepare and deliver to the Lessee the final good for construction drawings, which drawings shall be prepared in accordance with the Final Drawings.
- 3.4. If any Governmental Authority having jurisdiction over the construction of the Lessor's Work or any portion thereof shall impose terms or conditions during the construction thereof that: (i) are inconsistent with the Lessor's obligations hereunder, (ii) increase the cost of constructing Lessor's Work, or (iii) will materially delay the construction of Lessor's Work, Lessor shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions within a reasonable period.
- 3.5. In the event that the concerned Governmental Authority requires any amendment or modifications to the Sanctioned Plan, and if such amendment or modification requested is material to the proposed business or operations of the Lessee, the Lessor shall discuss the proposed amendments and modifications with the Lessee before submission of the revised plan to the concerned Governmental Authority. However, If the amendment or modification of the Sanctioned Plan is not material to the proposed business or operations of the Lessee, the Lessor shall notify the Lessee of the proposed

amendments and modifications before submission of the revised plan to the concerned Governmental Authority, and upon receipt of the notification, the Lessee shall have a unilateral right to classify the amendment or modification requested as material, and in which instance, Lessor and Lessee shall mutually discuss and mutually agree on the modifications and amendments to be made before submitting the revised plan to the concerned Governmental Authority. Notwithstanding anything in this Clause, the Lessor shall make all reasonable endeavours to submit acceptable modifications in accordance with Applicable Law.

- 3.6. Subject to there being no delay attributable to Force Majeure or Lessee Delays, the Lessor shall endeavour to obtain the Sanctioned Plan within 120 (one hundred twenty) days from the date of execution of this Agreement. Subject to any delay attributable to Force Majeure or Lessee Delays, the Lessee agrees that the Lessor's obligation to develop the Demised Premises will commence on receipt of the Sanctioned Plan. In the event the Sanctioned Plan is not obtained by the Lessor within 120 (one hundred twenty) days, the Lessor shall have a further period of 14 (fourteen) months to obtain the Sanctioned Plan. Further, Lessor shall endeavor to keep the Lessee notified of progress in relation to obtaining the Sanctioned Plan or delay in procuring the same by providing necessary documents including application made to the relevant Governmental Authority for approval of the building plan and other information and documents available with the Lessor, as may be submitted to the Governmental Authority, from time to time or upon request of the Lessee.
- 3.7. The Lessee may appoint, at its own cost, a professional project managers / consultant, which shall not exceed 15 (fifteen) members on the Demised Premises, to monitor construction of the Demised Premises. Such project manager shall also be entitled to inspect / check the quality of construction (as indicated in **Annexure 4 and Schedule E**) without causing any disturbance to the Lessor from carrying out Lessor's work.
- 3.8. The Lessor shall conduct a weekly meeting on such date as agreed between the Parties, to be attended by all concerned consultants appointed by the relevant authorized representatives of the Lessor and the Lessee, for a weekly update on the development of the Demised Premises. Issues in relation to the development and construction of the Demised Premises including the quality of construction, if any, shall be discussed by the Lessee and or their authorized representatives during such meeting.
- 3.9. On a monthly basis the Lessor will submit to the Lessee a log in relation to the development of the Demised Premises (“**Monthly Summary**”). The Monthly Summary will include a progress report of the development of the Demised Premises, the Timelines Schedule, delay reports with reason, if any, and such other documents/details as mutually agreed.
- 3.10. The Lessor shall provide to the Lessee a site office to seat a maximum of 5 (five) people along with other basic facilities at no extra cost to Lessee during the construction period. However, the Lessor will have the right to relocate the site office within the Project anytime with prior intimation to the Lessee.
- 3.11. Where more than one type of material or structure is indicated on the Final Drawings approved by the Lessor and the Lessee, the option will be selected at the Lessor's sole and absolute subjective discretion. As to all building materials and equipment that the Lessor is obligated to supply under this Agreement, the Lessor shall select the manufacturer thereof in its sole and absolute subjective discretion from the list as provided in the specifications or equivalent specification in the Final Drawings.

- 3.12. The Parties agree that in relation to the construction of the Demised Premises , the following shall apply:
- (i) The Lessor shall, from the date of execution of this Agreement till the date of handover of possession of the Demised Premises to the Lessee, be solely responsible for compliance with all Applicable Laws including applicable labour laws in relation to employees and workers employed by the Lessor and Lessor's contractors.
 - (ii) During the course of inspection by Lessee as detailed in Clause 3.7, if the Lessee or its representatives notices any non-compliance of the requirements specified above, the Lessee shall notify the Lessor of such non-compliance and the Lessor and the Lessee shall mutually agree on the remedial action. The Lessor shall be responsible for any delay or additional time on account of such corrective measures.
- 3.13. The Lessee shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment with respect to the Lessor's Work. The Lessor shall promptly undertake and complete, or cause to be completed, all punch list items.
- 3.14. If the Lessor is unable to (i) handover the possession of the Demised Premises in Handover Condition on the Target Handover Date and/or (ii) achieve Substantial Completion of the Lessor's Work within 60 (sixty) days from the Handover Date, primarily due to a Lessee Delay, the Lessee agrees that the Target Handover Date/ Substantial Completion Date, as the case may be shall be extended by such number of days of the Lessee Delay.
- 3.15. After the Handover Date, the Lessor shall provide to the Lessee and the Lessee's contractors the rights, available amenities and facilities required by the Lessee during the Lessee's fit-out and furnishing work period with respect to the Demised Premises. The Lessee shall ensure that the Lessor will not be required to redo any completed portion of the Handover Condition as a result of the Lessee's commencement / carrying out of its fit-outs and shall ensure that it does not prejudice the Lessor completing the Demised Premises.
- 3.16. The Lessee may, at its discretion, on the Handover Date, start installation of the fit outs, fixtures and equipment that are to be carried out/installed by the Lessee at the Building. The Lessee's fit out works will be coordinated with the Lessor's Architect and the contractors and the Lessee shall be required to comply with this Agreement and all other reasonable restrictions and conditions the Lessor may impose.
- 3.17. Neither the Lessee nor any Lessee's representatives, agents, officers, employees, contractors, etc. shall interfere with the performance of the Lessor's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authority, and upon any such interference, the Lessor shall have the right to exclude Lessee and any Lessee's representatives, agents, contractors, etc. from the Demised Premises and the Project until Substantial Completion of the Lessor's Work.
- 3.18. The Lessor will be responsible for any internal road alterations or improvements required within the Project Land to accommodate the movement of the Lessee's products based on the specifications agreed between the Parties and forming part of the Warm Shell Specifications. The Lessor shall at the request of the Lessee assist the Lessee, for implementing any required improvements to the internal roads formed in the Project which connects to the public road. The Lessor shall provide all assistance required on a best effort basis, for securing such approvals and implementing the improvements and the Lessee agrees to bear all costs for such approvals and improvements. It is also further agreed by the Parties that the Lessee through its transporter shall carry out such improvements within 120 (hundred and twenty) days from the date of signing of this Agreement.

4. CHANGES AND CHANGE REQUESTS

4.1. Changes to the Warm Shell Specifications

- (a) The Lessee shall be entitled to seek any reasonable modifications to the Warm Shell Specifications at any time during the construction period (“ **Changes** ”), in which case the Lessee will communicate the same to the Lessor in preferably writing or through the Procore project management software application (“ **Change Request** ”), which Change Request shall detail the nature and extent of any such Change. The Lessee agrees that the Change Request shall be consistent with the Sanctioned Plans and shall not substantially deviate from the Final Drawings.
- (b) The Lessor will review the Change Request made and revert within 10 (ten) days from the date of such Change Request on its acceptance or otherwise of such request. The Lessor will consider the Change Request reasonably and in good faith and inform the Lessee whether or not such Change Request is acceptable or not acceptable to it.
- (c) In the event that the Change sought is mutually agreed between the Lessor and the Lessee, the Lessor shall submit to the Lessee an assessment of the price (including the costs of undoing or redoing something which has been completed or underway at the time of Change Requests) and timelines (including any impact on the Target Handover Date) for carrying out the proposed Changes within 30 (thirty) days of the Change Request. The Lessee may confirm its approval or otherwise of the Lessor’s proposal of carrying out the Changes at such assessed price and timelines within 5 (five) Business Days of receipt of such assessment. On receipt of the Lessee’s approval, the Lessor will proceed with the implementation of the Changes based on such revised price and timelines, subject to approval of the Governmental Authority, which the Lessor shall proceed to obtain if necessary. Any such delay in the completion of the Lessor’s Work caused by a Change, including any suspension of the Lessor’s Work while any such Change is being evaluated and/or designed, shall be a Lessee Delay. In such event, the Lessor shall not be responsible for the delay in completion of Lessor’s Work caused on account of such changes, which shall correspond to the time required for carrying out the Change Request or Improvement Change Request and incidental delays thereof.
- (d) All cost plans provided by the Lessor in terms of this Clause 4.1 will be detailed cost estimates. If the Lessee approves in writing any additional cost or savings and any estimated extension in the time for completion of the Lessor’s Work, the Lessor shall cause the approved Change to be instituted based on such revised additional costs or savings and modified Target Handover Date.
- (e) The Lessee shall pay for any or all of the modifications, specifications/ improvements arising out of the Change Request, either as a capital contribution in the manner mutually agreed between the Parties or as an Improvement Change as detailed in Clause 4.2 below.
- (f) The Lessee shall provide to the Lessor the list of persons, which shall not exceed two, who shall be authorized to interact with the Lessor.

4.2. Changes to the Lessee Improvements

- (a) The Lessee shall be entitled to seek any reasonable modifications to the Lessee Improvements at any time during the construction period (“ **Improvement Changes** ”), in which case the Lessee will communicate the same to the Lessor preferably in writing or through the Procore project management software application (“ **Improvement Change Request** ”), which Improvement Change Request shall detail the nature and extent of any such Improvement Change. The Lessee agrees that the Improvement Change Request shall be consistent with the Sanctioned Plans and shall not substantially deviate from the Final Drawings.
- (b) The Lessor shall submit to the Lessee an assessment of the price (including the costs of undoing or redoing something which has been already completed or underway at the time of Change Requests) and timelines (including any impact on the Target Handover Date) for carrying out the proposed Improvement Change within 30 (thirty) days of the Improvement Change Request. The Lessee may confirm its approval or otherwise of the Lessor’s proposal of carrying out the Improvement Change at such assessed price and timelines within 5 (five) Business Days of receipt of such assessment. On receipt of the Lessee’s approval, the Lessor will proceed with the implementation of the Improvement Change based on such revised price and timelines, subject to approval of the Governmental Authority, which the Lessor shall proceed to obtain if necessary. Any such delay in the completion of the Lessor’s Work caused by Improvement Change, including any suspension of the Lessor’s Work while any such Improvement Change is being evaluated and/or designed, shall be a Lessee Delay.
- (c) Any Improvement Change will be added as part of the Lessee Improvements and the cost for completion of any Improvement Change shall be determined in the manner detailed in Clause 9 below.

5. DELIVERY OF THE DEMISED PREMISES

- 5.1. Subject to there being no delay attributable to Force Majeure or Lessee Delays, the Lessor shall handover the Demised Premises to the Lessee on or before the Target Handover Date in the Handover Condition.
- 5.2. Subject to there being no delay attributable to Force Majeure or Lessee Delays, the Lessor shall Substantially Complete the Lessor’s Work at the Demised Premises on or before the Target Completion Date. Upon Substantial Completion of Lessor’s Work, the Lessor shall require the Lessor’s Architect and the contractors to execute and deliver, for the benefit of the Lessee and the Lessor, a certificate of Substantial Completion of Lessor’s work as per the agreed Specifications.
- 5.3. On the date of the Lessor’s Architect confirming that the Lessor’s Work at the Demised Premises has been Substantially Completed, the Lessor and Lessee will jointly inspect the Demised Premises and agree on a list of snag items that are still required to be completed at the Demised Premises. The Lessor shall thereafter, within a period of 60 (sixty) days from the date of such written list, complete the snag items at the Demised Premises and the completion of such snag items will be certified by the Lessor’s Architect.

- 5.4. Where the Lessor fails to handover the Demised Premises in Handover Condition on or before the Target Handover Date, such delay not being attributable to a Force Majeure event or to a Lessee Delay, the Lessor shall be entitled to a grace period of 30 (thirty) days from the Target Handover Date (“ **Grace Period** ”). After the Grace Period , the Lessee shall be entitled to waiver of the Rent for a period of 1 (one) day for every 2 (two) days’ delay after the expiry of the Grace Period until Handover Date . It is clarified that the Lessee shall not be entitled to any penalties in terms of this Clause 5.4 if any delay in achieving Target Handover Date is due to Force Majeure or Lessee Delays. For avoidance of doubt , subject to waiver of Rent for Lessor’s delays as set out above , where delay in handover of the Demised Premises in the Handover Condition is due to the Lessee Delay, the Rent Commencement Date shall be determined based on the date on which the Lessor would have otherwise handed over the Demised Premises in Handover Condition to the Lessee had there been no Lessee Delay.
- 5.5. Prior to the Handover Date, the Parties shall jointly inspect the Demised Premises and record the measurements. All amounts payable in respect of the proposed lease as detailed in this Agreement will be proportionately adjusted and the final Leasable Area will be recorded in the Lease Deed.

6. EXECUTION OF LEASE DEED

- 6.1. Execution of the Lease Deed between the Lessor and the Lessee shall be subject to the following:
- (a) all the representations and warranties of the Parties hereunder are true and correct as on the proposed date of execution and registration of the Lease Deed;
 - (b) The Lessor providing all Approvals relating to the development of the Demised Premises till the Handover Date to the satisfaction of the Lessee; and
 - (c) As on the date of execution and registration of the Lease Deed, there exists no security interest of whatsoever kind or nature including any mortgage, charge (whether fixed or floating), pledge, lien (including negative lien), hypothecation, assignment, deed of trust, title retention, or other encumbrance of any kind securing, or conferring any priority of payment in respect of, any obligation of any Person including without limitation, any right granted by a transaction which, in legal terms, is not the granting of security but which has an economic or financial effect similar to the granting of security under Applicable Laws, on the Demised Premises, which will affect the Lessee’s Permitted use and its peaceful possession and enjoyment. In the event of the Lessor having secured financial assistance from a bank or financial institution against security of the Demised Premises, the Lessor shall obtain suitable no-objection letter (where required) from such bank or financial institution for granting on lease the Demised Premises in favour of the Lessee and submit a copy thereof for Lessee’s records.
- 6.2. On or before the delivery of possession of the Demised Premises to the Lessee on the Handover Date, the Parties shall execute and register the Lease Deed with respect to the lease of the Demised Premises. The Lessee’s failure to register the Lease Deed within the time provided under Applicable Law, such failure shall be deemed as default of the Lessee and such delay will not affect the Lessee’s obligations detailed in this Agreement or the Lease Deed. In the event, the Lessor fails to come forward to register the Lease Deed within the time provided under Applicable Law, despite receipt of notice from the Lessee, the Lessee may at its discretion be entitled to enforce specific performance as per Applicable Law. This is without prejudice to the other rights of the Lessee under this Agreement.

7. TERM AND RENEWAL

- 7.1. The lease in respect of the Demised Premises shall commence on the Lease Commencement Date and shall be in force for a period of 10 (ten) years from the Rent Commencement Date (“ **Initial Term** ”).
- 7.2. Subject to the Lessee not being in breach of the terms of the Lease Deed, the Lessee may at its sole option renew the lease of the Demised Premises for 2 (two) additional terms of 5 (five) years each (each a “ **Renewal Term** ”). The Lessee shall communicate its intention to renew the lease of the Demised Premises, in writing, to the Lessor, not less than 6 (six) months prior to the expiry of the Initial Term or the Renewal Term, as applicable.
- 7.3. The lease for the Renewal Terms shall be on the same terms and conditions as the Initial Term subject to the increase in the Rent as detailed in Clause 8.5. There will be no lock in period for the Renewal Terms and during the Renewal Terms, the Lessee shall be entitled to terminate the lease at any time upon issuing prior written notice of 6 (six) months. Subject to Clause 7.4 below, prior to the commencement of each Renewal Term, a fresh lease deed shall be executed by the Parties and the same shall be appropriately stamped and registered with the appropriate sub-registry. The stamp duty and registration fee payable for the registration of the lease deed/s for the Renewal Terms shall be borne by the Lessee.
- 7.4. The lease deed/s for the Renewal Terms shall be executed at least 3 (three) months prior to the expiry of the Initial Term or the first Renewal Term, as applicable. In the event for any reason the lease deed/s for the Renewal Terms are not executed within the said timelines by the Lessee and the Lessor, but, however, the Lessee has exercised the option to renew the lease as provided in Clause 7.2, the Lessee shall continue to use and occupy the Demised Premises subject to payment of applicable Rent for such renewed term and other outgoings and such use and occupation, pending execution of the fresh lease deed, shall not be deemed as unauthorized occupation, however, the Parties shall execute and register a fresh lease deed within 30 (thirty) days from expiry of 3 (three) months mentioned above.

8. RENT FOR THE DEMISED PREMISES

- 8.1. Subject to the escalation in the Rent as per Clause 8.5 of this Agreement, during the Lease Term, the Rent payable by Lessee to the Lessor from Rent Commencement Date with respect to the Demised Premises shall comprise of the following:
- (a) Rs. 21.30/- (Rupees Twenty one and thirty paisa) per square foot of Leasable Area of the Building per month (“ **Base Rent** ”), aggregating to Rs 16,534,764/- (Rupees One Crore Sixty Five Lakhs Thirty Four Thousand Seven Hundred Sixty Four) per month;
 - (b) Rs. 7.30/- (Rupees Seven and thirty paisa) per square foot of Leasable Area of the Open Area per month (“ **Open Area Rent** ”), aggregating to Rs 5,658,194/- (Rupees Fifty Six Lakhs Fifty Eight Thousand One Hundred Ninety Four) per month; and
 - (c) Improvement Rent at Rs 19.70/- (Rupees Nineteen and seventy paisa) per square foot per month estimated at Rs 15,292,716/- (Rupees one crore fifty two lakhs ninety two thousand seven hundred sixteen) per month, calculated in the manner detailed in Clause 9 below.

Total Rent is estimated at Rs 37,485,674/- (Rupees Three Crores Seventy Four Lakhs Eighty Five Thousand Six Hundred Seventy Four) per month. In the event of variation in the extent of built-up area upon completion of construction, the Parties shall agree on the final Rent, based on actual area in the Lease Deed.

- 8.2. The Lessee shall commence payment of the Rent from the Rent Commencement Date. The Rent shall be paid to Lessor either by electronic funds transfer (EFT) to Lessor's account or by account payee cheque at Chennai, or to such other account or such other address or person as instructed by the Lessor from time to time.
- 8.3. The Rent and Maintenance Charges shall be payable on a monthly basis on or before the 10th day of every month in advance subject to receipt of proper invoices on or before the 3rd day of such calendar month. Provided, where the 10th day of any month is a non-working Saturday, Sunday or public holiday when banks are closed for business, the Lessee shall make the payment on the next succeeding business day, which shall not be treated as delay or default. The Rent and Maintenance Charges are subject to all applicable deductions of tax at source as per the provisions of the Income Tax Act, 1961. In this regard, the Lessee shall provide to the Lessor, certificates of tax deducted at source in accordance with the Applicable Laws. The Lessee shall also pay the GST or any other tax as applicable on the Rent and Maintenance Charges. The Rent for any part of a month will be pro-rated and paid for that portion of the month only.
- 8.4. In the event of any delay in payment of Rent, Maintenance Charges and Utility Charges by the Lessee on the due date that are not otherwise disputed in good faith by the Lessee in writing detailing Lessee's basis for such dispute, the Lessee shall be liable to pay interest at the rate of 18% (eighteen percent) per annum for such delay, from the due date till the date of payment. Provided where the amounts disputed by the Lessee are found to be incorrect and the Lessee is required to make payment of such disputed amount to the Lessor, interest at the rate of 18% (eighteen percent) as stated above shall apply from its original due date till the date of payment. It is further agreed that in the event the Lessee defaults in payment of rent for 3 (three) consecutive months during the Lease Term and the default is not remedied within a period of 30 (thirty) days from receipt of notice to cure from the Lessor, the lease may be terminated by the Lessor in the manner provided in Clause 22.4.1 hereinafter.
- 8.5. After the expiry of every year during the Lease Term, the Base Rent and Open Area Rent will be escalated by 4.5% (four point five percent) over and above the Base Rent and Open Area Rent payable in the immediately preceding year. The Improvement Rent will only be payable over the Initial Term. The payment of Rent and the escalation thereof is detailed in **Schedule H** hereunder.
- 8.6. The obligation of the Lessee to pay the Rent, the Maintenance Charges, the Utility Charges and any other sums to the Lessor and the obligations of the Lessor under this Agreement and the Lease Deed are independent obligations. The Lessee shall have no right at any time to abate, reduce or set-off any Rent, the Maintenance Charges or Utility Charges due herein except for any abatement as may be expressly provided in this Agreement. For any payment due from the Lessee to the Lessor under this Agreement for which a specific payment due date is not otherwise provided for in this Agreement, the Lessee shall be required to pay the amount in question to the Lessor within 30 (thirty) days after receipt of notice from the Lessor that such amount is due.

9. LESSEE IMPROVEMENTS AND IMPROVEMENT RENT

9.1. The Lessor has agreed to provide Lessee Improvements in the Demised Premises as per Lessee's requirement. The Lessor's investment in relation to the Lessee Improvements shall be recovered during the Initial Term, calculated on the basis of the formula provided in Clause 9.2 on the Leasable Area of the Building (" **Improvement Rent** "). The Parties agree that in the event of the Lessee exercising the option to renew the lease, there shall be no Improvement Rent during the Renewal Term.

9.2. Calculation of Improvement Rent

9.2.1. Formulae for calculating Improvement Rent per month:

$$\text{Cost incurred by the Lessor towards Lessee Improvements} \times 15\% / 12$$

9.2.2. Further, the Improvement Rent shall be escalated by 4.5% (four point five percent) at the end of every year during the Initial Term over and above the Improvement Rent payable in the immediately preceding year.

9.2.3. For instance, in the event the Lessor's investment is Rs 1,000 (Rupees One Thousand) per square foot of the Leasable Area of the Building, the Improvement Rent payable by the Lessee to the Lessor shall be recovered over the Initial Term at a yield of 15% (fifteen percent) with an escalation of 4.5% (four point five percent) at the end of every year. For example: $\text{Rs } 1,000 \times 15\% / 12 = \text{Improvement Rent per month of Rs } 12.50$ (Rupees Twelve Paise Fifty) per square feet with an escalation of 4.5% (four point five percent) at the end of every year).

9.3. The Parties have agreed to follow an open book system for the determination of the Improvement Rent. The Parties agree that on the Substantial Completion of the Lessor's Work, the Lessor will provide the Lessee with an investment estimate for the Improvement Rent for the Lessee Improvements and any Improvement Change (" **Investment Estimate** "). The Investment Estimate will be accompanied with supporting documentation. The Improvement Rent for the 6 (six) months of the Initial Term commencing from the Rent Commencement Date will be based on the Investment Estimate. Within 6 (six) months from the Rent Commencement Date, the Lessor will provide the Lessee an audited statement issued by a reputed chartered accountant of the actual amounts incurred and paid for the completion of the Lessee Improvements and any Improvement Change along with supporting documentation. Based on the audited statement along with the supporting documents for verification and on a mutual reconciliation process to be completed within 30 (thirty) Business Days of receipt of the audited statement along with supporting documents, the final Improvement Rent will be recorded in writing by the Parties. Where the Improvement Rent paid by the Lessee to the Lessor during the aforesaid 6 (six) months period is less than the final Improvement agreed between the Parties, the deficient portion of the Improvement due to the Lessor will be paid in arrears within 30 (thirty) Business Days from finalization of the final Improvement Rent.

10. SECURITY DEPOSIT

10.1. The Lessee agrees to pay and maintain an interest free, refundable security deposit with the Lessor with respect to the Demised Premises in an amount being equivalent to 10 (ten) months' Rent calculated on the Rent due for the first year of the Initial Term of the lease, amounting to Rs. 374,856,735/- (Rupees Thirty Seven Crores Forty Eight Lakhs Fifty Six Thousand Seven Hundred Thirty Five) (" **Security Deposit** "). The Security Deposit shall be payable by the Lessee to the Lessor in the following manner:

- (i) Rs. 201,228,892 /- (Rupees Twenty Crores Twelve Lakhs Twenty Eight Thousand Eight Hundred Ninety Two) being 5 3.7 0% of the Security Deposit shall be paid by the Lessee to the Lessor No 2 and Lessor No 3 in equal proportion , within 5 (five) days from the date of this Agreement, as under:

Sl No	Lessor Account Details	Amount (in INR)
1.	Aarush (Phase IV) Logistics Park Private Limited (Lessor No 2) Yes Bank Limited, T Nagar Chennai A/c No 041863700000818	10,06,14,448
2.	Aarush (Phase V) Logistics Park Private Limited (Lessor No 3) Yes Bank Limited, T Nagar Chennai A/c No 041863700000434	10,06,14,448
Total		201,228,892 /-

The Lessor No 2 and Lessor No 3 agree to apportion an amount of Rs 40,00,000/- (Rupees Forty Lakhs) out of the portion of Security Deposit as detailed above, to the Lessor No 1 by way of internal adjustments / payments and shall be held by the Lessor No 1 as part of the Security Deposit during the term of this Agreement and the Lease Deed.

- (ii) Rs. 173,627,843/- (Rupees Seventeen Crores Thirty Six Lakhs Twenty Seven Thousand Eight Hundred Forty Three) i.e. the balance 46.30% of the Security Deposit on the Handover Date.

10.2. It is clarified that there shall be no escalation in the Security Deposit during the Lease Term.

10.3. The Security Deposit shall be held by the Lessor as security for the performance of Lessee's obligations under this Agreement and the Lease Deed and is not an advance rental amount/deposit. The Security Deposit is not a measure of the damages payable in case of the Lessee's default. The payment of Security Deposit is not intended to be and shall not be treated as payment of cost of construction of the Building by the Lessee to the Lessor.

10.4. As long as the Lessee has fully performed every obligation under the Lease Deed, including the obligations of the Lessee in connection with the surrender of the Demised Premises (including surrender of the electricity meter in terms of Clause 15.2), the Lessor shall refund the Security Deposit, subject to deductions of arrears of the Rent, the Maintenance Charges, the Utility Charges and all other amounts payable by the Lessee to the Lessor under this Agreement and the Lease Deed and/or charges payable by the Lessee with respect to utility services directly availed from utility service providers and/or the cost of any damage, injury, expense or liability caused to the Demised Premises (other than normal wear and tear) within 7 (seven) days after the expiry or termination of the Lease Deed. The Parties will conduct joint inspection of the Demised Premises at least 15 (fifteen) days prior to the expiry of the lease to assess any damage caused by the Lessee. At the discretion of the Lessor, any damage caused to the Demised Premises by the Lessee will be repaired by the Lessee at least 7 (seven) days prior to the expiry or termination of the Lease Deed, failing which the cost of the damages will be deducted from the Security Deposit.

- 10.5. Upon occurrence of a breach by the Lessee or failure by the Lessee to perform any of its obligations under this Agreement and the Lease Deed , the Lessor may use all or any part of the Security Deposit to pay delinquent amounts due under this Agreement and the Lease Deed , including Rent , the Maintenance Charges and/or Utility Charges , and the cost of any damage, injury, expense or liability caused by such default, without prejudice to any other remedy provided herein or provided by Law. Upon any use of all or any portion of the Security Deposit during the Lease Term , the Lessee shall pay the Lessor , on demand and in no event later than 7 (seven) days, the amount that will restore the Security Deposit to the full amount set forth in Clause 10.1 above.
- 10.6. If the Lessor fails to return the Security Deposit in the manner detailed in Clause 10.4 above, the Lessor will be liable to refund the Security Deposit with interest at the rate of 18% (eighteen percent) per month from the date the payment became due until refund to the Lessee.
- 10.7. In the event of any dispute between the Parties in relation to Clause 10.4 and Clause 10.5, the matter in dispute shall be referred to expert determination. The Parties shall mutually appoint a third-party expert within 30 (thirty) days of receipt of notice by either Party referring any dispute for expert determination. In the event the Parties are not able to mutually agree on the third-party expert within the aforesaid 30 (thirty) day period, each Party shall within 15 (fifteen) days appoint one expert and the two appointed experts shall thereafter appoint a third expert, who shall together provide their decision, by majority. The appointed expert/s shall consider the matter in issue and provide its / their expert decision, which shall be final and binding upon the Parties. The said expert/s is/are entitled to take into account the views of both the Lessee and the Lessor on the matter in issue and also conduct an independent enquiry into the matter in issue, prior to providing its / their decision. In the event, the decision of the appointed expert is in favour of the Lessee, the Lessor shall be liable to pay the interest calculated @ the rate of 18% on the Security Deposit, as stated in Clause 10.6.
- 10.8. In addition to the Security Deposit, simultaneous with the execution of this Agreement, the Lessee shall ensure that, TPI Composites, Inc., shall provide a corporate guarantee in favour of and for the benefit of the Lessor within 5 (five) days from the date of this Agreement, to guarantee the Lessee's performance of its financial obligations under this Agreement and such corporate guarantee shall be enforceable under Applicable Law in India. The agreed form of the said corporate guarantee is attached to this Agreement as ***Annexure 8***.

11. REPRESENTATIONS, WARRANTIES AND COVENANTS

11.1. The Lessor represents, warrants and covenants as follows:

- (a) The Lessor is the absolute owner of the Project and has the legal capacity to lease the Demised Premises to the Lessee in the manner contemplated hereunder and no other third party consents are required for Lessor to enter into this Agreement.
- (b) The person signing this Agreement has the appropriate authority to do so and to grant a lease in respect of the Demised Premises upon such terms as are agreed herein.
- (c) No part of the Demised Premises or the Schedule Land is the subject matter of any proceedings and that there are no proceedings with respect thereto and the Lessor or anyone on its behalf has not committed or omitted any act, deed, matter or thing whereby its right to use, occupy the Demised Premises is or can be forfeited, extinguished or rendered void or voidable.

- (d) The Lessor has not, in the acquisition of the Schedule Land, in the construction of the Building or in the use and occupation of the Demised Premises, or otherwise, contravened any Applicable Law, rule, regulation or other legal requirements whatsoever and shall during the Lease Term continue to be in compliance with all Applicable Laws. The Lessor has provided copies to the Lessee of all Approvals (available as on the date of this Agreement).
- (e) The Lessor is in compliance with all applicable Environmental Laws and has not stored under the Land any combustible or hazardous material or caused seepage of any toxic substance, oil spillage or such other like material or other adverse environmental condition, which potentially affects the usage and occupation of the Demised Premises or causes a threat to life and property in any manner and the Lessor further undertakes to comply with all applicable Environmental Laws until execution of the Lease Deed.
- (f) The Building and the Demised Premises shall be constructed in a workmanlike manner in accordance with the Sanctioned Plan and permit / license relating thereto, with only such changes /additions as have been permitted by the concerned Governmental Authority, subject to other changes mutually agreed.
- (g) The Lessee, on paying the agreed Rent, the Maintenance Charges and Utility Charges and performing and observing the agreed terms and covenants as confirmed herein and on its part to be performed, may peaceably hold and enjoy the Demised Premises during the Lease Term, without any interruption, interference or claims by or from the Lessor or any person claiming under, through or in trust for the Lessor.
- (h) The Lessee shall have unlimited access and the right to use the Demised Premises, without any hinderance, 24 (twenty four) hours a day, 7 (seven) days a week and through all days of the year for the Lease Term subject to the Lessee along with its employees, representatives and authorized agents adhering to the terms of the Lease Deed, rules and regulations as prescribed by the Lessor along with the right to use all the utilities, infrastructure and facilities (including the right to access public road (which connects to NH-4), through the internal roads formed in the Project Land).
- (i) All taxes, levies, cesses with respect to the Demised Premises have been paid and discharged by it and it shall promptly pay, during the Lease Term, all existing and future rates, taxes, cesses, assessments and out goings in respect of the Demised Premises, including but not restricted to, land tax, property tax, municipality tax, etc., now or hereafter imposed or charged in relation to the Demised Premises shall be borne by the Lessor.
- (j) The Lessor shall have no obligation to, and shall not, procure any permits, approvals or consents related to the Lessee's intended use of the Demised Premises or the Lessee's business operations therein. Except as expressly set forth in this Agreement, the Lessor shall have no obligation to perform any work at the Project in connection with the Lessee's occupancy of the Demised Premises.
- (k) The Lessor shall at all times ensure that the Demised Premises can be legally used for industrial purpose and ensure that all Approvals with respect to land usage are valid and subsisting during the Lease Term.

- (l) There are no Encumbrances, proceedings, claims, actions, litigation, arbitration, land acquisition proceedings, garnishee or any process issued by any court or authority including the competent authority under the Income Tax Act, 1961 or other proceedings whatsoever relating to the Land or the Demised Premises which are pending or to the best of the Lessor's knowledge have been threatened to be initiated in writing to the Lessor or to any of its representatives , which adversely impact the Lessor's ability to develop the Demised Premises and fulfil its obligations under this Agreement (including execution and registration of the Lease Deed) .
- (m) The Lessor has not and shall not enter into any agreement/s in favour of any third parties that would in any manner affect the rights of the Lessee under this Agreement.

11.2. **The Lessee represents, warrants and covenants as follows:**

- (a) The Lessee is duly incorporated under the laws of India and has the power to lease assets and carry on its business (including Permitted Use).
- (b) The Lessee is fully empowered by its constitutive documents and by Applicable Law to sign this Agreement and make the representations and warranties contained herein so as to be binding upon it.
- (c) The execution, delivery and the performance by the Lessee of this Agreement does not and will not breach or constitute a default under any constitutive documents.
- (d) The person signing this Agreement has the appropriate approval or authorization to do so.
- (e) It shall promptly perform and comply with all the terms and conditions of this Agreement and the Lease Deed.
- (f) It shall ensure that its employees, agents, contractors, invitees, executives and officers shall diligently observe and comply with all the terms and conditions of this Agreement and comply with all directions given from time to time by the Lessor, with regard to the use of the Demised Premises or any part thereof, provided they are in accordance with this Agreement and the Lease Deed.
- (g) It agrees to pay all outgoings attributable to its business and the use of the Demised Premises, including but not limited to payment of Rent, the Maintenance Charges, Utility Charges and GST or any other tax applicable thereon.
- (h) It shall maintain the Demised Premises with due care and caution, and not do anything or permit or commit to be done anything contrary to any provision made by or under any statute or law for the time being in force.
- (i) The Lessee shall at all times from the Handover Date, or from such earlier date that the Lessee is permitted to enter the Demised Premises for conducting any work, comply with the Applicable Laws including labour laws, fire safety, and fire code.

- (j) It has satisfied itself as to the right, title and interest of the Lessor in relation to the Scheduled Land, as on the date of this Agreement .
- (k) It shall use and occupy the Demised Premises at its own risk and responsibility and the Lessor shall not be responsible or liable for any loss, damage, shortage, theft or destruction of any papers, documents, equipment, machines, articles, property or things of any kind or nature whatsoever belonging to the Lessee or kept in the Demised Premises.
- (l) It shall obtain all necessary licenses, approvals and permits necessary to conduct business and operations (including the Permitted Use) in the Demised Premises.
- (m) It shall abide by all Applicable Laws for the time being in force, apply for and keep up-to-date all requisite approvals as may be required to carry on its Permitted Use, and follow all statutory requirements for the use of the Demised Premises. The Lessee's consent for establishment and consent for operations issued by the jurisdictional Pollution Control Board shall be within the scope of the consent for establishment and consent for operations issued by the jurisdictional Pollution Control Board in respect the Project.
- (n) From the Handover Date, the Lessee shall be in compliance with all applicable Environmental Laws. Subject to Clause 12.8, the Lessee shall not store on or beneath the Land any combustible or hazardous material (without obtaining necessary permits under applicable Environmental Laws) or cause seepage of any toxic substance, oil spillage or such other like material or cause other adverse environmental condition, which may potentially affect the usage and occupation of the Project Land or cause a threat to life and property in any manner.
- (o) It shall not do or suffer to be done in or in relation to the Demised Premises any unlawful or obnoxious act, deed, matter or thing which may cause nuisance, annoyance or disturbance to or interfere with the quiet use and enjoyment of the Lessor or the other occupants of the Project.
- (p) The Lessee shall furnish to the Lessor true and correct copy of Certificate of Incorporation and the Limited Liability Partnership Agreement, prior to the execution of the Lease Deed and as and when requested by the Lessor.
- (q) The Lessee shall always observe and perform all the terms and conditions, covenants and provisions under this Agreement on which the Demised Premises is agreed to be built and given on lease. It shall not do, omit or knowingly suffer to be done anything whereby the right of the Lessor to the Demised Premises is violated, forfeited, jeopardised or extinguished.
- (r) The Lessee shall not store any inflammable items without securing all statutory permission and fully implementing safety regulation required for the said purpose and the safety measure as may be reasonably and properly recommended by the Lessor.
- (s) The Lessee shall not cause or permit any hazardous materials to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Demised Premises or the Project in violation of Applicable Laws by Lessee or any person acting on behalf of the Lessee.

12. USE OF THE DEMISED PREMISES

- 12.1. The Demised Premises shall be used solely for the Permitted Use. The Lessee shall not use or permit the Demised Premises to be used for any purpose or in any manner that would increase the insurance premium payable by the Lessor. It is clarified that the technical activities to be pursued by the Lessee in the Demised Premises shall be compatible with what is permitted by the jurisdictional Pollution Control Board and any other statutory authority/s prescribed under the Applicable Laws. The Lessee shall not change the Permitted Use of the Demised Premises without obtaining necessary approvals under Applicable Law and the Lessor's prior written consent, which consent shall not be unreasonably withheld by the Lessor.
- 12.2. Subject to Clauses 3 and 5 and any other Lessor's obligations under this Agreement in relation to achieving the Handover Condition, Lessee shall accept the possession of the Demised Premises in Handover Condition as of the Handover Date. The Parties shall conduct a joint inspection prior to the Handover Date to ensure that Handover Condition has been achieved.
- 12.3. Subject to Clauses 3 and 5, upon the Lessee taking possession of the Demised Premises, it shall be construed that the Demised Premises has been provided in the Handover Condition.
- 12.4. The Lessee shall have access to the Demised Premises 24 (twenty four) hours a day and 7 (seven) days a week during the Initial Term or Renewal Term. The normal working hours during which the Project shall be operational shall be from Monday to Saturday i.e. 6 (six) days a week from 8:30 A.M to 8 P.M. The essential maintenance and management personal shall be off duty on all public holidays, determined by the Lessor in accordance with Applicable Laws. However, Lessee shall be entitled to use the Demised Premises at its discretion on all such days, without any hindrance or objection from the Lessor. The Lessee accepts that all services may not be available to the Project beyond the normal working hours.
- 12.5. The Lessee shall obtain all necessary licenses, approvals and permits necessary to conduct business and operations in the Demised Premises, including without limitation licenses, approvals and permits with regards to labour, pollution control, etc., from the concerned Governmental Authority, at its own cost and expense appreciating that technical activities to be pursued in the Demised Premises must be compatible with the facilities in the Project.
- 12.6. The Lessee shall, during the term of the lease and any renewal thereof, comply with all Applicable Laws (including Environmental Laws) as may be applicable to the Demised Premises and the Lessee shall always remain solely responsible for the consequences of non-compliance of the Applicable Laws. In the event of any proceedings being initiated with respect to non-compliance of Applicable Laws the Lessee shall notify the Lessor.
- 12.7. The Lessee will use the Demised Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Demised Premises, subject the Demised Premises to any use that would damage the structure of Building including the Demised Premises or obstruct or interfere with the rights of the Lessor or other licensees or occupants of the Project; provided that Lessor and Confirming Parties acknowledge that the wind turbine blades and related equipment and fixtures will be transported though the internal road in Project. It is the responsibility of Lessee to provide adequate training to its employees and vendors on safe handling of hazardous materials and hazardous wastes, fire-fighting and emergency management as necessary from time to time.

- 12.8. The Lessee shall be permitted to store chemicals and consumables in limited quantities within a portion of the Demised Premises (“ **Storage Area** ”) which are required by the Lessee to ensure the smooth day to day operations for the Permitted Use of Demised Premises, in accordance with Applicable Law. The location of the Storage Area is identified in the sketch detailed in **Annexure 7**.
- 12.9. The Lessee acknowledges that the Lessor is not liable or responsible, in its capacity as lessor as per this Agreement or the Lease Deed or otherwise, for any hazardous materials or hazardous wastes kept, used, stored, handled, treated, generated in or about, or released or disposed of from the Demised Premises due to the Lessee’s actions, business or use of the Demised Premises. The Lessee specifically acknowledges that the Lessor is not aware of the hazardous materials kept, used, stored, handled, treated, generated in or about, or released or disposed, including in particular any hazardous waste generated by the Lessee in the course of its business and that the Lessor is not in any way involved in or responsible for the management, collection, treatment or disposal of the hazardous waste generated. Further, any agreements or documentation to be executed in relation to the disposal of the hazardous wastes generated by the Lessee in the Demised Premises, including waste disposal manifests, shall be executed by the Lessee only. There shall be no obligation on the Lessor to sign or execute or be party to any such documents.
- 12.10. The Lessor understands that the Lessee may request the Lessor to sign any applications or documents for the purpose of enabling it to obtain licenses and approvals whether required under Applicable Law or otherwise, in which case, the Lessor shall cooperate with the Lessee to execute any documents and provide any supporting documents / information, as may be necessary, at the cost and expenses to be borne by the Lessee.
- 12.11. Subject to any Force Majeure event, if the Lessee’s access to the Demised Premises is obstructed or affected for any reasons attributable to the Lessor or other occupants of the Project and not attributable to any breach on part of the Lessee, the Lessor shall take immediate mitigating steps to clear such obstructions.
- 12.12. The Lessor shall at all times make out good, valid, clear and marketable title to the Demised Premises and in the event of any litigation is initiated with respect to title to the Schedule Land and only if it affects the use and enjoyment of the Demised Premises, the Lessor shall promptly notify the Lessee and take appropriate remedial action.
- 13. ALTERATIONS AND REPAIRS**
- 13.1. The Lessor shall post the Handover Date and during the Lease Period, be responsible for attending to and undertaking Major Repairs. The Lessor shall use reasonable efforts to carry out the Major Repairs. All Major Repairs to be performed under this Clause shall be carried out in a prompt, diligent and good workmanlike manner. The Lessor shall use reasonable efforts to inspect the damage immediately or within a period of 4 (four) Business Days or such mutually agreed period, of the same being brought to the notice of the Lessor by the Lessee in writing and the Parties shall mutually agree on the reasonable time required to undertake and complete the Major Repairs. During the period of Major Repairs, if the Lessee is unable to use the entire extent of the Demised Premises, the obligation to pay the Base Rent, Open Area Rent and Maintenance Charges, shall stand suspended until the Major Repairs are completed. Provided that if the Lessee is prevented from using only a portion of the Demised Premises, the suspension of the Base Rent, Open Area Rent and Maintenance Charges shall be proportionate. For avoidance of doubt, the Lessee shall be required to pay Improvement Rent and Utility Charges.

- 13.2. If the Lessor fails to commence the Major Repairs under Clause 13.1 above, within the period specified therein, the Lessee may cause the commencement of such Major Repairs at the cost of the Lessor. The Lessor shall reimburse the Lessee the entire cost of performing such Major Repairs within 15 (fifteen) Business Days of receipt of an invoice for such costs having expended by the Lessee. If the Lessor fails to reimburse the Lessee for such costs within the above-mentioned period, the Lessee shall have the right to deduct such costs from future Demised Premises Rent payable to the Lessor till the adjustment of the entire cost.
- 13.3. The Lessee shall not be entitled to carry out any structural alterations or modifications to the Demised Premises except with the prior written approval on the Lessor, which shall not be unreasonably withheld. It is clarified that the Lessor may, at the time of its approval of any alteration or at any time prior to the expiry of the lease, notify the Lessee that the Lessor requires that the Lessee removes such alteration upon the expiration or earlier termination of the Lease Deed in which event the Lessee shall remove the alteration without causing any damage to the Demised Premises or the building systems and shall restore the Demised Premises to its condition prior to the installation of the alteration, reasonable wear and tear excepted.
- 13.4. The Lessee shall however be at liberty to carry out interior works, fittings, fixtures, installations and furnishing within the Demised Premises at its sole discretion without causing any structural damage/alteration to the Building.
- 13.5. The Lessor reserves the right to modify Common Areas at its own cost, provided that such modifications do not, other than on a temporary basis, materially adversely affect the Lessee's use of the Demised Premises or its access to the Land, as well as the Lessee's ability to transport wind turbine blades from the Demised Premises to the exit of the Project.
- 13.6. Notwithstanding anything to the contrary contained herein, in no event shall the Lessee undertake any actions that affect any building systems serving areas outside of the Demised Premises or affecting any other licensees /lessees at the Project, the Building structure or the Common Areas.
- 13.7. The Lessee shall, at all times comply with all rules and regulations, applicable to all tenants at any time or from time to time, established by the Lessor covering use of the Demised Premises and the Project.

14. MAINTENANCE

- 14.1. The Lessor will be responsible for maintenance, security, management for the Common Areas and landscaping of the Project and the Lessor may appoint a maintenance service provider to undertake the Maintenance Services, more fully detailed in **Schedule G** hereunder. Simultaneously with the execution of the Lease Deed, the Parties will execute a maintenance agreement in relation to the provision of the Maintenance Services and payment of the Maintenance Charges.
- 14.2. The maintenance charges payable by the Lessee to the Lessor shall be calculated on an open book basis and based on the square footage of the Leasable Area of the Demised Premises as a percentage of the total square footage of built up areas within the Project and is currently estimated to be Rs. 2 (Rupees Two) per square foot of Leasable Area per month (“**Maintenance Charges**”). The Maintenance Charges are required to be paid over and above the Rent and will be payable in advance on monthly basis, along with the Rent as detailed in Clause 8. The Maintenance Charges shall be payable from the Lease Commencement Date.

- 14.3. On an annual basis the Lessor shall reconcile the actual amounts for the provision of the Maintenance Services. In the event that the Maintenance Charges are less than the actual maintenance charges, the Lessee shall be liable to pay the differential amount along with the Maintenance Charges for the month subsequent to the reconciliation of accounts. Conversely, in the event that the payment made by the Lessee towards the Maintenance Charges exceeded the actual maintenance charges arrived at on the basis of the audited accounts, the Lessor shall adjust the same in subsequent month's invoice till such time that the entire excess amounts have been set off, unless otherwise agreed between the Parties. The Lessor shall provide the Lessee a statement (along with supporting documents) on an annual basis bearing out the actual amounts incurred by the Lessor or the Maintenance Agency for the provision of the Maintenance Services.
- 14.4. The routine maintenance of the Demised Premises shall be done by the Lessee at its own cost. The maintenance charges relating to any and all equipment installed by the Lessee at its own cost will be maintained by the Lessee at its own cost, either directly or through its appointed agency, and will not form a part of the Maintenance Charges. Any warranty benefits for all equipment being provided by Lessor for exclusive use of the Lessee including but not limited to the AHUs shall be passed on to the Lessee by the Lessor. It is clarified that the cost of replacement of any such capital equipment of the building are part of capital expenses and will not be included in the Maintenance Charges or otherwise recovered from the Lessee.
- 14.5. The Lessor reserves the right to temporarily stop any Maintenance Services and utilities when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of the Lessor, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed.
- 14.6. The Lessor shall have no responsibility or liability for failure to supply such Maintenance Services and utilities during any period of interruption; provided however, that the Lessor shall, except in a case of emergency, make a commercially reasonable effort to give the Lessee 5 (five) days' advance notice of any planned stoppage of any such services for routine maintenance, repairs, alterations or improvements.
- 14.7. The Lessee acknowledges that the Lessor may suspend or delay the performance of any Maintenance Services, if occasioned by reasons of Force Majeure, only after giving notice of such suspension at the earliest possible opportunity.
- 14.8. The Lessor shall maintain and repair the Common Areas of the Project (excluding the Schedule Land), and keep them in good repair, reasonable wear and tear excepted. It is clarified that any damage to any of the foregoing, solely attributable to the Lessee or any of the Lessee's agents, servants, employees, invitees or contractors shall be repaired by the Lessor, and all costs incurred by the Lessor in connection therewith shall be reimbursed by the Lessee within 10 (ten) days after demand thereof, along with invoices and proof of expenses incurred by the Lessor.

15. INFRASTRUCTURE AND OTHER AMENITIES

- 15.1. The utilities provided to the Demised Premises (including but not limited to water and electricity power supply) shall be as follows:

- 15.1.1. **Domestic Water Supply** : From the centralized domestic water storage system, water shall be transferred to the Lessee's tapping point. The source for water shall be either existing bore-well depending upon the availability or sourced through water tankers supplies. Hydro-pneumatic pumping system shall be employed to supply water to hand wash, health faucets, showers, kitchens, etc. For maintenance purpose the control valves like ball valve, butter fly valves shall be provided at entry of all group/individual toilets. Maximum envisaged quantity is 63,000 Ltrs per day considering 2100 headcount @ 30 litre per person per day.
- 15.1.2. **Water Supply for Toilets** : The treated water from STP (from common STP) shall be supplied to all EWC/IWC and urinal plumbing fixtures through hydro-pneumatic pumps.
- 15.1.3. **Sewage Treatment Plant** : STP for the facility shall be provided with UF system. The STP will contain underground RCC tanks to collect the raw sewage, processing the sewage and to store the treated water. A separate plant shall be planned to house the pumps, blowers, filters, etc. MBBR system shall be adopted to treat the sewage. STP envisaged capacity is 60 KLD.
- 15.1.4. **HT Power Supply** : The Lessor shall provide adequate space to accommodate RMG Gear to set up 110 kV electrical sub-station within the Project. The Lessee shall receive incoming electrical power supply from Tamil Nadu Generation and Distribution Corporation (TANGEDCO) at 110 kV Outdoor RMG (with VCB type). From the RMG, the power is distributed as per the defined electrical scheme. The maximum estimated demand for phase-1 development is envisaged at 12,000 KVA.

In relation to the utilities specific to the Demised Premises, the Lessor shall install separate meters at the Demised Premises, and the Lessee shall pay for such utilities at actuals consumed at the Demised Premises based on the sub meter readings, either to the Lessor, directly to the concerned Governmental Authority or to the service provider, as applicable (hereinafter referred to as the “**Utility Charges**”). Utilities for the Common Areas will be charged as part of the Maintenance Charges. The Utility Charges shall not be a part of the Rent and shall be payable by the Lessee. The Lessee acknowledges that the Utility Charges are not fixed and shall vary each month depending upon, among other things, consumption, usage and any change in the price of the diesel, electricity unit charges, gas charges, occupancy of the Project etc. The Utility Charges shall be payable from the Lease Commencement Date. The Lessee shall be entitled to apply for and obtain in its own name connections for internet, fiber broadband, DTH, telephone and any other connections as per its requirement at its cost, without any objection from the Lessor and the Lessor shall sign necessary documents, wherever required, for enabling the Lessee to obtain the utility connections.

- 15.2. The Lessor shall obtain and organize power load between 10 and 12 MVA to the Demised Premises for Phase I of the Lessee's project. The power shall be connected to the transformer, along with necessary infrastructure for transmission and provided with a separate meter for the Demised Premises. In the event the Lessee requires additional power, the Lessee acknowledges that any deposit to be paid to the utility company with respect to the power connection for any additional power required by the Lessee at the Demised Premises shall be the sole responsibility of the Lessee. On the expiry or termination of the lease, the Lessee shall, at the Lessor's option, either surrender the additional power load obtained back to the Governmental Authority or transfer the electricity meter in the Lessor's name. In the event the Lessor decides to retain the additional power, the Lessor shall reimburse the entire deposit paid and expenses incurred by the Lessee in obtaining the additional power. It is clarified that the Lessee shall also be liable to pay the deposit for obtaining and organizing the initial power load to the Demised Premises for Phase I of the Lessee's project.

- 15.3. The Lessee shall be entitled to employ any such security measures as required to the Demised Premises, without the consent of the Lessor. The Lessee shall be entitled at its option to regulate the entry of persons into the Demised Premises and other areas within the Demised Premises and shall be entitled to engage security personnel or install security systems to restrain people from entering any part of the Demised Premises, in each case in its sole and absolute discretion. The Lessor shall be responsible for providing security in the Project, including at the main entrance and within the Common Areas, for which the Lessee shall have no objection and control.
- 15.4. The Lessee shall have naming rights on the Schedule Land and Building per the Lessee's sign standards and no additional charge to the Lessee, provided the same are in line with Lessor's signage policy. Any name / logo / signage along with dimensions and type of signage shall be approved by the Lessor's Architect and as per local laws before installation and the entire cost for procurement, installation and maintenance of the signage shall be borne by the Lessee.

16. INSPECTION

The Lessor and the Lessor's representatives may enter the Demised Premises at any reasonable time with 24 (twenty four) hours' notice (except in the case of emergencies) for the purpose of effecting any repairs, inspecting the Demised Premises or for any other business purposes, subject to complying with the Lessee's identification process and access control systems.

17. TAXES

- 17.1. All present and future municipal/property taxes in respect of the Project including the Demised Premises shall be borne by the Lessor.
- 17.2. The Lessee shall be required to pay GST or any other levies / duties of or similar nature, with respect to the Demised Premises and / or the Rent and any other charges that may be payable by the Lessee to the Lessor under this Agreement and the Lease Deed. In addition to its liability to pay GST or any other tax payable on the Rent or on the lease, if any tax is levied or assessed directly against the Lessee in relation to the payment of Rent and Maintenance Charges under this Agreement and the Lease Deed, then the lessee shall be responsible for and shall pay the same at such times and in such manner as the concerned Governmental Authority shall require.
- 17.3. All payments to be made by the Lessee to the Lessor shall be subject to tax deducted at source as the Income Tax Act, 1961.

18. ASSIGNMENT AND SUBLETTING

- 18.1. The Lessee shall be entitled to assign the lease or sub-lease or license all or any portion of the Demised Premises to any of its Affiliates, with prior written intimation to the Lessor. The Lessee shall not be entitled to sub-lease, assign or license its leasehold rights to a third party, without the prior written consent of the Lessor which consent may be withheld at the option of the Lessor by providing reasons for the same. No lease or license shall be done for commercial gain. Where the partners of the Lessee enter into any agreement with a third party (which is not an Affiliate of the Lessee) to transfer their entire partnership interest in the Lessee to such third party, the Lessee shall take prior written consent from the Lessor, which consent shall not be unreasonably withheld, conditioned, or delayed.

- 18.2. In the event of any assignment, sub-lease or license in accordance with this Clause 18 , the lessee or license, as the case may be, shall be bound by the covenants, terms and conditions of this Agreement and the Lease Deed and the Lessee shall ensure and guarantee that its obligations/covenants contained herein are performed by such assignee or lessee or licensee. The Lessee shall continue to be fully and primarily responsible to comply with all the obligations under this Agreement even after any lease or license in accordance with the provisions of this Agreement .
- 18.3. In the event of merger or amalgamation or demerger of the Lessee with its Affiliates, the terms of this Agreement and the Lease Deed shall be binding on the entity formed as a result of such merger or amalgamation or demerger, approved by the jurisdictional court or tribunal, without requirement of executing any further documents. In such event, the Lessee or the new entity resulting from the amalgamation or merger or demerger shall submit a certified copy of the order passed by the court or tribunal to the Lessor for its records. If the Parties are required to enter into any further documents consequent upon such order to continue the lease, if required under Applicable Law, the same shall be at the cost of the Lessee.

19. INSURANCE

- 19.1. After the Lease Commencement Date, the Lessee will keep in force at its sole expense as long as the Lease Deed remains in effect and during such other time as the Lessee and the Lessee's employees, agents, invitees and others for whom it is responsible at law use any portion of the Demised Premises, (a) Standard Fire and Special Perils Policy covering all its equipment/ machinery and other assets brought in by the Lessee onto the Demised Premises, (b) Commercial General Liability Policy: to provide insurance coverage for bodily injury, personal and advertising injury and products and completed operations liability, and (c) appropriate annual maintenance contracts for all the equipment being provided by the Lessor for exclusive use of the Lessee including but not limited to the AHUs.
- 19.2. The Lessee shall also obtain any insurance as may be required under Applicable Law or as may be required to be obtained, at the request of the Lessor from time to time.
- 19.3. During the Lease Term, the Lessor will obtain and maintain in force (a) Standard Fire and Special Perils Policy for the Demised Premises, Building, plant and machinery and other utilities owned by the Lessor in the Project, and any other insurance desired by the Lessor, all in amounts and with coverages determined by the Lessor in its sole discretion. The Lessor shall keep such insurance updated and provide the Lessee with the copy of the updated policies each year, prior to the expiration of the then current coverage.
- 19.4. On or prior to the Lease Commencement Date the Lessee shall provide to the Lessor a copy of the Lessee's insurance policy evidencing insurance coverage as required by this Agreement. The Lessee shall keep such insurance updated and provide the Lessor with the copy of the updated policies each year, prior to the expiration of the then current coverage.

20. INDEMNITY

- 20.1. The Lessee hereby indemnifies and agrees to defend, save and hold the Lessor, its directors, officers, employees, agents and representatives, harmless from and against any and all claims, demands, actions, damages, liabilities, costs and expenses, including reasonable attorney fees and expenses for (a) injury or death to persons or damage to property occurring within or about the Demised Premises, arising directly

or indirectly out of use or occupancy of the Demised Premises or Common Areas (b) a breach or default by Lessee or its partners, officers, employees, agents or representatives, in the performance of any of their obligations hereunder or (c) breach of any of the representations and warranties of the Lessee as contained in this Agreement or (d) any direct and actual loss or damage (not being in the nature of any direct or indirect business loss or any direct or indirect opportunity loss or any action in tort) suffered by the Lessor by reason of any act or deed or omission of the Lessee which is contrary to the terms hereof, unless caused solely by the willful misconduct or gross negligence of the Lessor or (e) any environmental condition arising during the Lease Term on the Demised Premises, which may have an adverse effect on the Project or non-compliance with the Environmental Laws. Further, The Lessee shall indemnify the Lessor from any and all costs and expenses incurred in connection with the enforcement of this clause.

- 20.2. The Lessor hereby indemnifies and agrees to defend, save and hold the Lessee, its partners, designated partner nominees, officers, employees, agents and representatives, harmless from and against any and all claims, demands, actions, damages, liabilities, costs and expenses, including reasonable attorney fees and expenses for (a) injury or death to persons within or about the Common Areas, arising directly or indirectly out of a breach or default by Lessor or its directors, officers, employees, agents or representatives, in the performance of any of their obligations hereunder or (b) breach of any of the representations and warranties of the Lessor as contained in this Agreement, unless caused by the willful misconduct or negligence of the Lessee (c) any direct and actual loss or damage (not being in the nature of any direct or indirect business loss or any direct or indirect opportunity loss or any action in tort) suffered by the Lessee by reason of any act or deed or omission of the Lessor which is contrary to the terms hereof, unless caused solely by the willful misconduct or gross negligence of the Lessee; and (d) any direct and actual (not being in the nature of any direct or indirect business loss or any direct or indirect opportunity loss or any action in tort) loss or damage caused to the Lessee on account of any defect in title to the Schedule Land, non-compliance of the terms of the Sanctioned Plan by the Lessor in relation to construction of the Building as determined by any Governmental Authority and such order having attained finality, breach or non-compliance with the Environmental Laws (and attributable to the Lessor as determined by independent environmental consultants) or the provision or utilities therein, which could not be reasonably ascertained by the Lessee at the time of taking handover of the Demised Premises. Further, the Lessor shall indemnify the Lessee from any and all costs and expenses incurred in connection with the enforcement of this clause.
- 20.3. The Lessor shall not be liable to the Lessee for, and the Lessee assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Demised Premises). The Lessee further waives any and all claims for injury to the Lessee's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). The Lessor shall not be liable for any damages arising from any act, omission or neglect of the Lessee or any of the Lessee's agents, servants, employees, invitees and contractors within the Project or of any other third party.
- 20.4. The indemnifying Party shall indemnify the indemnified Party from any and all costs and expenses incurred in connection with the enforcement of this clause.

21. SALE, MORTGAGE AND CHARGES

21.1. The Lessor shall have the right to sell or assign the Demised Premises or any portion thereof during the Lease Term with prior written intimation to the Lessee and such prospective purchaser shall be bound by all the terms and conditions of this Agreement and the Lease Deed, including but not limited to renewal of the lease and obligation to refund the Security Deposit. Subsequently, the lease shall be attorned in favour of the prospective purchaser. Deed of attornment or such other document as may be required shall be executed by the Parties confirming such attornment with the Lessor as the confirming party thereto and thereafter the Lessor shall stand released of their obligations under the Agreement. The Lessee shall not be liable to bear any cost for such attornment. The Lessor and/or the new purchaser shall bear all costs (including stamp duty and registration fee, if any) in relation to Deed of attornment and/or incidental documents.

21.2. The Lessor shall be entitled to seek rental discounting facility or create a mortgage of the Project, the Demised Premises or any part thereof, and the Lessee shall cooperate with the Lessor in connection thereto provided that such mortgage shall not affect the rights of the Lessee to use and occupy the Demised Premises during the Lease Term so long as the Lessee is not in default under this Agreement and the Lease Deed. The Lessee shall do all acts, deeds as required by the Lessor with respect to the same, as long as the same do not affect the Lessee's rights under this Agreement and the Lessee shall not have obligation to the bank or financial institution, save and except the payment of Rent to the designated account and any other reasonable request that the bank or financial institution may require.

22. LOCK IN AND TERMINATION

22.1. Termination of this Agreement :

22.1.1. Subject to Lessee Delay, the Lessee and Lessor may mutually discuss and agree to terminate this Agreement in the event the Lessor fails to obtain the Sanctioned Plan within 18 (eighteen) months from the date of execution of this Agreement or fails or is unable to handover the Demised Premises in the Handover Condition within 24 (twenty four) months from the date of execution of this Agreement or such mutually extended Timelines.

22.1.2. In addition to termination set out in Clause 22.1.1 above, the Lessee shall have the option to terminate this Agreement for any of the following reasons, in which case Lessee shall issue a notice of termination of 30 (thirty) days and call upon the Lessor to complete the obligations and upon failure of the Lessor to comply with the terms thereof, this Agreement shall stand terminated at the expiry of 30 (thirty) days:

- (i) Any order (whether final or interim) passed by Governmental Authority which affect the right of the Lessor to grant the Demised Premises on lease; or
- (ii) In the event of the Lessor failing to comply with the Applicable Laws for development and construction of the Demised Premises, which is determined by any Governmental Authority and which adversely impact the ability of the Lessee to take handover of the Demised Premises or to use and occupy the same for its operations; or
- (iii) In the event of the Lessor being ordered to be wound up by any court and/or liquidator / insolvency resolution professional being appointed or the Lessor being declared an insolvent, this Agreement shall stand terminated; or
- (iv) In the event any Governmental Authority acquires the Schedule Land or the Demised Premises or it becomes impossible or unlawful for any reason to proceed with the execution and registration of the Lease Deed.

In the event of termination as set out above, the Lessee will be entitled to receive the portion of the Security Deposit paid under this Agreement within 7 days from the date thereof.

Except as specified in this Clause 22.1, the Lessee shall not be entitled to terminate this Agreement before the Lease Commencement Date. Where this Agreement is terminated before the Lease Commencement Date, the Lessee shall pay the Rent for the Lock-in Period – which will be considered as damages payable by the Lessee to the Lessor. The Lessee hereby acknowledges and agrees that such damages paid by the Lessee to the Lessor are a genuine and reasonable pre-estimate of the damages the Lessor shall suffer as a result of the Lessee's failure to comply with its obligations in the manner contemplated and are not a penalty.

22.2. **Lock-in Period after execution of the Lease Deed:**

After the execution of the Lease Deed the Lessee shall not be entitled to terminate the lease during the Initial Term (“ **Lock-in Period** ”) except for breach of the obligations under the Lease Deed by the Lessor (subject to any cure period available to the Lessor under the Lease Deed) or occurrence of the Force Majeure event which renders the Demised Premises unusable for the Permitted Use even after 12 (twelve) months from the date of approvals to reenter and/or reconstruct the Demised Premises, subject to the right of the Lessor to repair and restore the damage to the Demised Premises. In the event of abandoning or surrendering or terminating the lease prematurely during the Lock-in Period either by the Lessee for reason other than the breach of the Lease Deed by the Lessor or Force Majeure event (as stated above) or due to termination by the Lessor due to the breach by the Lessee of any of the terms of the Lease Deed, the Lessee shall be bound to pay to the Lessor the Rent (including the escalation as per Clause 8.5 above) for the Demised Premises corresponding to the unexpired portion of the Lock-in Period.

22.3. **Termination of the Lease Deed Post Lock-In-Period:**

After the expiry of the Lock-in Period and during the Renewal Term, the lease may be terminated by the Lessee by providing the Lessor with 6 (six) months written advance notice (“ **Notice Period** ”) or upon payment of Rent, Maintenance Charges and other charges as per the Lease Deed in lieu of the 6 (six) month notice.

22.4. **Cure Rights and Cure Notices:**

22.4.1. In the event of a breach by the Lessee of any of the terms of this Agreement or the Lease Deed, including non-payment of Rent for 3 (three) consecutive months as provided in Clause 8.4 above, the Lessor will give a notice to the Lessee to remedy the breach within 30 (thirty) days, and in the event of the Lessee not remedying the breach within such notice period to the satisfaction of the Lessor, the Lessor will be entitled to terminate the lease with immediate effect. However, if the Lessee disputes the Lessor's claim that the Lessee is in default, the parties shall amicably settle the dispute in terms of Clause 27.2 of this Agreement failing which the matter shall be submitted to arbitration in terms of Clause 27.3 of this Agreement and the Lessor may only terminate the Lease Deed if the arbitrator rules in favour of the Lessor. The Parties shall continue to be bound by the terms and conditions of the Agreement / Lease Deed until the final outcome of the arbitration proceedings. Upon such termination, the Lessor will be entitled to collect the Rent for the remaining portion of the Lock-in Period and also be entitled to all direct damages incurred thereon, including the cost of recovering the vacant and peaceful possession of

the Demised Premises . For avoidance of doubt, this will include the arrears of Rent, if any, payable at the time of termination of the Lease Deed. This right is apart from the Lessor 's right to specifically enforce the Lessee 's obligations under this Agreement or the Lease Deed. Notwithstanding the foregoing, if any breach or other failure by the Lessee to perform any of its obligations under this Agreement / Lease Deed , results in an emergency situation or adversely impacts any building systems including, without limitation, any serving areas outside of the Demised Premises , any other Lessees at the Project, the Project structure or the Common Areas, the Lessor may, without waiting for the Lessee 's 30 (thirty) day cure period to expire and without limiting any of the Lessor 's other remedies, attempt to cure all or any part of the applicable breach or other failure, in which case the Lessee shall be required to reimburse the Lessor for all of its costs in connection therewith.

22.4.2. In addition to the Lessee's rights to self-perform pursuant to Clause 13.2, in the event of a breach by the Lessor of the terms of the Lease Deed, the Lessee will give notice to the Lessor to begin to remedying the breach within 30 (thirty) days and in the event of the Lessor not remedying the breach within a commercially reasonable period, the lease shall stand terminated, even if it is during the Lock-in Period and the Lessee shall not be liable to pay Rent for the unexpired portion of the Lock-in Period. If the Lessor disputes the Lessee's claim that the Lessor is in default, the parties shall amicably settle the dispute in terms of Clause 27.2 of this Agreement failing which the matter shall be submitted to arbitration in terms of Clause 27.3 of this Agreement and the Lessee may only terminate the Lease Deed if the arbitrator rules in favour of the Lessee.

22.4.3. It is clarified that a receipt by the Lessor of the Rent, the Maintenance Charges, Utility Charges or other payment with knowledge of the breach of any covenant hereof shall not be deemed a waiver of such breach, and no waiver by the Lessor of any provision of this Agreement shall be deemed to have been made unless expressed in writing and signed by the Lessor. To the greatest extent permitted by law, the Lessee waives the service of notice of the Lessor's intention to re-enter or re-take the Demised Premises, or to institute legal proceedings to that end.

23. REINSTATEMENT

23.1. Upon the expiration or earlier termination of the Initial Term or the Renewal Term if any, the Lessee shall surrender the Demised Premises to the Lessor in the same condition as received, free of hazardous materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Demised Premises, and released of any hazardous materials clearances that may be in effect at the time, broom clean, ordinary wear and tear excepted.

23.2. The Lessee shall immediately return to the Lessor all keys and/or access cards (if any provided) to the Project, or all or any portion of the Demised Premises furnished to or otherwise procured by the Lessee. If any such access card or key is lost, the Lessee shall pay to the Lessor, at the Lessor's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Lessee's property, alterations and property not so removed by the Lessee as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by the Lessor at the Lessee's expense, and the Lessee waives all claims against the Lessor for any damages resulting from the Lessor's retention and/or

disposition of such property. All obligations of the Lessee hereunder not fully performed as of the termination of the Initial Term or the Renewal Term, if any, shall survive the expiration or earlier termination of the Initial Term or the Renewal Term, if any, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Demised Premises.

- 23.3. In the event the Lessee fails to vacate the Demised Premises on expiry or earlier termination of the lease, the Lessee will be liable to pay compensation equivalent to 200% (two hundred percent) of the Rent and the Maintenance Charges for unauthorized use / possession of the Demised Premises. This right is without prejudice to the right of the Lessor to evict the Lessee and to deal with the Demised Premises. In such event of the Lessee failing to vacate the Demised Premises on expiry or earlier termination of the lease, the Lessee shall be responsible for all actual and direct damages suffered by the Lessor resulting therefrom. Nothing in this Clause shall be construed to grant the Lessee any right to use and/or occupy the Demised Premises after expiration or termination of this Agreement and the Lease Deed.

24. FORCE MAJEURE

- 24.1. “**Force Majeure**” shall mean any event or circumstance or a combination of events or circumstances, which satisfies any of the following conditions:

- (a) materially and adversely affects the performance of an obligation; or
- (b) is beyond the control of the affected Party and includes (without limitation), the following events and/or circumstances:
 - i. war, (whether declared or undeclared), invasion, armed conflict or act of foreign enemy in each case involving or affecting India;
 - ii. revolution, riot, insurrection or other civil commotion, act of terrorism or sabotage;
 - iii. strikes, industrial disputes and/or lockouts directly affecting the Demised Premises, provided it is not a strike of the employees or contractors of the Lessor for actions caused by the Lessor;
 - iv. change in governmental policy or Applicable Laws directly affecting the Demised Premises;
 - v. acts of God or events beyond the reasonable control of the affected Party which could not reasonably have been expected, including any effect of the natural elements, including lightning, fire, earthquake, unprecedented rains, landslide, subsidence, flood, storm, cyclone, epidemics or plagues or any other similar effect; and
 - vi. any judgment or order of any court of competent jurisdiction or statutory authority in India made against the Parties in any proceedings to comply with any Applicable Laws or on account of breach thereof (other than arising as a result of a breach of the relevant Party’s obligations hereunder);
 - vii. breach by any of the contractors engaged for the Lessor’s Work, of their obligations under such contracts, for reasons which are not attributable to the Lessor; and

viii. delays in the issuance of any permits or approval of any kind required to be obtained by Lessor in connection with the Lessor's Work, for reasons not attributable to the Lessor.

- 24.2. If the performance by either Party of any of its obligations under this Agreement or the Lease Deed is prevented, restricted or interfered with by reason of Force Majeure, then such Party shall be excused from such performance to the extent of such prevention, restriction or interference, provided that such Party shall use reasonable efforts to avoid or remove such cause of non-performance and shall continue performance hereunder whenever such causes are removed.
- 24.3. If, at any time during the Lease Term the Project or the Demised Premises are damaged or destroyed by a Force Majeure event, the affected Party shall notify the other Party within 5 (five) days after discovery of such occurrence. The Lessor shall thereafter notify the Lessee within 15 (fifteen) days from the date of the notification of the occurrence of a Force Majeure event as to the amount of time the Lessor reasonably estimates it will take to restore the Project or the Demised Premises.
- 24.4. If, due to any Force Majeure event, the damage or destruction caused to the Demised Premises continues beyond a period of aforesaid 15 (fifteen) days, there being no default on the part of the Lessee, the Lessee shall not be required to make payment of the Base Rent, Open Area Rent and Maintenance Charges or such portion thereof from 7 (seven) days from the date of the occurrence of the Force Majeure till the date that the Demised Premises is substantially restored to the condition as delivered by the Lessor to the Lessee for its Permitted Use. During the period of repair and restoration, if the Lessee is unable to use the entire extent of the Demised Premises, the obligation to pay the Base Rent, Open Area Rent and Maintenance Charges, shall stand suspended until the Demised Premises is substantially restored as stated above. Provided that if the Lessee is prevented from using only a portion of the Demised Premises actually affected by the Force Majeure event, the suspension of the Base Rent, Open Area Rent and Maintenance Charges shall be proportionate to the area affected. For avoidance of doubt, it is clarified that any abatement of Rent under this Clause shall not include the Rent, Maintenance Charges and other charges due and payable by the Lessee till such date. Further, it is agreed that the Lessee shall be required to pay Improvement Rent and Utility Charges. In addition to termination rights under Clause 22 above (during the Lease Term), in the event the Lessee is not able to make Permitted Use of the Demised Premises even 12 (twelve) months after the date of approvals to reenter and/or reconstruct the Demised Premises, the Lessee will be entitled to terminate the Lease Deed. It is clarified that if the termination occurs under this Cause 24.4, during the Lock-in Period, the Lessee shall not be liable to pay the Rent or any other charges or liquidated damages for the unexpired portion of the Lock-in Period.
- 24.5. The Lessor shall, upon any destruction caused to the Demised Premises due to the occurrence of a Force Majeure event, promptly restore the Demised Premises, subject to delays arising due to (i) insurance claims related investigations; or (ii) any prohibition, either by the insurers or the appropriate Governmental Authority, on entering and restoring the Demised Premises or (iii) for securing license, clearance or other authorization of any kind required issued by any Governmental Authority to enter into and restore the Demised Premises.
- 24.6. The Party invoking the Force Majeure shall immediately notify the other party of any Force Majeure event.

25. **HARD OPTION**

- 25.1. The Lessor shall reserve for the Lessee at no cost to the Lessee the Additional Space identified and earmarked in the attached Master Plan for second plant (“ **TPI Plant 2** ”). The Lessee shall have the right to exercise its option to take on lease Additional Space to build Additional Building at any time before the Handover Date to require the Lessor to develop the Additional Building and take on lease the Additional Building and Additional Space.
- 25.2. Additionally, Lessee shall have the right to extend the option period on the Additional Space for an additional 12 (twelve) months from the Handover Date by making a deposit equal to Rs 35,617,750/- (Rupees Three Crores Fifty Six Lakhs Seventeen Thousand Seven Hundred Fifty) to the Lessor. If Lessee fails to exercise the option on the Additional Space during this additional 12 (twelve) month period the deposit shall be forfeited to the Lessor. If Lessee does exercise their option for the Additional Space and Additional Building within the additional 12 (twelve) month period, the Lessor will be required to develop the Additional Building and Lessee shall take on lease the Additional Building and Additional Space. Upon rent commencement of the Additional Space and Additional Building, the Rs 35,617,750/- (Rupees Three Crores Fifty Six Lakhs Seventeen Thousand Seven Hundred Fifty) deposit will be equally applied in first forty-eight (48) equated monthly installments towards rent and the Lessee shall pay to the Lessor the remaining portion of the rent after such adjustment.
- 25.3. Within 7 (seven) days of the Lessee exercising the option, the Parties shall execute a separate agreement to lease (“ **Additional Space Agreement** ”) in respect of the Additional Space. The terms and conditions of lease of the Additional Space shall be the same as applicable to the Demised Premises at the time of execution of the Additional Space Agreement including the rent and Maintenance Charges provided there is no deviation in the Warm Shell Specifications. The rent for the improvements to be provided at the Additional Building will be based on the value of the improvements provided in the Additional Space. The lease for the Additional Space shall be co-extensive and co-terminus with the lease for the Demised Premises.

26. **CONFIDENTIALITY**

- 26.1. The Parties agree to keep the terms and conditions of this Agreement and all related documents confidential. Provided that nothing contained above shall apply to any disclosure: (i) for the purpose of giving effect to the terms and conditions of this Agreement or related documents, or (ii) in the course of the exercise or observance by the Parties of their respective rights and obligations under this Agreement or related documents, or (iii) pursuant to the requirements of any Law, or (iv) pursuant to the legitimate request of any regulatory, statutory or judicial authority; or (v) by the Parties to their respective legal advisors or counsel, or (vi) any filing of this Agreement (or portion thereof) with the United States Securities and Exchange Commission, or (vii) potential lenders to the Lessor and/or the Lessee.

27. **GOVERNING LAW, JURISDICTION AND DISPUTE RESOLUTION**

- 27.1. The provisions of this Agreement shall, in all respects, be governed by, and construed in accordance with the laws of India. Subject to Clauses 27.2 and 27.3 below, each Party agrees that the courts at Chennai shall have exclusive supervisory jurisdiction in relation to this Agreement.

- 27.2. If any dispute arises amongst Parties hereto during the subsistence of this Agreement or thereafter, in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Agreement or regarding a question, including the questions as to whether the termination of this Agreement has been legitimate, the Parties shall endeavour to settle such dispute amicably.
- 27.3. In the case of failure by the Parties to resolve the dispute in the manner set out above within 30 (thirty) days from the date when a dispute is notified by one Party to the others, the dispute shall be referred to and finally resolved by arbitration under the Singapore International Arbitration Centre (“**SIAC**”) in accordance with the Arbitration Rules of the Singapore International Arbitration Centre (“**SIAC Rules**”) for the time being in force, which rules are deemed to be incorporated by reference in this clause. The Tribunal shall consist of one arbitrator appointed in accordance with the SIAC Rules. The seat, or legal place, of arbitration and venue of the arbitration shall be Mumbai, India. The language to be used in the arbitration shall be English.
- 27.4. The arbitral tribunal's award shall be substantiated in writing and the Parties shall submit to the arbitral tribunal's award which shall be enforceable in any competent court of law .

28. COSTS AND STAMP DUTY

- 28.1. The cost of stamp duty and other incidental expenses in connection with this Agreement and any amendment thereof shall be borne by Lessee. The cost of stamp duty, registration charges and other incidental expenses in connection with execution and registration of the Lease Deed and any amendments thereof shall be borne by Lessee. The Lessor shall provide all assistance required by the Lessee and endeavour to and facilitate the registration of the Lease Deed in whatever manner possible. This Agreement and Lease Deed shall be executed in duplicate, and the original Agreement and Lease Deed shall be with the Lessee and the duplicate Agreement and Lease Deed shall be with the Lessor.
- 28.2. Each Party shall bear its own legal and other costs with respect to this Agreement and the Lease Deed.

29. NOTICES

- 29.1. Any notice and other communications provided for in this Agreement shall be in writing and shall be first transmitted by facsimile transmission/ electronic transmission, and then confirmed by postage, prepaid registered airmail or by internationally recognised courier service, in the manner as elected by the Party giving such notice to the following addresses:

(a) In the case of notices to the Lessor:

Address	:	Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113
Attention	:	Mr Alope Bhuniya, Chief Executive Officer
Telephone	:	022 62212400
Email	:	legal@ascendas-firstspace.com

(b) In the case of notices to the Lessee:

Address : C/o TPI Composites, Inc. 8501 N. Scottsdale Road, Suite 100 Scottsdale, AZ USA 85253

Attention : General Counsel and Chief Financial Officer
Telephone : (480) 305-8910
Email: sfishbach@tpicomposites.com

Attention: Chief Financial Officer
Telephone: (480) 305-8922
Email: bsiwek@tpicomposites.com

Copy of the notice shall be marked to:

Khaitan & Co LLP
Simal , 7/1, Ulsoor Road, Bangalore 560 042, Karnataka, India.
Attn: Rashmi Deshpande
Email: rashmi.deshpande@khaitanco.com

CBRE
Attn: Christian Perez Giese
Email: christian.perezgiese@cbre.com

- 29.2. All notices shall be deemed to have been validly given on (i) the business date immediately after the date of transmission with confirmed answer back, if transmitted by facsimile transmission, or (ii) the business day after the date of sending, if transmitted by courier or registered post.
- 29.3. The Parties may, from time to time, change their address or representative for receipt of notices provided for in this Agreement by giving to the other Party not less than 30 (thirty) days prior written notice.

30. MISCELLANEOUS

- 30.1. **Limitation of Liability** : Any reference to any losses, damage, claims, compensation, indemnity etc., to be payable by one Party to the other Party, shall not include any incidental, consequential, penal, exemplary or like damages, or any direct or indirect loss of profits or any claim for loss of opportunity or any action in tort even if advised of the possibility of such claims.
- 30.2. **Reservation of Rights** : No forbearance, indulgence, relaxation or inaction by any Party at any time to require performance of any of the provisions of this Agreement shall in any way affect, diminish or prejudice the right of that Party to require performance of that provision. Any waiver or acquiescence by any Party of any breach of any of the provisions of this Agreement shall not be construed as a waiver or acquiescence of any right under or arising out of this Agreement or of the subsequent breach, or acquiescence to or recognition of rights other than as expressly stipulated in this Agreement.
- 30.3. **Severability** : The Parties agree that the covenants, obligations and restrictions in this Agreement are reasonable in all circumstances. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under any present or future law, (i) such provision shall be fully severable; (ii) this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a part hereof;

(iii) the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance here from; and (iv) in lieu of such illegal, invalid, or unenforceable provision, there shall be added a legal valid and enforceable provision as similar in terms and effect to such illegal, invalid or unenforceable provision as may be possible.

- 30.4. **Amendments** : No modification or amendment to this Agreement and no waiver of any of the terms or conditions hereto shall be valid or binding unless made in writing and duly executed by the Parties.
- 30.5. **Entirety** : This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof to the exclusion of all other understandings and assurances, either written or oral between the Parties including the LOI. The Recitals, Schedules and Annexures shall be deemed to form a part of the body of the Agreement and shall be binding and enforceable.
- 30.6. **Specific Performance** : In the event that a Party commits a default of the terms of this Agreement then, the non-defaulting Parties shall be entitled to such remedies, including remedies by way of damages and/or specific performance, as may be permitted under Applicable Laws, in addition to its rights and remedies under this Agreement.
- 30.7. **Anti-Corruption** :
- 30.7.1. The Parties agree and confirm that, in connection with the proposed transaction contemplated by this Agreement, the Parties will comply with all Anti-Corruption Laws and not otherwise take any steps that would subject the Parties, its Affiliates or any of their respective representatives to any civil or criminal penalties or loss of benefits. Each of the Lessor and the Lessee represents and warrants that neither the Party nor any director, partner or officer associated with or acting on behalf of the Party has used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; made any direct or indirect unlawful payment to any foreign or domestic Government Official or employee from corporate funds; or violated or is in violation of any provision of the Anti-Corruption Laws.
- 30.7.2. The Parties will not:
- (a) pay, promise to pay or authorize the payment of any money or anything of value (including, without limitation, any gifts, entertainment or travel), directly or indirectly, to any person for the purpose of or where there is a reasonable likelihood of (i) inducing such person to perform improperly, or fail to perform, his or her function, (ii) securing an improper advantage, or (iii) inducing such person to use his or her influence to affect or influence any act or decision. The Parties acknowledge that the prohibitions in this Clause include any situation in which the person making the payment knows, believes or is aware of a reasonable likelihood that the person receiving the payment will pass the payment through, in whole or in part, to any person for any of the foregoing prohibited purposes.
 - (b) retain any Government Official, or any person whose immediate family member is a Government Official, in an official or unofficial capacity, to perform any service for the Parties or their respective Affiliates in relation to the transaction contemplated in this Agreement; and

- (c) pay or commit to pay anything of value directly to or indirectly for the benefit of (including, without limitation, in cases in which there is a reasonable likelihood that the person receiving the payment will pass the payment through to) any Government Official.

30.7.3. The Parties further agree and confirm that to the best of their respective knowledge neither the Parties nor any of its officers, employees or persons associated with it:

- (a) has been convicted of any offence involving the Anti-corruption Laws;
- (b) is the subject of any investigation, inquiry or enforcement proceedings by any governmental, administrative or regulatory body regarding any offence or alleged offence under the Anti-corruption Laws; or
- (c) has been or is listed by any government agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programs or other government contracts.

30.7.4. The Parties will promptly notify the other Party if, at any time during the term of this Agreement, the Parties breach any portion of this Clause or the Parties would not be able to repeat the confirmations made in this Clause at the relevant time.

30.8. **Anti-Money Laundering Laws :** Each of the Lessor and the Lessee represent that their respective operations is and has been conducted at all times in compliance with Anti-Money Laundering Laws and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Lessee with respect to Anti-Money Laundering Laws is pending and no such actions, suits or proceedings are threatened or contemplated.

30.9. **Whistle Blowing :**

- (a) Lessor believes in the conduct of the affairs of its constituents in a fair and transparent manner by adopting highest standards of professionalism, honesty, integrity and ethical behaviour. Anyone aggrieved or coming to know of an alleged act that constitutes an improper or unethical activity or conduct by any of our employees can report the same for further investigation and inquiry using the following whistleblowing channels:

Mr. Ammaiappan J.
Head-Legal, Ascendas Singbridge Pte. Ltd.
ammaiappan.j@ascendas-singbridge.com

- (b) All reports received in this whistleblowing channel will be received and will be handled confidentially, to the extent permitted by law and consistent with Lessor's requirements to investigate and address the reported conduct.
- (c) However, upon investigation, if a complaint is found to be frivolous or made with unsubstantiated allegations, the complainant and/or its associate companies / firms may be banned by Lessor or its affiliates for a limited period of time at the discretion of Lessor.

- 30.10. **Relationship between Parties** : Nothing contained in this Agreement shall be deemed or construed by the Parties or by any third part or court to create a relationship of principal and agent or employer and employee or of partnership or of joint venture or of any association between the Lessor and the Lessee, save and except that of landlord and tenant.
- 30.11. **Time** : The Parties agree that time is of the essence in the performance of the Parties' respective obligations. If any time period specified herein is extended in writing by the Parties, such extended time shall also be of the essence;
- 30.12. **Survival** : The provisions of Clauses, 1 (Definitions and Interpretations), 20 (Indemnity), 26 (Confidentiality), 27 (Governing Law, Jurisdiction and Dispute Resolution), 29 (Notices) and 30 (Miscellaneous) and any other provision intended to survive to give effect to the provisions of this Agreement shall survive the expiry or termination of this Agreement.

[The remainder of the page is intentionally left blank for the signature page to follow]

IN WITNESS WHEREOF, the Parties have executed this Agreement to Lease as of the date first written above

SIGNED and DELIVERED for and on behalf of the **LESSOR**

AARUSH (PHASE III) LOGISTICS PARKS PRIVATE LIMITED

/s/ Navin Kumar

Authorised Signatory

Name: Mr Navin Kumar

Designation: Authorised Signatory

AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED

/s/ Navin Kumar

Authorised Signatory

Name: Mr Navin Kumar

Designation: Authorised Signatory

AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED

/s/ Navin Kumar

Authorised Signatory

Name: Mr Navin Kumar

Designation: Authorised Signatory

SIGNED and DELIVERED for and on behalf of the **CONFIRMING PARTIES**

AARUSH LOGISTICS PARKS PRIVATE LIMITED

/s/ Navin Kumar

Authorised Signatory

Name: Mr Navin Kumar

Designation: Authorised Signatory

AARUSH (PHASE II) LOGISTICS PARKS PRIVATE LIMITED

/s/ Navin Kumar

Authorised Signatory

Name: Mr Navin Kumar

Designation: Authorised Signatory

SIGNED and **DELIVERED** for and on behalf of the **LESSEE**

PROSPECT ONE MANUFACTURING LLP

/s/ Bhupesh Chhajer

Authorised Signatory

Name: Mr Bhupesh Chhajer

Designation: Authorised Signatory

WITNESSES

In the presence of:

Name:

Address:

In the presence of:

Name:

Address:

SCHEDULE A – DESCRIPTION OF THE SCHEDULE LAND

All that piece and parcel of the vacant land totally measuring approximately 41 acres (as per the Field Measurement Book), as shown in the plan and shaded in blue color in Annexure 2 (Sketch of Schedule Land), situated at comprised in Survey Nos 232/2A1, 2A2(part), 234/1, 2, 3(full), 4 to 11 (part), 12 to 17(full), 235/1 to 11(full), 236/1&2(full), 237/1(full), 239/1&2(full), 240/1A, 1B, 1C & 1D(full) of Mettupalayam Village, Sriperumbudur Taluk, Kancheepuram District and lands bearing Survey Nos 270/4&5(part), 7&8(full), 271/2A, 2B & 2C(part), 272/1A, 1B, 1C, 1D, 1E & 2(full), 273/4(full), 275/1 to 4(full), 276(full), 277/1&2(full), 278/1 to 3(full), 279/1(full) situated at Echoor Village, Sriperumbudur Taluk, Kancheepuram District, Chennai, Tamil Nadu, India. The Schedule Land is bounded as follows:

North by	Aarush Logistics Park Land
South by	Echoor – Mettupalayam Village Road
East by	Aarush Logistics Park-15m Spine Road
West by	Neighbor's Land

SCHEDULE B – DESCRIPTION OF THE BUILDING

1.1 Factory Block	Usage : Industrial
	<p>Areas: This building contains</p> <ol style="list-style-type: none"> 1) 5 Bays (Finishing Bay 1 + Molding Bay 1 + Molding Bay 2 + Molding Bay 3 + Finishing Bay 2 + Production Passage) 2) Raw Material Warehouse, Glass Cutting, Buffer Stock, Tool Crib and Others, DOB, Locker Area (M&F), Lobby, Back Office with rest room arrangements, Passenger Lift Core 1 No 3) Mezzanine – Dining & Wash Area, Office & QA Lab

Building Parameters		
Type	Multi-Span	
Width (m)	200m Centerline to Centerline of Steel Column	
Length (m)	295m Centerline to Centerline of Steel Column	
Clear Height (m) – Eave	13.0m	
Width Module (m)	5 @ 40m centerline of Steel Column	
Roof Slope	4Deg. Subject to final design	
Bay Spacing (m)	10m	
Mezzanine	35m x 80m (load carrying capacity – 500 kg/sqm)	
Gable end expansion	Provision to Expand on West Side towards Maneuvering Area	
Block Masonry Wall Height (Periphery)	3.6m (all around)	
Fire Separation Wall	Full Height Wall between Production Block and Mezzanine Block @35m from East to West	
Flooring	5T/Sqm non FM2 flooring on Production & FM2 standard on Raw Material warehouse – Min, 200mm thickness, hardener & polishing	
Crane Loads	20MT crane – Max 24 Nos distribution across all 5 bays	
Finished Floor Height (FFL)	750mm above internal road level	
Crane Hook Clear Height	10m from FFL	
AHU Provisions	For molding bays AHU's are positioned @ the ridge level – 500 kg/sqm on platform locations and walkway for accessing AHU rooms Access Ladder & Good Lift Provision for accessing roof	
Design Loads: As per FM recommendation		
Design Live Load (kN/m2) on roof	1.0 (20 Psf) – as per FM recommendation	
Design Live Load (kN/m2) on frame	1.0 (20 Psf) – as per FM recommendation	
Wind Speed (mph)	55 m/sec (123 mph) – as per FM recommendation	
Roof & Wall Insulation	FM Approved Insulation Material	
Earthquake Zone	Zone 3	
Additional Collateral Load (kN/m2)	0.15KN/Sqm for purlin 0.35KN/Sqm for rafter	

1.2 Utility Block	<ol style="list-style-type: none"> 1) Type of Structure: RCC Framed Structure (as per IS code) 2) Building Height: 5m clear Electrical Room ((G + 1) & Vacuum Pump Room – Double Height, 10m clear height 3) Other Utility Buildings 5m clear, single story
1.3 Haz-Mat Room	<ol style="list-style-type: none"> 1) Type of Structure : RCC Framed Structure (as per IS code) 2) Building Height – 7.5m clear
1.4 Security Block	<ol style="list-style-type: none"> 1) Type of Structure RCC Framed Structure (as per IS code) 2) Building Height – 4.5m clear
1.5 Waste Storage Room	<ol style="list-style-type: none"> 1) Asphaltting with Chain Link Fence & Gate Arrangement

SCHEDULE C – TIMELINES SCHEDULE

Project Timelines		
Sr.No	Particulars	End Date
1	ATL & Deposit	02-02-2019
2	Approval for Design & Detailed Engineering	24-01-2019
3	Approvals	24-05-2019
4	Tender Process & Award of Contract	01-06-2019
5	Infra, Building, Utilities Construction	
	- Infra Development	31-12-2019
	- Blade Shop	15-01-2020
	- Utility Buildings	31-12-2019
	- Blade Storage Area	15-01-2020
	- Open Areas	15-03-2020
6	-Handing Over – Ref Schedule – F	15-01-2020
7	-Substantial Completion	15-03-2020

SCHEDULE D – WARM SHELL SPECIFICATIONS

Production Block		
A	General	
1	Clear Height @ Eaves	13.0m
2	Frame Type - PEB	Rigid Frame – multi span – Bay Width – 40m c/c
3	Gable Type - PEB	Single
4	Gutters & Downspouts	0.5mm TCT silicon modified polyester colour coated galvalume sheet of minimum 0.5mm thick 275 gsm galvanized sheet
5	Roofing Material	Metal Panels - 0.55mm thick - standing seam – non FM stanard
6		Profiled, TCT plain single skin galvalume : colour bare galvalume
7	Roof Slope	As per design
8	Wall Panel	Metal Panels - 0.50mm thick non FM
9		Profiled, pre-coated steel wall panels, trapezoidal type, colored profile sheet
10	Roof & Wall Light Panels	On roof : None On wall : as per design
11	Roof Insulation	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm – FM Approved Material
12	Wall Insulation	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm – FM Approve Material
13	Docking Type	Internal docking
14	Canopy Depth	5.0m wide
15	Canopy Height - Top of Apron	5.5m (or) as per final design
16	Canopy Slope	as per design
17	Mezzanine Structure For Office	5.0m clear height from FFL (as per TPI requirement) with services
18	Mezzanine Load For Office Use	500 Kg / Sqm (Metal Deck Sheeting with concrete finish - average 150mm thickness)
19	Roof Access Ladder	Considered
B	PEB DESIGN PARAMETERS	
	Design Code	IS
	Live Load	0.75KN/sqm
	Mezzanine floor load	5.0 KN/sqm
	Collateral load on rafter	0.35 KN/sqm
	Collateral load on purlin	0.15 KN/sqm
	Basic wind load	50m / sec
	Seismic Zone	III
	Importance Factor & Response reduction factor	1 & 4
	Crane loads on structure & foundation	For 20T crane design
	Building Floor Height	750mm from internal road level , Varying from 0.00 to 750mm matching with internal road level
	Type of Flooring	VDF with jointed screed concrete (Spec : 375mm non plasticity soil fill + 200mm WMM + HDPE 300 micron vapour barrier sheet + 200mm thick M25 grade concrete with steel bars or steel fibres + Floor Dry Shake Hardener 4 to 5 Kg / Sqm)
	Slab Load	5 ton per sqm UDL
	Flatness of Floor	Spec to follow : Polished floor
	Slab Sealer / Hardener	MM80 / FOSROC / SIKA / BASF
	Floor Joint Sealant	Construction / Contraction / Isolation / Expansion Joints as per Industrial Flooring Standards.

	Anti-Termite Treatment	Considered
	Cable Trenches on flooring	Considered & locations to be finalized – Tentative – 1820 Rmt
C	Perimeter Wall & Inner Walls	
	Perimeter Hard Wall	Hard Wall
	Perimeter Hard Wall Height	3.6m
	Perimeter Hard Wall Material	200mm thick Solid block wall, plastered on both sides and painted
D	Doors & Windows	
	Rolling Shutters- plant & maneuvering area	7.32m x 7.32m - 4 Nos
	Rolling shutter Width (Other Areas)	4.0m
	Drive-In Doors	Sliding doors
	Fire Escape Doors	2 Hrs fire rated Hot Pressed Metal Door with standard accessories - minimum size - 0.9m x 2.1m and compliant with codes
E	Dock Equipment	
	Dock Pit- Nos	5
	Dock guards/bumpers	Considered of Gandhi Automation / Maini or similar make
F	Paint & Finishes	
	Steel, Flashings, Doors and Frames	Finish with a grey white (Ral 9002) painting will be added to the indoor side.
	Exterior Wall For Office Entrance	Exterior grade emulsion paint.
	Interior Building Painting For Toilet Block	One coat of primer plus 2 coats of emulsion.
	Finish to primary members for steel building structural members	Surface preparation plus one coat of primer plus one coat of enamel paint.
	Lightning arrestor	As per statutory requirement
G	Paint, Finishes & Improvements	
	Toilet Cubicle (Male / Female)	Design as per NBC (local code)
		- Vitrified Tiles as per architect design
		- Standard UPVC pipes for water / waste water lines
		- Standard sanitary fixtures (Jaguar / Parryware / Hindware)
	Office Elevation- Treatment	16.0m wide
	Total Nos. of Office Entries	1
	Elevation Treatment	ACP & Glazing as per design
H	Open Areas	
	Manoeuvre Area- Access to production areas	RCC, as per design.
	Hard paved blade storage area	Hard Paved, as per design.
I	Common Areas	
	Fencing & Gates	1.8m heigh barbed wire fencing with intermittent pipe support
	Gate House	RCC Building as per design
	Roads, circulation areas	Asphalt road as per design
	Storm Water Drainage Network	RCC storm water drainage system as per slope
	STP	Common STP
	Domestic water supply	Water supply from bore well supply
	Fire water supply	Common Fire Water Tank – FM Compliance

SCHEDULE E – LESSEE IMPROVEMENTS

Lessee Improvements		
A	PEB Parameters	
1	Design Code	FM
	Live Load	1.0 KN/sqm
	Basic wind load	55m / sec
	Crane girders & brackets	To Carry a load of 20T of 24 cranes across all 5 bays
	Roof Insulation (FM Approved)	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm
	Wall Insulation (FM Approved)	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm
	Lift Core	Civil works connected with this work
B	Fire Fighting System	
	Fire Hydrant System, Sprinkler System, Smoke Detectors, Fire Alarm, Etc.,	Basic Design code : National Building Code (NBC) -2016 – PART IV & for sprinkler demand - FM3-26 & FM8-9
	Fire Fighting System	FM Global
C	Electrical System	
	10.5MVA to 12 MVA Power	Incoming & distribution, infrastructure & approvals
	Electrical System, including lighting in production, storage & office, open storage areas and distribution for utilities	As per design complete with sub main distribution boards and its components i.e. breakers, fuses etc.
	DG Set	As per requirement
	UPS System – 800 KVA	As per requirement
	Power Connection	Development & Liasoning
D	HVAC System	
	Air conditioning system	As per design. Includes all operation areas hazardous storage, waste storage, paint kitchen, WC areas, and HVAC room (as per space list)
	Additional HVAC support for Paint Booths	As per design of Paint booth supplier
	AHU Provisions	For molding bays AHU's are positioned @ the ridge level – 500 kg/sqm on platform locations and walkway for accessing AHU rooms Access Ladder & Good Lift Provision for accessing roof
E	CCTV & Security System	As per design
	Office Interior	
	Office interior, including partition, floor, walls etc.	Office interiors. HVAC for office included in A.11, excluding office furniture's.
G	Additional Buildings	
	Hazardous Store – 525 sq mt	RCC Building as per design
	Waste storage area – 975 sq mt	Asphalt floor Surface with MS Fence along periphery for an height of 1.8m, as per statutory requirements
	Utility Block- 2540 sq mt	RCC Building as per design
H	Others	
	Joineries / Light Fixtures / Other Equipment's	Additional Rolling Shutters, Trenches, Fire Wall, Dock Levellers, Lighting of 600 & 800 Lux

SCHEDULE F – HANDOVER CONDITION

- 1) Date of Handing Over: 15th January, 2020
- 2) Permanent power for facility however MB1 and FB1 infra complete with sub-distribution to site panels shall be fully ready (up and running), subject to TPI application submission on or before 01.03.2019 along with initial deposit.
- 3) MB1 & FB1 Structural column bracket and gantry girder to be ready by 15-09-2019 to commence rail work and other ancillary works to have crane operational by 15-12-2019.
- 4) Vacuum Pipework and Automation (MB1 and MB2) vacuum pumps rooms shall be ready to install pumps before and pump electrical panels 4. Compressed air pipework for all machinery, dust collection areas, compressors themselves - up and running, to achieve this milestone the subject utility block shall be partly made ready by AFS on or before 30.09.2019.
- 5) MB1 & MB2 Full trenches to be made ready by on or before 15.11.2019
- 6) Roof Closure and 3 sides closure (full)
- 7) Lighting fixtures functional at MB1-FB1
- 8) Floor concrete and trenches
- 9) Sprinkler pipeline tested only.
- 10) A temporary office space for at least 80 people and lunch space for 200 people
- 11) Glass kitting at least infra for 2 machines (eastman glass cutting machines) and jib cranes. (including ups cabling, power and pressurized air to each machine) – Full Functional condition
- 12) Partial completion of HVAC system for production areas, glass cutting and warehouse and Haz-Mat storage).
- 13) Utility Building – 100% completion
- 14) TPI-3rd Party schedule dated 24th January, 2019 (which is attached hereto) deadlines to be aligned
- 15) AFS to support and work along with TPI team for installing 1st mold by 1st January, 2020

SCHEDULE G – DESCRIPTION OF THE MAINTENANCE SERVICES

COMMON AREA MAINTENANCE SCOPE

Aarush Logistics Park Private Limited, is responsible for maintenance and upkeep of common area and maintenance of all items built as common park infrastructure and the charges for the same is classified as 'CAM Charges'. CAM Charges shall include among other things the following:

1. Costs incurred towards maintenance of all common areas including but not limited to:
 - a. Boundary Wall, Security Rooms, Security Gates, Boom Barriers and other security systems
 - b. Roads, Pavements and Road Furniture
 - c. Common Parking
 - d. Lawns and Landscape
 - e. Fire Tank & Fire System will be maintained in compliance with FM standards
 - f. Water Distribution System
 - g. Sewage Treatment Plant (STP) System
 - h. Electrical Systems- Park Infrastructure
 - i. Street Lighting
 - j. Common Telecom and Telecommunication System
 - k. Drainage System
 - l. Common Restrooms
 - m. Advertising and Signage for the Park
 - n. CCTV
 - o. Solid Waste Disposal

2. Costs incurred towards operations and upkeep of the common areas, operation of plant and machinery required for the park including but not limited to:
 - a. Security systems including guards and other systems deployed for the same
 - b. Electricity and consumables for operation of Street Lights, STP Systems, Water Systems, Fire Systems, Solar Systems,
 - c. Landscaping
 - d. General cleanliness and upkeep

SCHEDULE H – RENTAL SCHEDULE

FOR BASE RENT						
Lease Term (from Rent Commencement Date)	Leasable Area of the Building	Base Rent Per Square Feet Per Month (In INR)	Base Rent Per Month (In INR)	GST* @ 18% (In INR)	Total Base Rent Per Month (In INR)	Escalation Rate
Year 1	7,76,280.00	21.30	1,65,34,764.00	29,76,257.52	1,95,11,021.52	NIL
Year 2	7,76,280.00	22.26	1,72,78,828.38	31,10,189.11	2,03,89,017.49	4.50%
Year 3	7,76,280.00	23.26	1,80,56,375.66	32,50,147.62	2,13,06,523.28	4.50%
Year 4	7,76,280.00	24.31	1,88,68,912.56	33,96,404.26	2,22,65,316.82	4.50%
Year 5	7,76,280.00	25.40	1,97,18,013.63	35,49,242.45	2,32,67,256.08	4.50%
Year 6	7,76,280.00	26.54	2,06,05,324.24	37,08,958.36	2,43,14,282.60	4.50%
Year 7	7,76,280.00	27.74	2,15,32,563.83	38,75,861.49	2,54,08,425.32	4.50%
Year 8	7,76,280.00	28.99	2,25,01,529.20	40,50,275.26	2,65,51,804.46	4.50%
Year 9	7,76,280.00	30.29	2,35,14,098.02	42,32,537.64	2,77,46,635.66	4.50%
Year 10	7,76,280.00	31.65	2,45,72,232.43	44,23,001.84	2,89,95,234.27	4.50%

FOR OPEN AREA RENT					
Leasable Area of the Open Area	Open Area Rent Per Square Feet Per Month (In INR)	Open Area Rent Per Month (In INR)	GST @ 18% (In INR)	Total Open Area Rent Per Month (In INR)	Escalation Rate
7,75,095.00	7.30	56,58,193.50	10,18,474.83	66,76,668.33	Nil
7,75,095.00	7.63	59,12,812.21	10,64,306.20	69,77,118.40	4.50%
7,75,095.00	7.97	61,78,888.76	11,12,199.98	72,91,088.73	4.50%
7,75,095.00	8.33	64,56,938.75	11,62,248.98	76,19,187.73	4.50%
7,75,095.00	8.71	67,47,500.99	12,14,550.18	79,62,051.17	4.50%
7,75,095.00	9.10	70,51,138.54	12,69,204.94	83,20,343.48	4.50%
7,75,095.00	9.51	73,68,439.77	13,26,319.16	86,94,758.93	4.50%
7,75,095.00	9.93	77,00,019.56	13,86,003.52	90,86,023.08	4.50%
7,75,095.00	10.38	80,46,520.44	14,48,373.68	94,94,894.12	4.50%
7,75,095.00	10.85	84,08,613.86	15,13,550.50	99,22,164.36	4.50%

FOR IMPROVEMENT RENT ESTIMATED

Leasable Area of the Open Area	Open Area Rent Per Square Feet Per Month (In INR)	Open Area Rent Per Month (In INR)	GST @ 18% (In INR)	Total Open Area Rent Per Month (In INR)	Escalation Rate
7,76,280.00	19.70	1,52,92,716.00	27,52,688.88	1,80,45,404.88	Nil
7,76,280.00	20.59	1,59,80,888.22	28,76,559.88	1,88,57,448.10	4.50%
7,76,280.00	21.51	1,67,00,028.19	30,06,005.07	1,97,06,033.26	4.50%
7,76,280.00	22.48	1,74,51,529.46	31,41,275.30	2,05,92,804.76	4.50%
7,76,280.00	23.49	1,82,36,848.28	32,82,632.69	2,15,19,480.98	4.50%
7,76,280.00	24.55	1,90,57,506.46	34,30,351.16	2,24,87,857.62	4.50%
7,76,280.00	25.65	1,99,15,094.25	35,84,716.96	2,34,99,811.21	4.50%
7,76,280.00	26.81	2,08,11,273.49	37,46,029.23	2,45,57,302.72	4.50%
7,76,280.00	28.02	2,17,47,780.80	39,14,600.54	2,56,62,381.34	4.50%
7,76,280.00	29.28	2,27,26,430.93	40,90,757.57	2,68,17,188.50	4.50%

SCHEDULE I – ADDITIONAL SPACE

[Attached separately]

ANNEXURE 1 – MASTER PLAN OF THE PROJECT

[Attached separately]

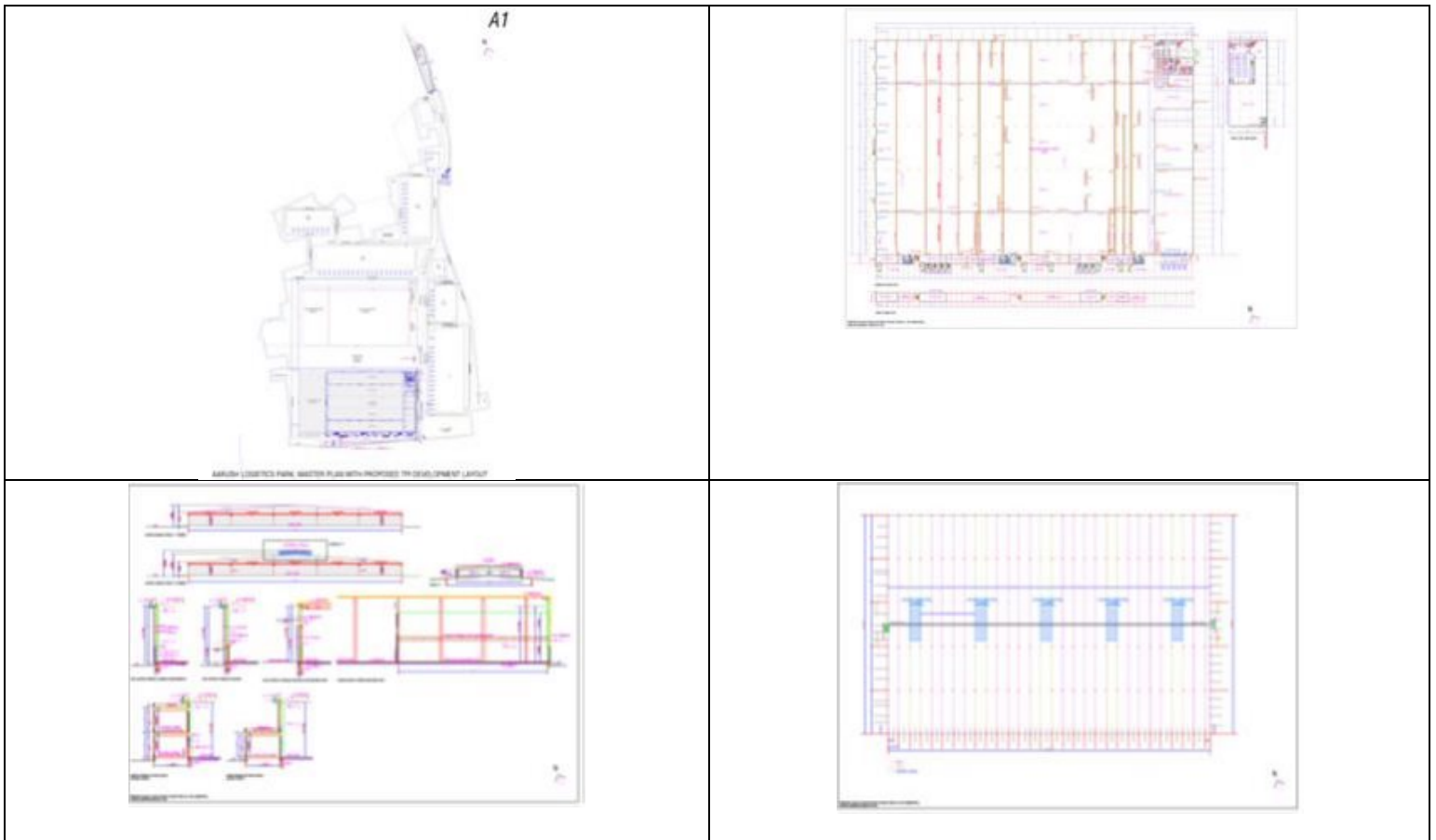
ANNEXURE 2 – SKETCH OF THE SCHEDULE LAND

[Attached separately]

ANNEXURE 3 – DETERMINATION OF BUILT UP AREA AND LEASABLE AREA

PHASE-1 AREA STATEMENT				
Sl.No	Particulars	Length (m)	Width (m)	Area (Sq.m)
A	Production Area			
	Production Hall #1 - Finishing	255.00	40.00	10,200.00
	Production Hall #2 - Molding	255.00	40.00	10,200.00
	Production Hall #3 - Molding	255.00	40.00	10,200.00
	Production Hall #4 - Molding	255.00	40.00	10,200.00
	Production Hall #5 - Finishing	255.00	40.00	10,200.00
	Shop floor passage	200.00	5.00	1,000.00
	Total - A			52,000.00
B	Office / Locker / Warehouse Etc.,			
	Lockers Area - GF	35.00	19.00	665.00
	Reception & Lobby - GF	35.00	7.00	245.00
	Passage - GF	35.00	5.00	175.00
	Tool Crib - GF	35.00	12.00	420.00
	Warehouse - GF	80.00	35.00	2,800.00
	Buffer Stock - GF	35.00	20.00	700.00
	Glass Cutting - GF	57.00	35.00	1,995.00
	Cafeteria and Dry Kitchen - Mezzanine	20.00	35.00	700.00
	Office Area - Mezzanine	60.00	35.00	2,100.00
	Other Operational Area			6,400.00
	Total - B			16,200.00
C	Other Covered Areas			
	Haz-Mat	35.00	15.00	525.00
	Waste Storage	39.00	25.00	975.00
	Security Building - 2 Nos - TBD			182.50
	Total - C			1,682.50
D	Utilities Building - (Ground Floor + First Floor)			
	Rest Room # 1	9.80	8.10	79.38
	First Aid Room	5.40	8.10	43.74
	Vacuum Pump Room #2	10.00	8.10	81.00
	Dust Collection #B-4	10.00	8.10	81.00
	Electrical Room #2	20.00	8.10	162.00
	AC Plant Room	10.00	8.10	81.00
	Paint Kitchen	20.00	8.10	162.00
	Spares Room	5.00	8.10	40.50
	Compressor Room	20.00	8.10	162.00
	Rest Room # 2	9.80	8.10	79.38
	Additional Space for Rooms	5.30	8.10	42.93
	Maintenance / Facility / Spares Room	15.00	8.10	121.50
	Dust Collection #1-2	10.00	8.10	81.00
	Electrical Spare Parts Room	20.00	8.10	162.00
	Step Up & UPS Room	5.00	8.10	40.50
	Electrical Room #1	20.00	8.10	162.00
	Rest Room # 3	9.80	8.10	79.38
	Additional Space for Rooms	5.50	8.10	44.55
	Vacuum Pump Room #1	20.40	8.10	165.24
	Electrical Room #1 (First Floor)	25.00	8.10	202.50
	Electrical Room #2 (First Floor)	20.00	8.10	162.00
	Total - D			2,235.60
E	Open Storage Areas			
	Blade Storage Area			51,000.00
	Blade Maneuvering Area	200.00	90.00	18,000.00
	Parking Area - 1	100.00	24.00	2,400.00
	Parking Area - 2	38.00	16.00	608.00
	** RMG Yard & Sub-station - To be added after scheme finalization			-
	Total - E			72,008.00
AREA SUMMARY				
Chargeable BUA >>> { A+B+C+D}				72,118.10
Chargeable Open Storage Area >>> { E}				72,008.00
Chargeable BUA >>> { SQ.FT}				7,76,280.00
Chargeable Open Storage Area >>> { SQ.FT}				7,75,095.00

ANNEXURE 4 – FINAL DRAWINGS



Ugur Ozcetin

Dear Sampath,
I hereby approve with below notes, all attached drawings for further proceeding with construction.

Thursday
1/24/19
11:39am

1. Restroom qty, parking slot qty and all other structural elements (which are not related with FM Global) need to be in line with local codes in practice and legal requirements.
2. Office internal layout is subject to change in future according to fit-out works interior design. However it does not impact any of your structural elements.

Regards
Ugur

ANNEXURE 5 – SKETCH OF OPEN AREA

[Attached separately]

ANNEXURE 6 – AGREED FORM OF LEASE DEED

[to be stamped appropriately and registered]

LEASE DEED

BY

- 7. AARUSH (PHASE III) LOGISTICS PARKS PRIVATE LIMITED (AS LESSOR 1)**
- 8. AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED (AS LESSOR 2)**
- 9. AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED (AS LESSOR 3)**

ALONG WITH

- 10. AARUSH LOGISTICS PARKS PRIVATE LIMITED (AS CONFIRMING PARTY)**
- 11. AARUSH (PHASE II) LOGISTICS PARKS PRIVATE LIMITED (AS CONFIRMING PARTY)**

IN FAVOUR OF

PROSPECT ONE MANUFACTURING LLP

Privileged & Confidential

TABLE OF CONTENTS

1.	DEFINITIONS AND INTERPRETATIONS:	70
2.	GRANT OF LEASE	75
3.	HANDOVER OF THE DEMISED PREMISES	75
4.	TERM AND RENEWAL	76
5.	RENT FOR THE DEMISED PREMISES	77
6.	LESSEE IMPROVEMENTS AND IMPROVEMENT RENT	78
7.	SECURITY DEPOSIT	79
8.	REPRESENTATIONS, WARRANTIES AND COVENANTS	81
9.	USE OF THE DEMISED PREMISES	84
10.	ALTERATIONS AND REPAIRS	86
11.	MAINTENANCE	87
12.	INFRASTRUCTURE AND OTHER AMENITIES	88
13.	INSPECTION	90
14.	TAXES	90
15.	ASSIGNMENT AND SUBLETTING	90
16.	INSURANCE	91
17.	INDEMNITY	91
18.	SALE, MORTGAGE AND CHARGES	93
19.	LOCK IN AND TERMINATION	93
20.	REINSTATEMENT	94
21.	FORCE MAJEURE	95
22.	ANTI-CORRUPTION LAWS & ANTI-MONEY LAUNDERING LAWS	97
23.	GOVERNING LAW, JURISDICTION AND DISPUTE RESOLUTION	98
24.	COSTS AND STAMP DUTY	99
25.	NOTICES	99
26.	MISCELLANEOUS	41
	SCHEDULE A – DESCRIPTION OF THE SCHEDULE LAND	100
	SCHEDULE B – DESCRIPTION OF THE BUILDING	105
	SCHEDULE C - WARM SHELL SPECIFICATIONS	106
	SCHEDULE D – LESSEE IMPROVEMENTS	110
	SCHEDULE E – HANDOVER CONDITION	111
	SCHEDULE F – DESCRIPTION OF THE MAINTENANCE SERVICES	112
	SCHEDULE G – RENTAL SCHEDULE	113
	ANNEXURE 1 – MASTER PLAN OF THE PROJECT	114
	ANNEXURE 2 – SKETCH OF THE SCHEDULE LAND	115
	ANNEXURE 3 – SKETCH OF OPEN AREA	116
	ANNEXURE 4 – LOCATION OF STORAGE AREA	117
	ANNEXURE 5 – LIST OF APPROVALS	118

LEASE DEED

This LEASE DEED (“ **Lease Deed** ”) is made and executed at Chennai on [●].

BY

6. **AARUSH (PHASE III) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70109TN2017PTC114953, PAN No AAPCA1642J, represented by it’s authorized signatory [●], *vide* Board Resolution dated [●] (hereinafter referred to as the “ **Lessor No 1** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE FIRST PART;**
7. **AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70109TN2017PTC114902, PAN No AAPCA1734K, represented by it’s authorized signatory [●], *vide* Board Resolution dated [●] (hereinafter referred to as the “ **Lessor No 2** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE SECOND PART ;**
8. **AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70200TN2017PTC114901, PAN No AAPCA1733Q, represented by it’s authorized signatory [●], *vide* Board Resolution dated [●] (hereinafter referred to as the “ **Lessor No 3** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE THIRD PART ;**

Each of the Lessor No 1, Lessor No 2 and Lessor No 3 are hereinafter, wherever the context so necessitates or admits, collectively referred to as the “ **Lessor** ”.

ALONG WITH

9. **AARUSH LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70100TN2016PTC113056, PAN No AAPCA0725Q, represented by it’s authorized signatory [●], *vide* Board Resolution dated [●] (hereinafter referred to as the “ **Confirming Party No 1** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE FOURTH PART ;**
10. **AARUSH (PHASE II) LOGISTICS PARKS PRIVATE LIMITED**, a company incorporated under the Companies Act, 2013, and having its registered office at Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani Chennai 600113, CIN No U70109TN2017PTC114899, PAN No AAPCA1735J , represented by it’s authorized signatory [●], *vide* Board Resolution dated [●] (hereinafter referred to as the “ **Confirming Party No 2** ” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE FIFTH PART ;**

Each of the Confirming Party No 1 and Confirming Party No 2 are hereinafter, wherever the context so necessitates or admits, collectively referred to as the “ **Confirming Parties** ”.

AND

PROSPECT ONE MANUFACTURING LLP, a limited liability partnership incorporated under the provisions of the Limited Liability Partnership Act, 2008 and having its registered office at 156/1, Shop No 16. SMR Sartaz Plaza, Jupiter Colony, Sikh Road, Secunderbad, Hyderabad, Telangana 560 009, LLPIN AAN-4797, PAN AAWFP7794C, represented by its designated partner, *vide* resolution passed by its partner TPI Holdings Switzerland GmbH dated 30 January 2019 (hereinafter referred to as the “**Lessee**” which expression shall, unless repugnant to the meaning or context thereof, be deemed to mean and include its successors-in-interest and permitted assigns), **OF THE SIXTH PART** ;

(Each of the Lessors and the Lessee are hereinafter collectively referred to as the “Parties” and individually as a “Party”.)

(Each of the Lessors, confirming parties and the Lessee are hereinafter collectively referred to as the “Parties” and individually as a “Party”.)

WHEREAS:

- I. The Lessor and the Confirming Parties are the absolute owners of land totally measuring about 124.5 acres in Sriperumbudur Taluk, Kancheepuram District, Chennai, Tamil Nadu, India (hereinafter referred to as the “**Project Land**”) and are in the process of developing upon the Project Land an industrial and logistics park which will comprise of manufacturing facilities and warehouses along with related services and amenities, known as "Aarush Logistics Park" (“**Project**”). The preliminary Master Plan of the Project is attached as **Annexure 1**.
- J. The Lessee is engaged in the business of manufacturing machineries and equipment, engineering and storage of composite wind blades and other composite structures as well as the manufacturing of tooling used for manufacturing of composite wind blades and other composite structures and activities incidental to the foregoing (“**Permitted Use**”) and evinced interest to take on lease a built-to-suit manufacturing facility comprising buildings and storage area for its Permitted Use. The Lessor has represented that the Schedule Land is permitted to be used for development of industrial buildings.
- K. The Lessor, Confirming Parties and the Lessee had entered into an Agreement to Lease dated 4 February 2019 (“**Agreement**”) wherein the Lessor had agreed to construct and develop a built to suit facility for the Lessee on a portion of the Project Land measuring approximately 41 acres comprised in Survey Nos 232/2A1, 2A2(part), 234/1, 2, 3(full), 4 to 11 (part), 12 to 17(full), 235/1 to 11(full), 236/1&2(full), 237/1(full), 239/1&2(full), 240/1A, 1B, 1C & 1D(full) of Mettupalayam Village, Sriperumbudur Taluk, Kancheepuram District and lands bearing Survey Nos 270/4&5(part), 7&8(full), 271/2A, 2B & 2C(part), 272/1A, 1B, 1C, 1D, 1E & 2(full), 273/4(full), 275/1 to 4(full), 276(full), 277/1&2(full), 278/1 to 3(full), 279/1(full) situated at Echoor Village, Sriperumbudur Taluk, Kancheepuram District, Chennai, Tamil Nadu, India (hereinafter referred to as the “**Schedule Land**”) as more fully detailed in **Schedule A** and attached hereto as **Annexure 2**.
- L. Pursuant to the terms of the Agreement, the Lessor has obtained all the necessary Approvals (as defined hereinafter) which are more fully set out in **Annexure 5** for development of the Schedule Land by constructing thereon the buildings, as per the mutually agreed terms.

- M. Accordingly, as part of the Project and as per the terms of the Agreement, the Lessor has developed and constructed for the Lessee on the Scheduled Land a building admeasuring about 7,76,280 square feet of total Built Up Area (hereinafter referred to as the “ **Building** ” and more fully described in Item 1 of **Schedule B**.) and open area admeasuring about 7,75,095 square feet (hereinafter referred to as the “Open Area” and identified in blue colour in the sketch attached as **Annexure 3**), the Schedule B and the Open Area shall be collectively referred to as “ **Demised Premises** ”.
- N. The Lessor has provided all documents of title in relation to the Schedule Land and the Demised Premises to the Lessee, including all Approvals for the construction and development of the Buildings, and the Lessee has satisfied itself as to the title of the Lessor.
- O. Pursuant to the compliance of the terms and conditions of the Agreement by both the Parties, the Lessor hereby grants on lease to the Lessee the Demised Premises and the Lessee hereby takes on lease the Demised Premises, for the Permitted Use and the Parties are executing this Lease Deed to reduce the terms and conditions agreed in respect of the lease of the Demised Premises in favour of the Lessee, to writing.

NOW THIS LEASE DEED WITNESSETH AND IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATIONS:

1.3. DEFINITIONS

Unless the context herein otherwise provides and apart from the terms which may be defined elsewhere in this Lease Deed, the following terms shall have the meanings ascribed to them hereto:

- (ggg) “ **Agreement** ” shall have the meaning ascribed to the term in Recital D;
- (hhh) “ **Affiliates** ” shall mean with respect to any Party, any other Person, which, directly or indirectly, Controls, is Controlled by, or is under common Control with such Party, such control being exercised by the controlling entity through its ability to direct the management and policies of the controlled entity through ownership of voting shares of the controlled entity, any group company, holding or subsidiary company, any transferee companies which have resulted from a merger;
- (iii) “ **Anti-Corruption Laws** ” shall mean (i) the U S Foreign Corrupt Practices Act, (ii) the U K Bribery Act 2010, (iii) the OECD Anti-Bribery Convention, (iv) the (Indian) Prevention of Corruption Act, 1988 and (iv) any other Applicable Laws (as defined hereinafter) dealing with improper or illegal payment, gifts or gratuities or commercial or governmental bribery;
- (jjj) “ **Approvals** ” shall mean all necessary statutory approvals, consents and permissions obtained by the Lessor for constructing and enabling occupancy of the Building as set out in **Annexure 5** ;
- (kkk) “ **Applicable Laws** ” shall mean any laws, statutes, rules, regulations, directives, bye laws, codes of conduct, mandatory guidelines which have legal effect, judgments, awards, decrees, writs, orders or requirements of any Governmental Authority and other binding actions or requirements of any government; department, agency or instrument of any government; regulatory authority, any court or arbitral tribunal in India for the time being in force;

- (lll) " **Anti-Money Laundering Laws** " means Prevention of Money Laundering Act, 2002 and as amended from time to time and includes all applicable financial recordkeeping and reporting requirements and any related rules, regulations or guidelines, which in each case are issued, administered or enforced by any Governmental Authority having jurisdiction over the Parties, or to which the Parties are subject.
- (mmm) " **Base Rent** " shall have the meaning ascribed to the term in Clause 8.1(a);
- (nnn) " **Building** " shall have the meaning ascribed to the term in Recital E;
- (ooo) " **Built Up Area** " shall mean the total built up area of the Building and other structures developed on the Schedule Land admeasuring [●] square feet and detailed in **Schedule B** ;
- (ppp) " **Business Days** " shall mean a day other than Sunday on which scheduled commercial banks are open for normal banking business in Mumbai, Hyderabad and Chennai, India;
- (qqq) " **Common Areas** " shall mean those portions of the Project not intended to be leased to or used exclusively by any tenant or occupant, including pedestrian passageways, infrastructure, sewage treatment plant, effluent treatment plant, generators, sidewalks, ramps, landscaped areas, planted areas and the grounds of the Project and other areas used in common by occupants of the Project;
- (rrr) " **Completion Certificate** " shall mean the certificate issued by the Lessor's Architect, certifying Substantial Completion of the Building in accordance with the Sanctioned Plan.
- (sss) " **Control** " (together with its correlative meanings, " **Controlled by** ", " **Controlling** " or "under common Control with") in relation to an entity (only for the purposes of the definition of the " **Affiliate** "), means (i) the possession, directly or indirectly, of more than 50 (fifty) percent of the voting rights of the Affiliate, and/or (ii) the possession, directly or indirectly and either by contract or otherwise, of the power to direct or cause the direction of the management, affairs or policies of the Affiliate, and/or (iii) controlling, directly or indirectly, the majority of the composition of the board of directors of the Affiliate;
- (ttt) " **Demised Premises** " shall have the meaning ascribed to the term in Recital E of this Lease Deed;
- (uuu) " **Encumbrance** " shall mean, (i) a security interest of whatsoever kind or nature including any mortgage, charge (whether fixed or floating), pledge, lien (including negative lien), hypothecation, assignment, deed of trust, title retention, or other encumbrance of any kind securing, or conferring any priority of payment in respect of, any obligation of any Person including without limitation, any right granted by a transaction which, in legal terms, is not the granting of security but which has an economic or financial effect similar to the granting of security under Applicable Laws, (ii) any interest, option, right of first offer, or refusal or transfer restriction in favour of any person, and (iii) any adverse claim as to title, possession, access or use affecting the rights of the Lessee to take on lease the Demised Premises and/or use and occupy the Demised Premises by the Lessee;

- (vvv) “ **Environmental Laws** ” shall mean and include Environment (Protection) Act, 1986, Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and any other applicable laws, and the rules, notifications etc. made thereunder and their amendments made from time to time;
- (www) “ **Final Drawings** ” shall mean the final designs, plans and specifications which detail the Lessor’s Work, which Final Drawings are attached to the Agreement;
- (xxx) “ **Force Majeure** ” shall have the meaning ascribed to the term in Clause 24.1;
- (yyy) “ **Governmental Authority** ” shall mean the Government of India or of any state or Union Territory in India, or any department thereof, any semi-governmental or judicial or quasi-judicial person in India or any person/authority (whether autonomous or not) who is charged with the administration of an Indian law;
- (zzz) “ **Government Official** ” shall mean an officer, employee or representative of any government entity, Governmental Authority, agency, instrumentality, political party or multilateral agency;
- (aaaa) “ **GST** ” shall mean the Goods and Services Tax applicable in India;
- (bbbb) “ **Handover Condition** ” shall mean the portion of the Lessor’s Work which has been completed in the Demised Premises, as on the Handover Date, to enable the Lessee to commence its fit outs, as detailed in **Schedule E**;
- (cccc) “ **Handover Date** ” shall mean [●];
- (dddd) “ **Initial Term** ” shall have the meaning ascribed to the term in Clause 7.1;
- (eeee) “ **Leasable Area** ” shall mean the total built up area of the Building and other structures developed on the Schedule Land for the Lessee, for which Rent will be payable by the Lessee, and as detailed in **Schedule B**;
- (ffff) “ **Lease Commencement Date** ” shall mean [●] (ie the Handover Date);
- (gggg) “ **Lease Deed** ” shall mean this lease deed along with the schedules and annexures attached hereto and any amendments hereto;
- (hhhh) “ **Lease Term** ” shall mean the Initial Term and the Renewal Term, where applicable;
- (iiii) “ **Lessee Delay** ” shall have the meaning ascribed to it in the Agreement.
- (jjjj) “ **Lessee Improvements** ” shall mean all improvements to the Demised Premises that have been or shall be carried out by the Lessor, at the request of the Lessee, as shown on the Final Drawings and detailed in **Schedule D** and in accordance with the provisions detailed in Clause 3 below;
- (kkkk) “ **Lessor’s Architect** ” shall mean the architect appointed by the Lessor for the development of the Schedule Land and the Building constructed thereon;
- (llll) “ **Lessor’s Work** ” shall mean the completion of the Warm Shell Specifications and the Lessee Improvements at the Demised Premises, at the Lessor’s cost, as per the Sanctioned Plan and Final Drawings, respectively in accordance with the provisions detailed in Clause 3 below;

- (mmmm) “ **Lock in Period** ” shall have the meaning ascribed to the term in Clause 19.1;
- (nnnn) “ **Maintenance Charges** ” shall have the meaning ascribed to the term in Clause 14.2;
- (oooo) “ **Maintenance Services** ” shall mean the maintenance services to be provided by the Lessor to the Common Areas of the Project as more fully detailed in **Schedule F** hereunder;
- (pppp) “ **Minor Variations** ” shall mean any modifications reasonably required: (i) to comply with all applicable legal requirements and/or to obtain or to comply with any required permit, if applicable, issued by the relevant Governmental Authority; (ii) to comply with any request by Lessee for change/modifications to Lessor’s Work provided such request has been accepted by the Lessor; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of Lessor’s Work with prior written intimation to the Lessee;
- (qqqq) “ **Major Repairs** ” shall mean and include any structural repairs to the Warm Shell Specifications, including but not limited to the interior and exterior part of the structure of the Demised Premises, leakage or seepage and replacement of all articles and equipment after the normal useful life has expired or when they cease to function as expected, roof space, exterior walls, load bearing walls, support beams, foundation, columns, parking facilities, exterior doors and windows, plumbing lines;
- (rrrr) “ **Open Areas** ” shall mean the open portion of the Schedule Land admeasuring approximately 7,75,095 square feet, identified in blue colour in the sketch attached hereto as **Annexure 3**;
- (ssss) “ **Open Area Rent** ” shall have the meaning ascribed to the term in Clause 8.1(b);
- (tttt) “ **Permitted Use** ” shall have the meaning ascribed to the term in Recital B;
- (uuuu) “**Person**” means an individual, a limited liability company, joint venture, a corporation, a partnership, an association, a trust, a division or operating group of any of the foregoing or other entity or organization.
- (vvvv) “ **Project** ” shall have the meaning ascribed to the term in Recital A and the preliminary master plan of the Project is attached hereto as **Annexure 1**;
- (wwww) “ **Project Land** ” shall have the meaning ascribed to the term in Recital A;
- (xxxx) “ **Renewal Term** ” shall have the meaning ascribed to the term in Clause 4.2;
- (yyyy) “ **Rent** ” shall have a collective reference to the Base Rent, Open Area Rent and Improvement Rent;
- (zzzz) “ **Rent Commencement Date** ” shall mean the 61st day from the Handover Date or the date of the Lessor providing Completion Certificate, whichever is later;
- (aaaa) “ **Sanctioned Plan** ” shall mean the plan of the Building in conformity with the Final Drawings, and sanctioned by the concerned Governmental Authority on [●], bearing No [●], in terms of which the Lessor has undertaken construction and development of the Building (including any amendments and modifications thereof sanctioned by the concerned Governmental Authority);

- (bbbb) “ **Security Deposit** ” shall have the meaning ascribed to the term in Clause 10.1 ;
- (cccc) “ **Schedule Land** ” shall have the meaning ascribed to the term in Recital C;
- (dddd) “ **Substantial Completion** ” shall mean the date on which the Lessor shall substantially complete or cause to be substantially completed the Lessor’s Work in a good and workmanlike manner, certified by the Lessor’s Architect subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with the use and occupation of the Demised Premises and the term “ **Substantially Complete** ” shall be construed accordingly;
- (eeee) “ **Target Completion Date** ” shall mean the date that is 60 (sixty) days from the Handover Date;
- (ffff) “ **Utility Charges** ” shall have the meaning ascribed to the term in Clause 0; and
- (gggg) “ **Warm Shell Specification** ” shall mean the minimum specifications provided by the Lessor to the Schedule Land and Building as more fully detailed in **Schedule C**.

1.4. INTERPRETATION

- (b) Unless the context otherwise requires in this Lease Deed:
- (ix) words importing persons or parties shall include firms and corporations and any organisations having legal capacity;
 - (x) words importing the singular include the plural and vice versa where the context so requires;
 - (xi) reference to any Applicable Law shall include such Applicable Law as from time to time enacted, amended, supplemented or re-enacted;
 - (xii) reference to any gender includes a reference to all other genders;
 - (xiii) reference to the words "include" or "including" shall be construed without limitation;
 - (xiv) reference to this Lease Deed, the Agreement or any other agreement, deed or other instrument or document shall be construed as a reference to this Lease Deed, the Agreement or such other agreement, deed or other instrument or document as the same may from time to time be validly amended, varied, supplemented or novated;
 - (xv) the provisions of this Lease Deed shall be read and interpreted in conjunction with the schedules and annexures hereto and the schedules and annexures hereto shall be a part and parcel of this Lease Deed; and
 - (xvi) the headings and titles in this Lease Deed are indicative only and shall not be deemed part thereof or be taken into consideration in the interpretation or construction hereof.

2. GRANT OF LEASE

2.4 In consideration of the Rent, the Security Deposit and other charges to be paid by the Lessee to the Lessor as set out in this Lease Deed and the Lessee agreeing to comply with the covenants and conditions set out herein, the Lessor hereby grants by way of lease to the Lessee and the Lessee, based on the representations and warranties of the Lessor as set forth in this Lease Deed, hereby takes on lease from the Lessor the Demised Premises, together with all easements, including the uninterrupted licence to enter upon and use the underlying land of the Demised Premises for the Permitted Use, access to and enjoyment of all Common Areas, all designated facilities and amenities in the Project, on and with effect from the Lease Commencement Date for the Lease Term, subject to the terms and conditions of this Lease Deed.

2.5 The Demised Premises shall have access to the public road through the internal roads formed in the Project.

3. HANDOVER OF THE DEMISED PREMISES

3.1. As on the Lease Commencement Date, the Lessor has handed over the Demised Premises to the Lessee in the Handover Condition. The Parties agree that the Lessor shall provide the Warm Shell Specifications and the Lessee Improvements to the Demised Premises as per the Final Drawings and the Sanctioned Plan as detailed in the Agreement and this Lease Deed, in the manner and within the time as agreed. Other than Lessor's Work, the Lessor shall not have any obligation whatsoever with respect to the finishing of the Demised Premises for the Lessee's use and occupancy.

3.2. Subject to there being no delay attributable to Force Majeure or Lessee Delays, the Lessor shall use reasonable efforts to Substantially Complete the Lessor's Work at the Demised Premises on or before the Target Completion Date. Upon Substantial Completion of Lessor's Work, the Lessor shall require the Lessor's Architect and the contractors to execute and deliver, for the benefit of the Lessee and the Lessor, a certificate of Substantial Completion. The obligation of the Lessee to pay Rent shall commence from the Rent Commencement Date.

3.3. On the date of the Lessor's Architect confirming that the Lessor's Work at the Demised Premises has been Substantially Complete, the Lessor and Lessee will jointly inspect the Demised Premises and agree on a list of snag items that are still required to be completed at the Demised Premises. The Lessor shall thereafter, within a period of 60 (sixty) days from the date of such written list, complete the snag items at the Demised Premises and the completion of such snag items will be certified by the Lessor's Architect.

3.4. If the Lessor is unable to achieve Substantial Completion of the Lessor's Work on the Target Completion Date, due to a Force Majeure event or a Lessee Delay, the Lessee agrees that the Target Completion Date shall be pushed forward by such number of days of the Force Majeure event or Lessee Delay.

3.5. After the Lease Commencement Date, the Lessor shall provide to the Lessee and the Lessee's contractors the rights, amenities and facilities required by the Lessee during the Lessee's fit-out and furnishing work period with respect to the Demised Premises. The Lessee shall ensure that the Lessor will not be required to redo any completed portion of the Handover Condition as a result of the Lessee's commencement / carrying out of its fit-outs and shall ensure that it does not prejudice the Lessor from achieving Substantial Completion at the Demised Premises.

- 3.6. The Lessee may, at its discretion, on the Lease Commencement Date, start installation of the fit outs, fixtures and equipment that are to be carried out/installed by the Lessee at the Building. The Lessee's fit out works will be coordinated with the Lessor's Architect and the contractors, and the Lessee shall be required to comply with the Agreement and this Lease Deed and all other reasonable restrictions and conditions the Lessor may impose.
- 3.7. Neither the Lessee nor any Lessee's representatives, agents, officers, employees, contractors, etc. shall interfere with the performance of the Lessor's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authority, and upon any such interference, the Lessor shall have the right to exclude Lessee and any Lessee's representatives, agents, contractors, etc. from the Demised Premises and the Project until Substantial Completion of the Lessor's Work.
- 3.8. The Lessee shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment with respect to the Lessor's Work. The Lessor shall promptly undertake and complete, or cause to be completed, all punch list items.

4. TERM AND RENEWAL

- 4.1. The lease in respect of the Demised Premises shall commence on the Lease Commencement Date and shall be in force for a period of 10 (ten) years from the Rent Commencement Date (“ **Initial Term** ”).
- 4.2. Subject to the Lessee not being in breach of the terms of this Lease Deed, the Lessee may at its sole option renew the lease of the Demised Premises for 2 (two) additional terms of 5 (five) years each (each a “ **Renewal Term** ”). The Lessee shall communicate its intention to renew the lease of the Demised Premises, in writing, to the Lessor, not less than 6 (six) months prior to the expiry of the Initial Term or the Renewal Term, as applicable.
- 4.3. The lease for the Renewal Terms shall be on the same terms and conditions as the Initial Term subject to the increase in the Rent as detailed in Clause 8.5. There will be no lock in period for the Renewal Terms and during the Renewal Terms, the Lessee shall be entitled to terminate the lease at any time upon issuing prior written notice of 6 (six) months. Subject to Clause 4.4 below, prior to the commencement of each Renewal Term, a fresh lease deed shall be executed by the Parties and the same shall be appropriately stamped and registered with the appropriate sub-registry. The stamp duty and registration fee payable for the registration of the lease deed/s for the Renewal Terms shall be borne by the Lessee.
- 4.4. The lease deed/s for the Renewal Terms shall be executed at least 3 (three) months prior to the expiry of the Initial Term or the first Renewal Term, as applicable. In the event for any reason the lease deed/s for the Renewal Terms are not executed within the said timelines by the Lessee and the Lessor, but, however, the Lessee has exercised the option to renew the lease as provided in Clause 4.2, the Lessee shall continue to use and occupy the Demised Premises subject to payment of applicable Rent for such renewed term and other outgoings and such use and occupation, pending execution of the fresh lease deed, shall not be deemed as unauthorized occupation. However, the Parties shall execute and register a fresh lease deed within 30 (thirty) days from expiry of 3 (three) months mentioned above.

5. RENT FOR THE DEMISED PREMISES

5.1. Subject to the escalation in the Rent as per Clause 5.5 of this Lease Deed, during the Lease Term, the Rent payable by Lessee to the Lessor from Rent Commencement Date with respect to the Demised Premises aggregating to Rs [●]/- (Rupees [●] only) per month, shall comprise of the following:

- (d) Rs. 21.30/- (Rupees Twenty-one and thirty paise) per square foot of Leasable Area of the Building per month (“ **Base Rent** ”) aggregating to Rs [●]/- (Rupees [●] only) per month;
- (e) Rs. 7.30/- (Rupees Seven and thirty paise) per square foot of Leasable Area of the Open Area per month (“ **Open Area Rent** ”) aggregating to Rs [●]/- (Rupees [●] only) per month; and
- (f) Improvement Rent currently estimated at Rs 19.70/- (Rupees Nineteen and seventy paise) per square foot per month aggregating to Rs [●]/- (Rupees [●] only) per month, calculated in the manner detailed in Clause 6 below (“ **Improvement Rent** ”).

[**NOTE** : In the event of any variation in the extent of the built-up area, as finally certified upon completion of construction, the amounts shall be adjusted as pre actual extent]

5.2. The Lessee shall commence payment of the Rent from the Rent Commencement Date. The Rent shall be paid to Lessor either by electronic funds transfer (EFT) to Lessor account or by account payee cheque at Chennai, or to such other account or such other address or person as Lessor as instructed by the Lessor from time to time.

5.3. The Rent and Maintenance Charges shall be payable on a monthly basis on or before the 10th day of every month in advance subject to receipt of proper invoices on or before the 3rd day of such calendar month. Provided, where the 10th day of any month is a non-working Saturday, Sunday or public holiday when banks are closed for business, the Lessee shall make the payment on the next succeeding business day, which shall not be treated as delay or default. The Rent and Maintenance Charges are subject to all applicable deductions of tax at source as per the provisions of the Income Tax Act, 1961. In this regard, the Lessee shall provide to the Lessor, certificates of tax deducted at source in accordance with the Applicable Laws. The Lessee shall also pay the GST or any other tax as applicable on the Rent and Maintenance Charges. The Rent for any part of a month will be pro-rated and paid for that portion of the month only.

5.4. In the event of any delay in payment of Rent, Maintenance Charges and Utility Charges by the Lessee on the due date that are not otherwise disputed in good faith by the Lessee in writing detailing Lessee’s basis for such dispute, the Lessee shall be liable to pay interest at the rate of 18% (eighteen percent) per annum for such delay, from the due date till the date of payment. Provided where the amounts disputed by the Lessee are found to be incorrect and the Lessee is required to make payment of such disputed amount to the Lessor, interest at the rate of 18% (eighteen percent) as stated above shall apply from its original due date till the date of payment. It is further agreed that in the event the Lessee defaults in payment of rent for 3 (three) consecutive months during the Lease Term and the default is not remedied within a period of 30 (thirty) days from receipt of notice to cure from the Lessor, the lease may be terminated by the Lessor in the manner provided in Clause 19.3.1 hereinafter.

- 5.5. After the expiry of every year during the Lease Term, the Base Rent and Open Area Rent will be escalated by 4.5% (four point five percent) over and above the Base Rent and Open Area Rent payable in the immediately preceding year. The Improvement Rent will only be payable over the Initial Term. The payment of Rent and the escalation thereof is detailed in **Schedule G** hereunder.
- 5.6. The obligation of the Lessee to pay the Rent, the Maintenance Charges, the Utility Charges and any other sums to the Lessor and the obligations of the Lessor under this Lease Deed are independent obligations. The Lessee shall have no right at any time to abate, reduce or set-off any Rent, the Maintenance Charges or Utility Charges due herein except for any abatement as may be expressly provided in this Lease Deed. For any payment due from the Lessee to the Lessor under this Lease Deed for which a specific payment due date is not otherwise provided for in this Lease Deed, the Lessee shall be required to pay the amount in question to the Lessor within 30 (thirty) days after receipt of notice from the Lessor that such amount is due.

6. LESSEE IMPROVEMENTS AND IMPROVEMENT RENT

- 6.1. The rent payable for the Lessee Improvements shall be calculated on the basis of the formula provided in Clause 6.2 on the Leasable Area of the Building (" **Improvement Rent** "). The Parties agree that in the event of the Lessee exercising the option to renew the lease, there shall be no Improvement Rent during the Renewal Terms.
- 6.2. Calculation of Improvement Rent:
- 6.1.1 Formulae for calculating Improvement Rent per month:
- Cost incurred by the Lessor towards Lessee Improvements x 15% / 12*
- 6.1.2 Further, the Improvement Rent shall be escalated by 4.5% (four point five percent) at the end of every year during the Initial Term over and above the Improvement Rent payable in the immediately preceding year.
- 6.1.3 For instance, in the event the Lessor's investment is Rs 1,000 (Rupees One Thousand) per square foot of the Leasable Area of the Building, the Improvement Rent payable by the Lessee to the Lessor shall be recovered over the Initial Term at a yield of 15% (fifteen percent) with an escalation of 4.5% (four point five percent) at the end of every year. For example: $Rs\ 1,000 * 15\% / 12 =$ Improvement Rent per month of Rs12.50 (Rupees Twelve Paise Fifty) per square feet with an escalation of 4.5% (four point five percent) at the end of every year).
- 6.3. The Parties agree that on the Substantial Completion of the Lessor's Work, the Lessor will provide the Lessee with an investment estimate for the Improvement Rent for the Lessee Improvements and any Improvement Change (" **Investment Estimate** "). The Investment Estimate will be accompanied with supporting documentation. The Improvement Rent for the 6 (six) months of the Initial Term commencing from the Rent Commencement Date will be based on the Investment Estimate. Within 6 (six) months from the Rent Commencement Date, the Lessor will provide the Lessee an audited statement issued by a reputed chartered accountant of the actual amounts incurred and paid for the completion of the Lessee Improvements and any Improvement Change along with supporting documentation. Based on the audited statement along with the supporting documents for verification and on a mutual reconciliation process to be completed within 30 (thirty) Business Days of receipt of the audited statement along with supporting documents, the final Improvement Rent will be recorded in

writing by the Parties. Where the Improvement Rent paid by the Lessee to the Lessor during the aforesaid 6 (six) months period is less than the final Improvement agreed between the Parties, the deficient portion of the Improvement due to the Lessor will be paid in arrears within 30 (thirty) Business Days from finalization of the final Improvement Rent.

7. SECURITY DEPOSIT

7.1. The Lessee agrees to pay and maintain an interest free, refundable security deposit with the Lessor with respect to the Demised Premises in an amount being equivalent to 10 (ten) months' Rent calculated on the Rent due for the first year of the Initial Term of the lease, amounting to Rs. 374,856,735/- (Rupees Thirty Seven Crores Forty Eight Lakhs Fifty Six Thousand Seven Hundred Thirty Five (" **Security Deposit** "). The entire Security Deposit has been paid on the date of execution of the Agreement. It is clarified that there shall be no escalation in the Security Deposit during the Lease Term.

7.2. The Lessee has paid the entire Security Deposit to the Lessor in the following manner:

(iii) Rs. 201,228,892/- (Rupees Twenty Crores Twelve Lakhs Twenty Eight Thousand Eight Hundred Ninety Two Only) being 53.70% of the Security Deposit has been paid by the Lessee to the Lessor No 2 and Lessor No 3 in equal proportion, on [•] February 2019, as under:

SI No	Lessor Account Details	Amount (in INR)	UTR Reference No
3.	Aarush (Phase IV) Logistics Park Private Limited (Lessor No 2) Yes Bank Limited, T Nagar Chennai A/c No 041863700000818	10,06,14,448	
4.	Aarush (Phase V) Logistics Park Private Limited (Lessor No 3) Yes Bank Limited, T Nagar Chennai A/c No 041863700000434	10,06,14,448	
Total		201,228,892 /-	

The Lessor No 2 and Lessor No 3 have apportioned an amount of Rs 40,00,000/- (Rupees Forty Lakhs) out of the portion of Security Deposit as detailed above, to the Lessor No 1 by way of internal adjustments / payments and shall be held by the Lessor No 1 as part of the Security Deposit during the Lease Term.

(iv) Rs. 173,627,843/- (Rupees Seventeen Crores Thirty Six Lakhs Twenty Seven Thousand Eight Hundred Forty Three Only) i.e. the balance 46.30% of the Security Deposit has been paid by the Lessee to the Lessor on the date of execution and registration of this Lease Deed as under:

SI No	Lessor Account Details	Amount (in INR)	UTR Reference No
1.	Aarush (Phase III) Logistics Park Private Limited (Lessor No 1) Yes Bank Limited, T Nagar Chennai A/c No [●]	[●]	[●]
2.	Aarush (Phase IV) Logistics Park Private Limited (Lessor No 1) Yes Bank Limited, T Nagar Chennai A/c No 041863700000818	[●]	[●]
3.	Aarush (Phase V) Logistics Park Private Limited (Lessor No 2) Yes Bank Limited, T Nagar Chennai A/c No 041863700000434	[●]	[●]
Total		173,627,843/-	

- 7.3. The Security Deposit shall be held by the Lessor as security for the performance of Lessee's obligations under this Lease Deed and is not an advance rental amount/deposit. The Security Deposit is not a measure of the damages payable in case of the Lessee's default. The payment of Security Deposit is not intended to be and shall not be treated as payment of cost of construction of the Building by the Lessee to the Lessor.
- 7.4. As long as the Lessee has fully performed every obligation under the Lease Deed, including the obligations of the Lessee in connection with the surrender of the Demised Premises (including surrender of the electricity meter in terms of Clause 12.3), the Lessor shall refund the Security Deposit, subject to deductions of arrears of the Rent, the Maintenance Charges, the Utility Charges and all other amounts payable by the Lessee to the Lessor under this Agreement and the Lease Deed and/or charges payable by the Lessee with respect to utility services directly availed from utility service providers and/or the cost of any damage, injury, expense or liability caused to the Demised Premises (other than normal wear and tear) within 7 (seven) days after the expiry or termination of the Lease Deed. The Parties will conduct joint inspection of the Demised Premises at least 15 (fifteen) days prior to the expiry of the lease to assess any damage caused by the Lessee. At the discretion of the Lessor, any damage caused to the Demised Premises by the Lessee will be repaired by the Lessee at least 7 (seven) days prior to the expiry or termination of the Lease Deed, failing which the cost of the damages will be deducted from the Security Deposit.
- 7.5. Upon occurrence of a breach by the Lessee or failure by the Lessee to perform any of its obligations under this Lease Deed, the Lessor may use all or any part of the Security Deposit to pay delinquent amounts due under this Lease Deed, including Rent, the Maintenance Charges and/or Utility Charges, and the cost of any damage, injury, expense or liability caused by such default, without prejudice to any other remedy provided herein or provided by Law. Upon any use of all or any portion of the Security Deposit during the Lease Term, the Lessee shall pay the Lessor, on demand and in no event later than 7 (seven) days, the amount that will restore the Security Deposit to the full amount set forth in Clause 10.1 above.

- 7.6. If the Lessor fails to return the Security Deposit in the manner detailed in Clause 10.4 above, the Lessor will be liable to refund the Security Deposit with interest at the rate of 18% (eighteen percent) per month from the date the payment became due until refund to the Lessee.
- 7.7. In the event of any dispute between the Parties in relation to the Clause 7.4 and Clause 10.5, the matter in dispute shall be referred to expert determination. The Parties shall mutually appoint a third-party expert within 30 (thirty) days of receipt of notice by either Party referring any dispute for expert determination. In the event the Parties are not able to mutually agree on the third-party expert within the aforesaid 30 (thirty) day period, each Party shall within 15 (fifteen) days appoint one expert and the two appointed experts shall thereafter appoint a third expert, who shall together provide their decision, by majority. The appointed expert/s shall consider the matter in issue and provide its / their expert decision, which shall be final and binding upon the Parties. The said expert/s is/are entitled to take into account the views of both the Lessee and the Lessor on the matter in issue and also conduct an independent enquiry into the matter in issue, prior to providing its / their decision. In the event, the decision of the appointed expert is in favour of the Lessee, the Lessor shall be liable to pay the interest calculated @ the rate of 18% on the Security Deposit, as stated in Clause 7.6.

8. REPRESENTATIONS, WARRANTIES AND COVENANTS

8.1. The Lessor represents, warrants and covenants as follows:

- (n) The Lessor is the absolute owner of the Project and has the legal capacity to lease the Demised Premises to the Lessee in the manner contemplated hereunder and no other third party consents are required for Lessor to grant on lease the Demised Premises.
- (a) The person signing this Lease Deed has the appropriate authority to do so and to grant a lease in respect of the Demised Premises upon such terms as are agreed herein.
- (b) No part of the Demised Premises, the Schedule Land or the Building is the subject matter of any proceedings and that there are no proceedings with respect thereto and the Lessor or anyone on its behalf has not committed or omitted any act, deed, matter or thing whereby its right to use, occupy the Demised Premises is or can be forfeited, extinguished or rendered void or voidable.
- (c) The Lessor has not, in the acquisition of the Schedule Land, in the construction of the Building or in the use and occupation of the Demised Premises, or otherwise, contravened any Applicable Law, rule, regulation or other legal requirements whatsoever and shall during the Lease Term continue to be in compliance with all Applicable Laws. The Lessor has provided copies to the Lessee of all Approvals (available as on the date of this Lease Deed) in relation to the Schedule Land and the Demised Premises.
- (d) The Building and the Demised Premises has been constructed in a workmanlike manner in accordance with the Sanctioned Plan and permit / license relating thereto, with only such changes /additions as have been permitted by the concerned Governmental Authority or as mutually agreed between the Parties.
- (e) The Lessee, on paying the agreed Rent, the Maintenance Charges and Utility Charges and performing and observing the agreed terms and covenants as confirmed herein and on its part to be performed, may peaceably hold and enjoy the Demised Premises during the Lease Term, without any interruption, interference or claims by or from the Lessor or any person claiming under, through or in trust for the Lessor.

- (f) The Lessee shall have unlimited access and the right to use the Demised Premises, without any hindrance, 24 (twenty four) hours a day, 7 (seven) days a week and through all days of the year for the Lease Term subject to the Lessee along with its employees, representatives and authorized agents adhering to the terms this Lease Deed, rules and regulations as prescribed by the Lessor along with the right to use all the utilities, infrastructure and facilities (including the right to access public road (which connects to NH-4) through the internal roads formed in the Project Land).
- (g) All taxes, levies, cesses with respect to the Demised Premises have been paid and discharged by it and it shall promptly pay, during the Lease Term, all existing and future rates, taxes, cesses, assessments and out goings in respect of the Project Land, the Building and the Demised Premises, including but not restricted to, land tax, property tax, municipality tax, etc., now or hereafter imposed or charged in relation to the Demised Premises shall be borne by the Lessor.
- (h) The Lessor shall have no obligation to, and shall not, procure any permits, approvals or consents related to the Lessee's intended use of the Demised Premises or the Lessee's business operations therein. Except as expressly set forth in this Lease Deed, the Lessor shall have no obligation to perform any work at the Project in connection with the Lessee's occupancy of the Demised Premises.
- (i) The Lessor shall at all times ensure that the Demised Premises can be legally used for industrial purpose and ensure that all Approvals with respect to land usage are valid and subsisting during the Lease Term.
- (j) As on the date of this Lease Deed, there are no Encumbrances, proceedings, claims, actions, litigation, arbitration, land acquisition proceedings, garnishee or any process issued by any court or authority including the competent authority under the Income Tax Act, 1961 or other proceedings whatsoever relating to the Land or the Demised Premises which are pending or to the best of the Lessor's knowledge have been threatened to be initiated in writing to the Lessor or to any of its representatives, which adversely impact the Lessor's ability to execute and register the Lease Deed.
- (k) The Lessor has not and shall not enter into any agreement/s in favour of any third parties that would in any manner affect the rights of the Lessee under this Lease Deed.
- (l) The Lessor is validly existing under the Applicable Law and there exist no proceedings or orders against the Lessor declaring it an insolvent or for winding up of the Lessor or appointing and insolvency resolution professional, administrator or liquidator for managing the affairs and assets of the Lessor.

8.2. **The Lessee represents, warrants and covenants as follows:**

- (t) The Lessee is duly incorporated under the laws of India, and has the power to lease assets and carry on its business (including for the Permitted Use).
- (u) The Lessee is fully empowered by its constitutive documents and by Applicable Law to sign this Agreement and make the representations and warranties contained herein so as to be binding upon it.
- (v) The execution, delivery and the performance by the Lessee of this Lease Deed does not and will not breach or constitute a default under any constitutive documents.

- (w) The person signing this Lease Deed has the appropriate approval or authorization to do so.
- (x) The Lessee is validly existing under the Applicable Law and there exist no proceedings or orders against the Lessee declaring it an insolvent or for winding up of the Lessee or appointing and insolvency resolution professional or administrator for managing the affairs and assets of the Lessee.
- (y) It shall promptly perform and comply with all the terms and conditions of this Lease Deed.
- (z) It shall ensure that its employees, agents, contractors, invitees, executives and officers shall diligently observe and comply with all the terms and conditions of this Lease Deed and comply with all directions given from time to time by the Lessor, with regard to the use of the Demised Premises or any part thereof, provided they are in accordance with this Lease Deed.
- (aa) It agrees to pay all outgoings attributable to its business and the use of the Demised Premises, including but not limited to payment of Rent, the Maintenance Charges, Utility Charges and GST or any other tax applicable thereon.
- (bb) It shall maintain the Demised Premises with due care and caution, and not do anything or permit or commit to be done anything contrary to any provision made by or under any statute or law for the time being in force.
- (cc) The Lessee shall all times from the Lease Commencement Date comply with the Applicable Laws, including labour laws, fire safety and fire code.
- (dd) It has satisfied itself as to the right, title and interest of the Lessor in relation to the Schedule Land and the Demised Premises.
- (ee) It shall use and occupy the Demised Premises at its own risk and responsibility and the Lessor shall not be responsible or liable for any loss, damage, shortage, theft or destruction of any papers, documents, equipment, machines, articles, property or things of any kind or nature whatsoever belonging to the Lessee or kept in the Demised Premises.
- (ff) It shall obtain, renew from time to time and keep valid during the Lease Term, all necessary licenses, approvals and permits necessary to conduct business and operations (including the Permitted Use) in the Demised Premises.
- (gg) It shall abide by all Applicable Laws for the time being in force, apply for and keep up-to-date all requisite approvals as may be required to carry on its Permitted Use, and follow all statutory requirements for the use of the Demised Premises. The Lessee's consent for establishment and consent for operations issued by the jurisdictional Pollution Control Board shall be within the scope of the consent for establishment and consent for operations issued by the jurisdictional Pollution Control Board in respect the Project.
- (hh) From the Lease Commencement Date, the Lessee shall be in compliance with all applicable Environmental Laws. Subject to Clause 9.8, the Lessee shall not store on or beneath the Land any combustible or hazardous material (without obtaining necessary permits under applicable Environmental Laws) or cause seepage of any toxic substance, oil spillage or such other like material or cause other adverse environmental condition, which may potentially affect the usage and occupation of the Project Land or cause a threat to life and property in any manner.

- (ii) It shall not do or suffer to be done in or in relation to the Demised Premises any unlawful or obnoxious act, deed, matter or thing which may cause nuisance, annoyance or disturbance to or interfere with the quiet use and enjoyment of the Lessor or the other occupants of the Project.
- (jj) The Lessee as requested by the Lessor, has furnished to the Lessor true and correct copy of Certificate of Incorporation and the Limited Liability Partnership Agreement.
- (kk) The Lessee shall always observe and perform all the terms and conditions, covenants and provisions under this Agreement on which the Demised Premises is agreed to be built and given on lease. It shall not do, omit or knowingly suffer to be done anything whereby the right of the Lessor to the Demised Premises is violated, forfeited, jeopardized or extinguished.
- (ll) The Lessee shall not store any inflammable items without securing all statutory permission and fully implementing safety regulation required for the said purpose and the safety measure as may be reasonably and properly recommended by the Lessor.
- (mm) The Lessee shall not cause or permit any hazardous materials to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Demised Premises or the Project in violation of Applicable Laws by Lessee or any person acting on behalf of the Lessee.
- (nn) The Lessee hereby covenants that the Demised Premises shall be used solely for the Permitted Use and for no other purposes whatsoever. In the event, the Lessee plans to use the Demised Premises for any purpose other than as mentioned herein, it shall do so only after obtaining written permission from the Lessor.
- (oo) The Lessee shall not sub-let or assign its leasehold rights in relation to the Demised Premises, except in the manner provided in this Lease Deed.
- (pp) The Lessee shall not, during the Lease Term, abandon the Demised Premises, save and except any temporary vacation of the Demised Premises for repair or restoration as provided in this Lease Deed.
- (qq) The Lessee's operations shall not exceed the capacity of the structure and utilities and should not jeopardize the structural stability of the Demised Premises or cause damage / impair to any part of the Demised Premises or the Project.
- (rr) Permitting use of Marketing Material:
 - a. The Lessee hereby grants Lessor and its Affiliates *unfettered* permission to use the Lessee's name and logo in its marketing materials, with prior written intimation to the Lessee.
 - b. Lessor or its Affiliates, as applicable, shall include a trademark attribution notice giving notice of the Lessee's ownership of its trademarks in the marketing materials in which the Lessee's name and logo appear.

9. USE OF THE DEMISED PREMISES

- 9.1. The Demised Premises shall be used solely for the Permitted Use. The Lessee shall not use or permit the Demised Premises to be used for any purpose or in any manner that would increase the insurance premium payable by the Lessor. It is clarified that the technical activities to be pursued by the Lessee in the Demised Premises shall be compatible with what is permitted by the jurisdictional Pollution Control Board and

any other statutory authority/s prescribed under the Applicable Laws. The Lessee shall not change the Permitted Use of the Demised Premises without obtaining necessary approvals under Applicable Law and the Lessor's prior written consent, which consent shall not be unreasonably withheld by the Lessor.

- 9.2. The Lessor hereby delivers the possession of the Demised Premises to the Lessee and the Lessee hereby accepts the possession of the Demised Premises in the Handover Condition. The Parties have conducted a joint inspection and ascertained that the Handover Condition has been achieved. The Lessee's entering upon the Demised Premises shall be conclusive evidence that Lessee accepts the Demised Premises and that the Demised Premises were in good condition at the time the Lessee entered upon them.
- 9.3. The Lessee taking possession of the Demised Premises, it shall be construed that the Demised Premises has been provided in the Handover Condition.
- 9.4. The Lessee shall have access to the Demised Premises 24 (twenty four) hours a day and 7 (seven) days a week during the Initial Term or Renewal Term, if applicable. The normal working hours during which the Project shall be operational shall be from Monday to Saturday i.e. 6 (six) days a week from 8:30 A.M to 8 P.M. The essential maintenance and management personnel shall be off duty on all public holidays, determined by the Lessor in accordance with Applicable Laws. However, Lessee shall be entitled to use the Demised Premises at its discretion on all such days, without any hindrance or objection from the Lessor. The Lessee accepts that all services may not be available to the Project beyond the normal working hours.
- 9.5. The Lessee shall obtain all necessary licenses, approvals and permits necessary to conduct business and operations in the Demised Premises, including without limitation licenses, approvals and permits with regards to labour, pollution control, etc., from the concerned Governmental Authority, at its own cost and expense appreciating that technical activities to be pursued in the Demised Premises must be compatible with the facilities in the Project.
- 9.6. The Lessee shall, during the term of the lease and any renewal thereof, comply with all Applicable Laws (including Environmental Laws) as may be applicable to the Demised Premises and the Lessee shall always remain solely responsible for the consequences of non-compliance of the Applicable Laws. In the event of any proceedings being initiated with respect to non-compliance of Applicable Laws the Lessee shall notify the Lessor;
- 9.7. The Lessee will use the Demised Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Demised Premises, subject the Demised Premises to any use that would damage the structure of Building including the Demised Premises or obstruct or interfere with the rights of the Lessor or other licensees or occupants of the Project provided that Lessor and Confirming Parties acknowledge that the wind turbine blades and related equipment and fixtures will be transported through the internal road in Project. It is the responsibility of Lessee to provide adequate training to its employees and vendors on safe handling of hazardous materials and hazardous wastes, fire-fighting and emergency management as necessary from time to time.

- 9.8. The Lessee shall be permitted to store chemicals and consumables in limited quantities within a portion of the Demised Premises (“ **Storage Area** ”) which are required by the Lessee to ensure the smooth day to day operations for the Permitted Use of Demised Premises, in accordance with Applicable Law. The location of the Storage Area is identified in the sketch detailed in **Annexure 4**.
- 9.9. The Lessee acknowledges that the Lessor is not liable or responsible, in its capacity as lessor as per this Lease Deed or otherwise, for any hazardous materials or hazardous wastes kept, used, stored, handled, treated, generated in or about, or released or disposed of from the Demised Premises due to the Lessee’s actions, business or use of the Demised Premises. The Lessee specifically acknowledges that the Lessor is not aware of the hazardous materials kept, used, stored, handled, treated, generated in or about, or released or disposed, including in particular any hazardous waste generated by the Lessee in the course of its business and that the Lessor is not in any way involved in or responsible for the management, collection, treatment or disposal of the hazardous waste generated. Further, any agreements or documentation to be executed in relation to the disposal of the hazardous wastes generated by the Lessee in the Demised Premises, including waste disposal manifests, shall be executed by the Lessee only. There shall be no obligation on the Lessor to sign or execute or be party to any such documents.
- 9.10. The Lessor understands that the Lessee may request the Lessor to sign any applications or documents for the purpose of enabling it to obtain licenses and approvals whether required under Applicable Law or otherwise, in which case, the Lessor shall cooperate with the Lessee to execute any documents and provide any supporting documents / information, as may be necessary, at the cost and expenses to be borne by the Lessee.
- 9.11. Subject to any Force Majeure event, if the Lessee’s access to the Demised Premises is obstructed or affected for any reasons attributable to the Lessor or other occupants of the Project and not attributable to any breach on part of the Lessee, the Lessor shall take immediate mitigating steps to clear such obstructions.
- 9.12. The Lessor shall at all times make out good, valid, clear and marketable title to the Demised Premises and in the event of any litigation is initiated with respect to title to the Schedule Land and only if it affects the use and enjoyment of the Demised Premises, the Lessor shall promptly notify the Lessee and take appropriate remedial action.

10. ALTERATIONS AND REPAIRS

- 10.1. The Lessor shall during the Lease Period, be responsible for attending to and undertaking Major Repairs. The Lessor shall use reasonable efforts to carry out the Major Repairs. All Major Repairs to be performed under this Clause shall be carried out in a prompt, diligent and good workmanlike manner. The Lessor shall use reasonable efforts to inspect the damage immediately or within a period of 4 (four) Business Days or such mutually agreed period, of the same being brought to the notice of the Lessor by the Lessee in writing and the Parties shall mutually agree on the reasonable time required to undertake and complete the Major Repairs. During the period of Major Repairs, if the Lessee is unable to use the entire extent of the Demised Premises, the obligation to pay the Base Rent, Open Area Rent and Maintenance Charges, shall stand suspended until the Major Repairs are completed. Provided that if the Lessee is prevented from using only a portion of the Demised Premises, the suspension of the Base Rent, Open Area Rent and Maintenance Charges shall be proportionate. For avoidance of doubt, the Lessee shall be required to pay Improvement Rent and Utility Charges.

- 10.2. If the Lessor fails to commence the Major Repairs under Clause 10.1 above, within the period specified therein, the Lessee may cause the commencement of such Major Repairs at the cost of the Lessor. The Lessor shall reimburse the Lessee the entire cost of performing such Major Repairs within 15 (fifteen) Business Days of receipt of an invoice for such costs having expended by the Lessee. If the Lessor fails to reimburse the Lessee for such costs within the above-mentioned period, the Lessee shall have the right to deduct such costs from future Demised Premises Rent payable to the Lessor till the adjustment of the entire cost.
- 10.3. The Lessee shall not be entitled to carry out any structural alterations or modifications to the Demised Premises except with the prior written approval on the Lessor, which shall not be unreasonably withheld. It is clarified that the Lessor may, at the time of its approval of any alteration or at any time prior to the expiry of the lease, notify the Lessee that the Lessor requires that the Lessee removes such alteration upon the expiration or earlier termination of this Lease Deed in which event the Lessee shall remove the alteration without causing any damage to the Demised Premises or the building systems and shall restore the Demised Premises to its condition prior to the installation of the alteration, reasonable wear and tear excepted.
- 10.4. The Lessee shall however be at liberty to carry out interior works, fittings, fixtures, installations and furnishing within the Demised Premises at its sole discretion without causing any structural damage/alteration to the Building.
- 10.5. The Lessor reserves the right to modify Common Areas at its own cost, provided that such modifications do not, other than on a temporary basis, materially adversely affect the Lessee's use of the Demised Premises or its access to the Land, as well as the Lessee's ability to transport wind turbine blades from the Demised Premises to the exit of the Project.
- 10.6. Notwithstanding anything to the contrary contained herein, in no event shall the Lessee undertake any actions that affect any building systems serving areas outside of the Demised Premises or affecting any other licensees/lessees at the Project, the Building structure or the Common Areas.
- 10.7. The Lessee shall, at all times comply with all rules and regulations, set out in Annexure 6 of this Deed, applicable to all tenants at any time or from time to time, established by the Lessor covering use of the Demised Premises and the Project.

11. MAINTENANCE

- 11.1. The Lessor will be responsible for maintenance, security, management for the Common Areas and landscaping of the Project and the Lessor may appoint a maintenance service provider to undertake the Maintenance Services, more fully detailed in Schedule F hereunder. Simultaneously with the execution of the Lease Deed, the Parties will execute a maintenance agreement in relation to the provision of the Maintenance Services and payment of the Maintenance Charges.
- 11.2. The maintenance charges payable by the Lessee to the Lessor shall be calculated on an open book basis and based on the square footage of the Leasable Area of the Demised Premises as a percentage of the total square footage of built up areas within the Project and is currently estimated to be Rs. 2 (Rupees Two only) per square foot of Leasable Area per month (“**Maintenance Charges**”). The Maintenance Charges are required to be paid over and above the Rent and will be payable in advance on monthly basis, along with the Rent as detailed in Clause 5. The Maintenance Charges shall be payable from the Lease Commencement Date.

- 11.3. On an annual basis the Lessor shall reconcile the actual amounts for the provision of the Maintenance Services. In the event that the Maintenance Charges are less than the actual maintenance charges, the Lessee shall be liable to pay the differential amount along with the Maintenance Charges for the month subsequent to the reconciliation of accounts. Conversely, in the event that the payment made by the Lessee towards the Maintenance Charges exceeded the actual maintenance charges arrived at on the basis of the audited accounts, the Lessor shall adjust the same in subsequent month's invoice till such time that the entire excess amounts have been set off, unless otherwise agreed between the Parties. The Lessor shall provide the Lessee a statement (along with supporting documents) on an annual basis bearing out the actual amounts incurred by the Lessor or the Maintenance Agency for the provision of the Maintenance Services.
- 11.4. The routine maintenance of the Demised Premises shall be done by the Lessee at its own cost. The maintenance charges relating to any and all equipment installed by the Lessee at its own cost will be maintained by the Lessee at its own cost, either directly or through its appointed agency, and will not form a part of the Maintenance Charges. Any warranty benefits for all equipment being provided by Lessor for exclusive use of the Lessee including but not limited to the AHUs shall be passed on to the Lessee by the Lessor. It is clarified that the cost of replacement of any such capital equipment of the building are part of capital expenses and will not be included in the Maintenance Charges or otherwise recovered from the Lessee.
- 11.5. The Lessor reserves the right to temporarily stop any Maintenance Services and utilities when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of the Lessor, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed.
- 11.6. The Lessor shall have no responsibility or liability for failure to supply such Maintenance Services and utilities during any period of interruption; provided however, that the Lessor shall, except in a case of emergency, make a commercially reasonable effort to give the Lessee 5 (five) days' advance notice of any planned stoppage of any such services for routine maintenance, repairs, alterations or improvements.
- 11.7. The Lessee acknowledges that the Lessor may suspend or delay the performance of any Maintenance Services, if occasioned by reasons of Force Majeure, only after giving notice of such suspension at the earliest possible opportunity.
- 11.8. The Lessor shall maintain and repair the Common Areas of the Project (excluding the Schedule Land), and keep them in good repair, reasonable wear and tear excepted. It is clarified that any damage to any of the foregoing, solely attributable to the Lessee or any of the Lessee's agents, servants, employees, invitees or contractors shall be repaired by the Lessor, and all costs incurred by the Lessor in connection therewith shall be reimbursed by the Lessee within 10 (ten) days after demand thereof, along with invoices and proof of expenses incurred by the Lessor.

12. INFRASTRUCTURE AND OTHER AMENITIES

- 12.1. The utilities provided to the Demised Premises (including but not limited to water and electricity power supply) shall be as follows:

- 12.1.1. **Domestic Water Supply** : From the centralized domestic water storage system, water shall be transferred to the Lessee's tapping point. The source for water shall be either existing bore-well depending upon the availability or sourced through water tankers supplies. Hydro-pneumatic pumping system shall be employed to supply water to hand wash, health faucets, showers, kitchens, etc. For maintenance purpose the control valves like ball valve, butter fly valves shall be provided at entry of all group/individual toilets. Maximum envisaged quantity is 63,000 Ltrs per day considering 2100 headcount @ 30 litre per person per day.
- 12.1.2. **Water Supply for Toilets** : The treated water from STP (from common STP) shall be supplied to all EWC/IWC and urinal plumbing fixtures through hydro-pneumatic pumps.
- 12.1.3. **Sewage Treatment Plant** : STP for the facility shall be provided with UF system. The STP will contain underground RCC tanks to collect the raw sewage, processing the sewage and to store the treated water. A separate plant shall be planned to house the pumps, blowers, filters, etc. MBBR system shall be adopted to treat the sewage. STP envisaged capacity is 60 KLD.
- 12.1.4. **HT Power Supply** : The Lessor shall provide adequate space to accommodate RMG Gear to set up 110 kV electrical sub-station within the Project. The Lessee shall receive incoming electrical power supply from Tamil Nadu Generation and Distribution Corporation (TANGEDCO) at 110 kV Outdoor RMG (with VCB type). From the RMG, the power is distributed as per the defined electrical scheme. The maximum estimated demand for phase-1 development is envisaged at 12,000 KVA.
- 12.2. In relation to the utilities specific to the Demised Premises, the Lessor shall install separate meters at the Demised Premises, and the Lessee shall pay for such utilities at actuals consumed at the Demised Premises based on the sub-meter readings, either to the Lessor, directly to the concerned Governmental Authority or to the service provider, as applicable (hereinafter referred to as the “**Utility Charges**”). Utilities for the Common Areas will be charged as part of the Maintenance Charges. The Utility Charges shall not be a part of the Rent and shall be payable by the Lessee. The Lessee acknowledges that the Utility Charges are not fixed and shall vary each month depending upon, among other things, consumption, usage and any change in the price of the diesel, electricity unit charges, gas charges, occupancy of the Project etc. The Utility Charges shall be payable from the Lease Commencement Date. The Lessee shall be entitled to apply for and obtain in its own name connections for internet, fiber broadband, DTH, telephone and any other connections as per its requirement at its cost, without any objection from the Lessor and the Lessor shall sign necessary documents, wherever required, for enabling the Lessee to obtain the utility connections
- 12.3. The Lessor shall obtain and organize power load between 10 and 12 MVA to the Demised Premises for Phase I of the Lessee's project. The power shall be connected to the transformer, along with necessary infrastructure for transmission and provided with a separate meter for the Demised Premises. In the event the Lessee requires additional power, the Lessee acknowledges that any deposit to be paid to the utility company with respect to the power connection for any additional power required by the Lessee at the Demised Premises shall be the sole responsibility of the Lessee. On the expiry or termination of the lease, the Lessee shall, at the Lessor's option, either surrender the additional power load obtained back to the Governmental Authority or transfer the electricity meter in the Lessor's name. In the event the Lessor decides to retain the additional power, the Lessor shall reimburse the entire deposit paid and expenses incurred by the Lessee in obtaining the additional power. It is clarified that the Lessee shall also be liable to pay the deposit for obtaining and organizing the initial power load to the Demised Premises for Phase I of the Lessee's project.

12.4. The Lessee shall be entitled to employ any such security measures as required to the Demised Premises, without the consent of the Lessor. The Lessee shall be entitled at its option to regulate the entry of persons into the Demised Premises and other areas within the Demised Premises and shall be entitled to engage security personnel or install security systems to restrain people from entering any part of the Demised Premises, in each case in its sole and absolute discretion. The Lessor shall be responsible for providing security in the Project, including at the main entrance and within the Common Areas, for which the Lessee shall have no objection and control.

12.5. The Lessee shall have naming rights on the Schedule Land and Building per the Lessee's sign standards and no additional charge to the Lessee, provided the same are in line with Lessor's signage policy. Any name / logo / signage along with dimensions and type of signage shall be approved by the Lessor's Architect and as per local laws before installation and the entire cost for procurement, installation and maintenance of the signage shall be borne by the Lessee.

13. INSPECTION

The Lessor and the Lessor's representatives may enter the Demised Premises at any reasonable time with 24 (twenty four) hours' notice (except in the case of emergencies) for the purpose of effecting any repairs, inspecting the Demised Premises or for any other business purposes, subject to complying with the Lessee's identification process and access control systems.

14. TAXES

14.1. All present and future municipal/property taxes in respect of the Project including the Demised Premises shall be borne by the Lessor.

14.2. The Lessee shall be required to pay GST or any other levies / duties of similar nature, with respect to the Demised Premises and / or the Rent and any other charges that may be payable by the Lessee to the Lessor under this Lease Deed. In addition to its liability to pay any GST or any other tax payable on the Rent or on the lease, if any tax is levied or assessed directly against the Lessee in relation to the payment of Rent and Maintenance Charges under this Lease Deed, then the Lessee shall be responsible for and shall pay the same at such times and in such manner as the concerned Governmental Authority shall require.

14.3. All payments to be made by the Lessee to the Lessor shall be subject to tax deducted at source as the Income Tax Act, 1961.

15. ASSIGNMENT AND SUBLETTING

15.1. The Lessee shall be entitled to assign the lease or sub-lease or license all or any portion of the Demised Premises to any of its Affiliates, with prior written intimation to the Lessor. The Lessee shall not be entitled to sub-lease, assign or license its leasehold rights to a third party, without the prior written consent of the Lessor which consent may be withheld at the option of the Lessor by providing reasons for the same. No lease or license shall be done for commercial gain. Where the partners of the Lessee enter into any agreement with a third party (which is not an Affiliate of the Lessee) to transfer their entire partnership interest in the Lessee to such third party, the Lessee shall take prior written consent from the Lessor, which consent shall not be unreasonably withheld, conditioned, or delayed.

- 15.2. In the event of any assignment, sub-lease or license in accordance with this Clause 15, the lessee or licensee, as the case may be, shall be bound by the covenants, terms and conditions of this Lease Deed and the Lessee shall ensure and guarantee that its obligations/covenants contained herein are performed by such assignee or lessee or licensee. The Lessee shall continue to be fully and primarily responsible to comply with all the obligations under this Lease Deed even after any lease or license in accordance with the provisions of this Lease Deed.
- 15.3. In the event of merger or amalgamation or demerger of the Lessee with its Affiliates, the terms of this Lease Deed shall be binding on the entity formed as a result of such merger or amalgamation or demerger, approved by the jurisdictional court or tribunal, without requirement of executing any further documents. In such event, the Lessee or the new entity resulting from the amalgamation or merger or demerger shall submit a certified copy of the order passed by the court or tribunal to the Lessor for its records. If the Parties are required to enter into any further documents consequent upon such order to continue the lease, if required under Applicable Law, the same shall be at the cost of the Lessee.

16. INSURANCE

- 16.1. After the Lease Commencement Date, the Lessee will keep in force at its sole expense as long as this Lease Deed remains in effect and during such other time as the Lessee and the Lessee's employees, agents, invitees and others for whom it is responsible at law use any portion of the Demised Premises, **(a)** Standard Fire and Special Perils Policy covering all its equipment/ machinery and other assets brought in by the Lessee onto the Demised Premises, **(b)** Commercial General Liability Policy: to provide insurance coverage for bodily injury, personal and advertising injury and products and completed operations liability, and **(c)** appropriate annual maintenance contracts for all the equipment being provided by the Lessor for exclusive use of the Lessee including but not limited to the AHUs.
- 16.2. The Lessee shall also obtain any insurance as may be required under Applicable Law or as may be required to be obtained, at the request of the Lessor from time to time.
- 16.3. During the Lease Term, the Lessor will obtain and maintain in force (a) Standard Fire and Special Perils Policy for the Demised Premises, Building, plant and machinery and other utilities owned by the Lessor in the Project, and any other insurance desired by the Lessor, all in amounts and with coverages determined by the Lessor in its sole discretion. The Lessor shall keep such insurance updated and provide the Lessee with the copy of the updated policies each year, prior to the expiration of the then current coverage.
- 16.4. On or prior to the Lease Commencement Date, the Lessee has provided to the Lessor a copy of the Lessee's insurance policy evidencing insurance coverage as required by this Lease Deed. The Lessee shall keep such insurance updated and provide the Lessor with the copy of the updated policies each year, prior to the expiration of the then current coverage.

17. INDEMNITY

- 17.1. The Lessee hereby indemnifies and agrees to defend, save and hold the Lessor, its directors, officers, employees, agents and representatives, harmless from and against any and all claims, demands, actions, damages, liabilities, costs and expenses, including reasonable attorney fees and expenses for (a) injury or death to persons or damage to property occurring within or about the Demised Premises, arising directly

or indirectly out of use or occupancy of the Demised Premises or Common Areas or (b) a breach or default by Lessee or its partners, officers, employees, agents or representatives, in the performance of any of their obligations hereunder or (c) breach of any of the representations and warranties of the Lessee as contained in this Lease Deed or (d) any direct and actual loss or damage (not being in the nature of any direct or indirect business loss or any direct or indirect opportunity loss or any action in tort) suffered by the Lessor by reason of any act or deed or omission of the Lessee which is contrary to the terms hereof, unless caused solely by the willful misconduct or gross negligence of the Lessor or (e) any environmental condition arising during the Lease Term on the Demised Premises, which may have an adverse effect on the Project or non-compliance with the Environmental Laws. Further, The Lessee shall indemnify the Lessor from any and all costs and expenses incurred in connection with the enforcement of this clause.

- 17.2. The Lessor hereby indemnifies and agrees to defend, save and hold the Lessee, its partners, designated partner nominees, officers, employees, agents and representatives, harmless from and against any and all claims, demands, actions, damages, liabilities, costs and expenses, including reasonable attorney fees and expenses for (a) injury or death to persons within or about the Common Areas, arising directly or indirectly out of a breach or default by Lessor or its directors, officers, employees, agents or representatives, in the performance of any of their obligations hereunder or (b) breach of any of the representations and warranties of the Lessor as contained in this Lease Deed, unless caused by the willful misconduct or negligence of the Lessee (c) any direct and actual loss or damage (not being in the nature of any direct or indirect business loss or any direct or indirect opportunity loss or any action in tort) suffered by the Lessee by reason of any act or deed or omission of the Lessor which is contrary to the terms hereof, unless caused solely by the willful misconduct or gross negligence of the Lessee; and (d) any direct and actual (not being in the nature of any direct or indirect business loss or any direct or indirect opportunity loss or any action in tort) loss or damage caused to the Lessee on account of any defect in title to the Schedule Land, non-compliance of the terms of the Sanctioned Plan by the Lessor in relation to construction of the Building as determined by any Governmental Authority and such order having attained finality, breach or non-compliance with the Environmental Laws (and attributable to the Lessor as determined by independent environmental consultants) or the provision or utilities therein, which could not be reasonably ascertained by the Lessee at the time of taking handover of the Demised Premises. Further, the Lessor shall indemnify the Lessee from any and all costs and expenses incurred in connection with the enforcement of this clause.
- 17.3. The Lessor shall not be liable to the Lessee for, and the Lessee assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Demised Premises). The Lessee further waives any and all claims for injury to the Lessee's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). The Lessor shall not be liable for any damages arising from any act, omission or neglect of the Lessee or any of the Lessee's agents, servants, employees, invitees and contractors within the Project or of any other third party.
- 17.4. The indemnifying Party shall indemnify the indemnified Party from any and all costs and expenses incurred in connection with the enforcement of this clause.

18. SALE, MORTGAGE AND CHARGES

- 18.1. The Lessor shall have the right to sell or assign the Demised Premises or any portion thereof during the Lease Term with prior written intimation to the Lessee and such prospective purchaser shall be bound by all the terms and conditions of this Lease Deed including but not limited to renewal of the lease and obligation to refund the Security Deposit. Subsequently, the lease shall be attorned in favour of the prospective purchaser. Deed of attornment or such other document as may be required shall be executed by the Parties confirming such attornment with the Lessor as the confirming party thereto and thereafter the Lessor shall stand released of their obligations under the Agreement. The Lessee shall not be liable to bear any cost for such attornment. The Lessor and/or the new purchaser shall bear all costs (including stamp duty and registration fee, if any) in relation to Deed of attornment and/or incidental documents.
- 18.2. The Lessor shall be entitled to seek rental discounting facility or create a mortgage of the Project, the Demised Premises or any part thereof, and the Lessee shall cooperate with the Lessor in connection thereto provided that such mortgage shall not affect the rights of the Lessee to use and occupy the Demised Premises during the Lease Term so long as the Lessee is not in default under this Lease Deed. The Lessee shall do all acts, deeds as required by the Lessor with respect to the same, as long as the same do not affect the Lessee's rights under this Lease Deed and the Lessee shall not have obligation to the bank or financial institution, save and except the payment of Rent to the designated account and any other reasonable request that the bank or financial institution may require.

19. LOCK IN AND TERMINATION

- 19.1. The Lessee shall not be entitled to terminate the lease during the Initial Term (“**Lock-in Period**”) except for breach of the obligations under this Lease Deed by the Lessor (subject to any cure period available to the Lessor under this Lease Deed) or occurrence of the Force Majeure event which renders the Demised Premises unusable for the Permitted Use even after 12 (twelve) months from the date of approvals to reenter and/or reconstruct the Demised Premises, subject to the right of the Lessor to repair and restore the damage to the Demised Premises. In the event of abandoning or surrendering or terminating the lease prematurely during the Lock-in Period either by the Lessee for reason other than the breach of the Lease Deed by the Lessor or Force Majeure event (as stated above) or due to termination by the Lessor due to the breach by the Lessee of any of the terms of this Lease Deed, the Lessee shall be bound to pay to the Lessor the Rent (including the escalation as per Clause 5.5 above) for the Demised Premises corresponding to the unexpired portion of the Lock-in Period.
- 19.2. **Termination of the Lease Deed Post Lock-In-Period**
- After the expiry of the Lock-in Period and during the Renewal Term, the lease may be terminated by the Lessee by providing the Lessor with 6 (six) months written advance notice (“**Notice Period**”) or upon payment of Rent, Maintenance Charges and other charges as per the Lease Deed in lieu of the 6 (six) month notice.
- 19.3. **Cure Rights and Cure Notices**
- 19.3.1. In the event of a breach by the Lessee of any of the terms of this Lease Deed, including non-payment of Rent for 3 (three) consecutive months as provided in Clause 5.4 above, the Lessor will give a notice to the Lessee to remedy the breach within 30 (thirty) days, and in the event of the Lessee not remedying the breach within such notice period to the satisfaction of the Lessor, the Lessor

will be entitled to terminate the lease with immediate effect. However, if the Lessee disputes the Lessor's claim that the Lessee is in default, the parties shall amicably settle the dispute in terms of Clause 23.2 of this Lease Deed failing which the matter shall be submitted to Arbitration in terms of Clause 23.3 of this Lease Deed and the Lessor may only terminate the Lease Deed if the arbitrator rules in favour of the Lessor. The Parties shall continue to be bound by the terms and conditions of this Lease Deed until the final outcome of the arbitration proceedings. Upon such termination, the Lessor will be entitled to collect the Rent for the remaining portion of the Lock-in Period and also be entitled to all direct damages incurred thereon, including the cost of recovering the vacant and peaceful possession of the Demised Premises. For avoidance of doubt, this will include the arrears of Rent, if any, payable at the time of termination of the Lease Deed. This right is apart from the Lessor's right to specifically enforce the Lessee's obligations under this Lease Deed. Notwithstanding the foregoing, if any breach or other failure by the Lessee to perform any of its obligations under this Lease Deed, results in an emergency situation or adversely impacts any building systems including, without limitation, any serving areas outside of the Demised Premises, any other lessees at the Project, the Project structure or the Common Areas, the Lessor may, without waiting for the Lessee's 30 (thirty) day cure period to expire and without limiting any of the Lessor's other remedies, attempt to cure all or any part of the applicable breach or other failure, in which case the Lessee shall be required to reimburse the Lessor for all of its costs in connection therewith.

- 19.3.2. In addition to the Lessee's rights to self-perform pursuant to Clause 10.2, in the event of a breach by the Lessor of the terms of this Lease Deed, the Lessee will give notice to the Lessor to begin to remedying the breach within 30 (thirty) days and in the event of the Lessor not remedying the breach within a commercially reasonable period, this lease shall stand terminated, even if it is during the Lock-in Period and the Lessee shall not be liable to pay Rent for the unexpired portion of the Lock-in Period. If the Lessor disputes the Lessee's claim that the Lessor is in default, the parties shall amicably settle the dispute in terms of Clause 23.2 of this Lease Deed failing which the matter shall be submitted to arbitration in terms of Clause 23.3 of this Lease Deed and the Lessee may only terminate this Lease Deed if the arbitrator rules in favour of the Lessee.
- 19.3.3. It is clarified that a receipt by the Lessor of the Rent, the Maintenance Charges, Utility Charges or other payment with knowledge of the breach of any covenant hereof shall not be deemed a waiver of such breach, and no waiver by the Lessor of any provision of this Lease Deed shall be deemed to have been made unless expressed in writing and signed by the Lessor. To the greatest extent permitted by law, the Lessee waives the service of notice of the Lessor's intention to re-enter or re-take the Demised Premises, or to institute legal proceedings to that end.

20. REINSTATEMENT

- 20.1. Upon the expiration or earlier termination of the Initial Term or the Renewal Term if any, the Lessee shall surrender the Demised Premises to the Lessor in the same condition as received, free of hazardous materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Demised Premises, and released of any hazardous materials clearances that may be in effect at the time, broom clean, ordinary wear and tear excepted.

- 20.2. The Lessee shall immediately return to the Lessor all keys and/or access cards (if any provided) to the Project, or all or any portion of the Demised Premises furnished to or otherwise procured by the Lessee. If any such access card or key is lost, the Lessee shall pay to the Lessor, at the Lessor's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Lessee's property, alterations and property not so removed by the Lessee as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by the Lessor at the Lessee's expense, and the Lessee waives all claims against the Lessor for any damages resulting from the Lessor's retention and/or disposition of such property. All obligations of the Lessee hereunder not fully performed as of the termination of the Initial Term or the Renewal Term, if any, shall survive the expiration or earlier termination of the Initial Term or the Renewal Term, if any, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Demised Premises.
- 20.3. In the event of the Lessee failing to vacate the Demised Premises on expiry or earlier termination of the lease, the Lessee will be liable to pay compensation equivalent to 200% (two hundred percent) of the Rent and the Maintenance Charges for unauthorized use/ possession of the Demised Premises. This right is without prejudice to the right of the Lessor to evict the Lessee and to deal with the Demised Premises. In such event of the Lessee failing to vacate the Demised Premises on expiry or earlier termination of the lease, the Lessee shall be responsible for all actual and direct damages suffered by the Lessor resulting therefrom. Nothing in this paragraph shall be construed to grant the Lessee any right to use and/or occupy the Demised Premises after expiration or termination of this Lease Deed.

21. FORCE MAJEURE

- 21.1. "Force Majeure" shall mean any event or circumstance or a combination of events or circumstances, which satisfies any of the following conditions:
- (c) materially and adversely affects the performance of an obligation; and
 - (d) is beyond the control of the affected Party and includes (without limitation), the following events and/or circumstances:
 - ix. war, (whether declared or undeclared), invasion, armed conflict or act of foreign enemy in each case involving or affecting India;
 - x. revolution, riot, insurrection or other civil commotion, act of terrorism or sabotage;
 - xi. strikes, industrial disputes and/or lockouts directly affecting the Demised Premises, provided it is not a strike of the employees or contractors of the Lessor or Lessee, as the case may be, for actions caused by the Lessor or Lessee;
 - xii. change in governmental policy or Applicable Laws directly affecting the Demised Premises;
 - xiii. acts of God or events beyond the reasonable control of the affected Party which could not reasonably have been expected, including any effect of the natural elements, including lightning, fire, earthquake, unprecedented rains, landslide, subsidence, flood, storm, cyclone, epidemics or plagues or any other similar effect; and
 - xiv. any judgment or order of any court of competent jurisdiction or statutory authority in India made against the Parties in any proceedings to comply with any Applicable Laws or on account of breach thereof (other than arising as a result of a breach of the relevant Party's obligations hereunder);

- xv. breach by any of the contractors engaged for the Lessor's Work, of their obligations under such contracts, for reasons which are not attributable to the Lessor; and
- xvi. delays in the issuance of any permits or approval of any kind required to be obtained by Lessor in connection with the Lessor's Work for reasons not attributable to the Lessor.

- 21.2. If the performance by either Party of any of its obligations under this Lease Deed is prevented, restricted or interfered with by reason of Force Majeure, then such Party shall be excused from such performance to the extent of such prevention, restriction or interference, provided that such Party shall use reasonable efforts to avoid or remove such cause of non-performance and shall continue performance hereunder whenever such causes are removed.
- 21.3. If, at any time during the Lease Term the Project or the Demised Premises are damaged or destroyed by a Force Majeure event, the affected Party shall notify the other Party within 5 (five) days after discovery of such occurrence. The Lessor shall thereafter notify the Lessee within 15 (fifteen) days from the date of the notification of the occurrence of a Force Majeure event as to the amount of time the Lessor reasonably estimates it will take to restore the Project or the Demised Premises.
- 21.4. If, due to any Force Majeure event, the damage or destruction caused to the Demised Premises continues beyond a period of 15 (fifteen) days, there being no default on the part of the Lessee, the Lessee shall not be required to make payment of the Base Rent, Open Area Rent and Maintenance Charges or such portion thereof from 7 (seven) days from the date of the occurrence of the Force Majeure till the date that the Demised Premises is substantially restored to the condition as delivered by the Lessor to the Lessee for its Permitted Use. During the period of repair and restoration, if the Lessee is unable to use the entire extent of the Demised Premises, the obligation to pay the Base Rent, Open Area Rent and Maintenance Charges, shall stand suspended until the Demised Premises is substantially restored as stated above. Provided that if the Lessee is prevented from using only a portion of the Demised Premises actually affected by the Force Majeure event, the suspension of the Base Rent, Open Area Rent and Maintenance Charges shall be proportionate to the area affected. For avoidance of doubt, it is clarified that any abatement of Rent under this Clause shall not include the Rent, Maintenance Charges and other charges due and payable by the Lessee till such date. For avoidance of doubt, the Lessee shall be required to pay Improvement Rent and Utility Charges. In addition to termination rights under Clause 19 above, in the event the Lessee is not able to make Permitted Use of the Demised Premises even 12 (twelve) months after the date of approvals to reenter and/or reconstruct the Demised Premises, the Lessee will be entitled to terminate the Lease Deed. It is clarified that if the termination occurs under this Clause 21.4, during the Lock-in Period, the Lessee shall not be liable to pay the Rent or any other charges or liquidated damages for the unexpired portion of the Lock-in Period.
- 21.5. The Lessor shall, upon any destruction caused to the Demised Premises due to the occurrence of a Force Majeure event, promptly restore the Demised Premises, subject to delays arising due to (i) insurance claims related investigations; or (ii) any prohibition, either by the insurers or the appropriate Governmental Authority, on entering and restoring the Demised Premises or (iii) for securing license, clearance or other authorization of any kind required issued by any Governmental Authority to enter into and restore the Demised Premises.

21.6. The Party invoking the Force Majeure shall immediately notify the other party of any Force Majeure event.

22. ANTI-CORRUPTION LAWS & ANTI-MONEY LAUNDERING LAWS

22.1. **Anti-Corruption Laws** : The Parties agree and confirm that, in connection with this Lease Deed, the Parties will comply with all Anti-Corruption Laws and not otherwise take any steps that would subject the Parties, its Affiliates or any of their respective representatives to any civil or criminal penalties or loss of benefits. Each of the Lessor and the Lessee represents and warrants that neither the Party nor any director, partner or officer associated with or acting on behalf of the Party has used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; made any direct or indirect unlawful payment to any foreign or domestic Government Official or employee from corporate funds; or violated or is in violation of any provision of the Anti-Corruption Laws.

22.1.1 The Parties will not:

- (d) pay, promise to pay or authorize the payment of any money or anything of value (including, without limitation, any gifts, entertainment or travel), directly or indirectly, to any person for the purpose of or where there is a reasonable likelihood of (i) inducing such person to perform improperly, or fail to perform, his or her function, (ii) securing an improper advantage, or (iii) inducing such person to use his or her influence to affect or influence any act or decision. The Parties acknowledge that the prohibitions in this Clause include any situation in which the person making the payment knows, believes or is aware of a reasonable likelihood that the person receiving the payment will pass the payment through, in whole or in part, to any person for any of the foregoing prohibited purposes.
- (e) retain any Government Official, or any person whose immediate family member is a Government Official, in an official or unofficial capacity, to perform any service for the Parties or their respective Affiliates in relation to the transaction under this Lease Deed; and
- (f) pay or commit to pay anything of value directly to or indirectly for the benefit of (including, without limitation, in cases in which there is a reasonable likelihood that the person receiving the payment will pass the payment through to) any Government Official.

22.1.2 The Parties further agree and confirm that to the best of their respective knowledge neither the Parties nor any of its's officers, employees or persons associated with it:

- (d) has been convicted of any offence involving the Anti-corruption Laws;
- (e) is the subject of any investigation, inquiry or enforcement proceedings by any governmental, administrative or regulatory body regarding any offence or alleged offence under the Anti-corruption Laws; or
- (f) has been or is listed by any government agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programs or other government contracts.

- 22.1.3 The Parties will promptly notify the other Party if, at any time during the term of this Agreement, the Parties breach any portion of this Clause or the Parties would not be able to repeat the confirmations made in this Clause at the relevant time.
- 22.2. **Anti-Money Laundering Laws** : Each of the Lessor and the Lessee represent that their respective operations is and has been conducted at all times in compliance with Anti-Money Laundering Laws and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Lessee with respect to Anti-Money Laundering Laws is pending and no such actions, suits or proceedings are threatened or contemplated.
- 22.3. **Whistle Blowing:**
- (d) Lessor believes in the conduct of the affairs of its constituents in a fair and transparent manner by adopting highest standards of professionalism, honesty, integrity and ethical behaviour. Anyone aggrieved or coming to know of an alleged act that constitutes an improper or unethical activity or conduct by any of our employees can report the same for further investigation and inquiry using the following whistleblowing channels:
- Mr. Ammaiappan J.
Head-Legal, Ascendas Singbridge Pte. Ltd.
ammaiappan.j@ascendas-singbridge.com
- (e) All reports received in this whistleblowing channel will be received and will be handled confidentially, to the extent permitted by law and consistent with Lessor's requirements to investigate and address the reported conduct.
- (f) However, upon investigation, if a complaint is found to be frivolous or made with unsubstantiated allegations, the complainant and/or its associate companies / firms may be banned by Lessor or its affiliates for a limited period of time at the discretion of Lessor.

23. **GOVERNING LAW, JURISDICTION AND DISPUTE RESOLUTION**

- 23.1. The provisions of this Lease Deed shall, in all respects, be governed by, and construed in accordance with the laws of India. Subject to Clauses 23.2 and 23.3 below, each Party agrees that the courts at Chennai shall have exclusive supervisory jurisdiction in relation to this Lease Deed.
- 23.2. If any dispute arises amongst Parties hereto during the subsistence of this Lease Deed or thereafter, in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Lease Deed or regarding a question, including the questions as to whether the termination of this Lease Deed has been legitimate, the Parties shall endeavour to settle such dispute amicably.
- 23.3. In the case of failure by the Parties to resolve the dispute in the manner set out above within 30 (thirty) days from the date when a dispute is notified by one Party to the others, the dispute shall be referred to and finally resolved by arbitration under the Singapore International Arbitration Centre ("SIAC") in accordance with the Arbitration Rules of the Singapore International Arbitration Centre ("SIAC Rules") for the time being in force, which rules are deemed to be incorporated by reference in this clause. The Tribunal shall consist of one arbitrator appointed in accordance with the SIAC Rules. The seat, or legal place, of arbitration and venue of the arbitration shall be Mumbai, India. The language to be used in the arbitration shall be English.

23.4. The arbitral tribunal's award shall be substantiated in writing and the Parties shall submit to the arbitral tribunal's award which shall be enforceable in any competent court of law.

24. COSTS AND STAMP DUTY

24.1. The cost of stamp duty and other incidental expenses in connection with this Lease Deed and any amendment thereof shall be borne by Lessee. The Lessor shall provide all assistance required by the Lessee and endeavour to and facilitate the registration of this Lease Deed in whatever manner possible. This Lease Deed shall be executed in duplicate, and the original Agreement and Lease Deed shall be with the Lessee and the duplicate Agreement and Lease Deed shall be with the Lessor.

24.2. Each Party shall bear its own legal and other costs with respect to this Lease Deed.

25. NOTICES

25.1. Any notice and other communications provided for in this Lease Deed shall be in writing and shall be first transmitted by facsimile transmission/ electronic transmission, and then confirmed by postage, prepaid registered airmail or by internationally recognised courier service, in the manner as elected by the Party giving such notice to the following addresses:

(a) In the case of notices to the Lessor:

Address : Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road,
Taramani Chennai 600113
Attention : Mr Alope Bhuniya, Chief Executive Officer
Telephone : 022- 62212400
Email : legal@ascendas-firstspace.com

(b) In the case of notices to the Lessee:

Address : C/o TPI Composites, Inc. 8501 N. Scottsdale Road, Suite 100 Scottsdale, AZ USA 85253
Attention : General Counsel and Chief Financial Officer
Telephone : (480) 305-8910
Email: sfishbach@tpicomposites.com

Attention: Chief Financial Officer
Telephone: (480) 305-8922
Email: bsiwek@tpicomposites.com

Copy of the notice shall be marked to:

Khaitan & Co LLP
Simal , 7/1, Ulsoor Road, Bangalore 560 042, Karnataka, India.
Attn: Rashmi Deshpande
Email: rashmi.deshpande@khaitanco.com

CBRE
Attn: Christian Perez Giese
Email: christian.perezgiese@cbre.com

- 25.2. All notices shall be deemed to have been validly given on (i) the business date immediately after the date of transmission with confirmed answer back, if transmitted by facsimile transmission, or (ii) the business day after the date of sending, if transmitted by courier or registered post.
- 25.3. The Parties may, from time to time, change their address or representative for receipt of notices provided for in this Lease Deed by giving to the other Party not less than 30 (thirty) days prior written notice.
26. **MISCELLANEOUS**
- 26.1. **Limitation of Liability** : Any reference to any losses, damage, claims, compensation, indemnity etc., to be payable by one Party to the other Party, shall not include any incidental, consequential, penal, exemplary or like damages, or any direct or indirect loss of profits or any claim for loss of opportunity or any action in tort even if advised of the possibility of such claims.
- 26.2. **Reservation of Rights** : No forbearance, indulgence, relaxation or inaction by any Party at any time to require performance of any of the provisions of this Lease Deed shall in any way affect, diminish or prejudice the right of that Party to require performance of that provision. Any waiver or acquiescence by any Party of any breach of any of the provisions of this Lease Deed shall not be construed as a waiver or acquiescence of any right under or arising out of this Lease Deed or of the subsequent breach, or acquiescence to or recognition of rights other than as expressly stipulated in this Lease Deed.
- 26.3. **Severability** : The Parties agree that the covenants, obligations and restrictions in this Lease Deed are reasonable in all circumstances. If any provision of this Lease Deed is held to be illegal, invalid, or unenforceable under any present or future law, (i) such provision shall be fully severable; (ii) this Lease Deed shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a part hereof; (iii) the remaining provisions of this Lease Deed shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance here from; and (iv) in lieu of such illegal, invalid, or unenforceable provision, there shall be added a legal valid and enforceable provision as similar in terms and effect to such illegal, invalid or unenforceable provision as may be possible.
- 26.4. **Amendments** : No modification or amendment to this Lease Deed and no waiver of any of the terms or conditions hereto shall be valid or binding unless made in writing and duly executed by the Parties.
- 26.5. **Entirety** : This Lease Deed read along with the Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof to the exclusion of all other understandings and assurances, either written or oral between the Parties. The Recitals, Schedules and Annexures shall be deemed to form a part of the body of the Deed and shall be binding and enforceable. In the event of any inconsistency or discrepancy between the terms of this Lease Deed and the Agreement, with respect to the matters covered herein, the terms of this Lease Deed shall prevail. For all other terms which are not specifically covered in this Lease Deed, the terms of the Agreement shall continue to prevail and be binding on the Parties.

- 26.6. ***Specific Performance*** : In the event that a Party commits a default of the terms of this Lease Deed then, the non-defaulting Parties shall be entitled to such remedies, including remedies by way of damages and/or specific performance, as may be permitted under Applicable Laws, in addition to its rights and remedies under this Lease Deed.
- 26.7. ***Relationship between Parties*** : Nothing contained in this Lease Deed shall be deemed or construed by the Parties or by any third part or court to create a relationship of principal and agent or employer and employee or of partnership or of joint venture or of any association between the Lessor and the Lessee, save and except that of landlord and tenant.
- 26.8. ***Time*** : The Parties agree that time is of the essence in the performance of the Parties' respective obligations. If any time period specified herein is extended in writing by the Parties, such extended time shall also be of the essence.
- 26.9. ***Survival*** : The provisions of Clauses, 1 (Definitions and Interpretations), 20 (Indemnity), 27 (Governing Law, Jurisdiction and Dispute Resolution), 25 (Notices) and 26 (Miscellaneous) and any other provision intended to survive to give effect to the provisions of this Lease Deed shall survive the expiry or termination of this Lease Deed.

IN WITNESS WHEREOF, the Parties have executed this Lease Deed as of the date first written above

SIGNED and DELIVERED for and on behalf of the **LESSOR**

AARUSH (PHASE III) LOGISTICS PARKS PRIVATE LIMITED

Authorised Signatory

Name: [●]

Designation: [●]

AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED

Authorised Signatory

Name: [●]

Designation: [●]

AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED

Authorised Signatory

Name: [●]

Designation: [●]

SIGNED and DELIVERED for and on behalf of the **CONFIRMING PARTIES**

AARUSH LOGISTICS PARKS PRIVATE LIMITED

Authorised Signatory

Name: [●]

Designation: [●]

AARUSH (PHASE II) LOGISTICS PARKS PRIVATE LIMITED

Authorised Signatory

Name: [●]

Designation: [●]

SIGNED and DELIVERED for and on behalf of the **LESSEE**

PROSPECT ONE MANUFACTURING LLP

Authorised Signatory

Name: [●]

Designation: [●]

In the presence of:

WITNESSES

In the presence of:

In the presence of:

Name:

Name:

Address:

Address:

SCHEDULE A – DESCRIPTION OF THE SCHEDULE LAND

All that piece and parcel of the vacant land totally measuring approximately 41 acres (as per the Field Measurement Book), as shown in the plan and shaded in blue color in Annexure 2 (Sketch of Schedule Land), situated at comprised in Survey Nos 232/2A1, 2A2(part), 234/1, 2, 3(full), 4 to 11 (part), 12 to 17(full), 235/1 to 11(full), 236/1&2(full), 237/1(full), 239/1&2(full), 240/1A, 1B, 1C & 1D(full) of Mettupalayam Village, Sriperumbudur Taluk, Kancheepuram District and lands bearing Survey Nos 270/4&5(part), 7&8(full), 271/2A, 2B & 2C(part), 272/1A, 1B, 1C, 1D, 1E & 2(full), 273/4(full), 275/1 to 4(full), 276(full), 277/1&2(full), 278/1 to 3(full), 279/1(full) Survey Nos 230/1 to 4, 231/1 to 9, 232/1A,1B,1C, 232 2A1, 2A2, 2B, 2C1, 2C2, 2C3, 234/1 to 17, 235/1 to 11, 236/1&2, 237/1, 239/1&2, 240/1A, 1B, 1C & 1D of Mettupalayam Village, Sriperumbudur Taluk, Kancheepuram District and lands bearing Survey Nos 267/3A&3B, 268/1C, 2A & 2B, 269/1B, 2A, 2B, 2C & 2D, 270/1 to 5, 7 & 8, 271/1A, 1B, 1C, 1D, 2A, 2B & 2C, 272/1A, 1B, 1C, 1D, 1E & 2, 273/4, 275/1 to 4, 276, 277/1&2, 278/1 to 3, 279/1 situated at Echoor Village, Sriperumbudur Taluk, Kancheepuram District, Chennai, Tamil Nadu, India. The Schedule Land is bounded as follows:

North by Aarush Logistics Park-Proposed Building 11

South by Echoor – Mettupalayam Village Road

East by Aarush Logistics Park-15m Spine Road

West by Neighbor's Land

SCHEDULE B – DESCRIPTION OF THE BUILDING

1.1 Factory Block	Usage : Industrial
	<p>Areas: This building contains</p> <p>4)5 Bays (Finishing Bay 1 + Molding Bay 1 + Molding Bay 2 + Molding Bay 3 + Finishing Bay 2 + Production Passage)</p> <p>5)Raw Material Warehouse, Glass Cutting, Buffer Stock, Tool Crib and Others, DOB, Locker Area (M&F), Lobby, Back Office with rest room arrangements, Passenger Lift Core 1 No</p> <p>6)Mezzanine – Dining & Wash Area, Office & QA Lab</p>

Building Parameters		
Type	Multi-Span	
Width (m)	200m Centerline to Centerline of Steel Column	
Length (m)	295m Centerline to Centerline of Steel Column	
Clear Height (m) – Eave	13.0m	
Width Module (m)	5 @ 40m centerline of Steel Column	
Roof Slope	4Deg. Subject to final design	
Bay Spacing (m)	10m	
Mezzanine	35m x 80m (load carrying capacity – 500 kg/sqm)	
Gable end expansion	Provision to Expand on West Side towards Maneuvering Area	
Block Masonry Wall Height (Periphery)	3.6m (all around)	
Fire Separation Wall	Full Height Wall between Production Block and Mezzanine Block @35m from East to West	
Flooring	5T/Sqm non FM2 flooring on Production & FM2 standard on Raw Material warehouse – Min, 200mm thickness, hardener & polishing	
Crane Loads	20MT crane – Max 24 Nos distribution across all 5 bays	
Finished Floor Height (FFL)	750mm above internal road level	
Crane Hook Clear Height	10m from FFL	
AHU Provisions	For molding bays AHU's are positioned @ the ridge level – 500 kg/sqm on platform locations and walkway for accessing AHU rooms Access Ladder & Good Lift Provision for accessing roof	
Design Loads: As per FM recommendation		
Design Live Load (kN/m2) on roof	1.0 (20 Psf) – as per FM recommendation	
Design Live Load (kN/m2) on frame	1.0 (20 Psf) – as per FM recommendation	
Wind Speed (mph)	55 m/sec (123 mph) – as per FM recommendation	
Roof & Wall Insulation	FM Approved Insulation Material	
Earthquake Zone	Zone 3	
Additional Collateral Load (kN/m2)	0.15KN/Sqm for purlin 0.35KN/Sqm for rafter	

1.2 Utility Block	4)Type of Structure: RCC Framed Structure (as per IS code) 5)Building Height: 5m clear Electrical Room ((G + 1) & Vacuum Pump Room – Double Height, 10m clear height 6)Other Utility Buildings 5m clear, single story
1.3 Haz-Mat Room	3)Type of Structure : RCC Framed Structure (as per IS code) 4)Building Height – 7.5m clear
1.4 Security Block	3)Type of Structure RCC Framed Structure (as per IS code) 4)Building Height – 4.5m clear
1.5 Waste Storage Room	2)Asphalting with Chain Link Fence & Gate Arrangement

SCHEDULE C - WARM SHELL SPECIFICATIONS

Production Block		
A	General	
1	Clear Height @ Eaves	13.0m
2	Frame Type - PEB	Rigid Frame – multi span – Bay Width – 40m c/c
3	Gable Type - PEB	Single
4	Gutters & Downspouts	0.5mm TCT silicon modified polyester colour coated galvalume sheet of minimum 0.5mm thick 275 gsm galvanized sheet
5	Roofing Material	Metal Panels - 0.55mm thick - standing seam – non FM stanard
6		Profiled, TCT plain single skin galvalume : colour bare galvalume
7	Roof Slope	As per design
8	Wall Panel	Metal Panels - 0.50mm thick non FM
9		Profiled, pre-coated steel wall panels, trapezoidal type, colored profile sheet
10	Roof & Wall Light Panels	On roof : None On wall : as per design
11	Roof Insulation	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm – FM Approved Material
12	Wall Insulation	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm – FM Approve Material
13	Docking Type	Internal docking
14	Canopy Depth	5.0m wide
15	Canopy Height - Top of Apron	5.5m (or) as per final design
16	Canopy Slope	as per design
17	Mezzanine Structure For Office	5.0m clear height from FFL (as per TPI requirement) with services
18	Mezzanine Load For Office Use	500 Kg / Sqm (Metal Deck Sheeting with concrete finish - average 150mm thickness)
19	Roof Access Ladder	Considered
B	PEB DESIGN PARAMETERS	
	Design Code	IS
	Live Load	0.75KN/sqm
	Mezzanine floor load	5.0 KN/sqm
	Collateral load on rafter	0.35 KN/sqm
	Collateral load on purlin	0.15 KN/sqm
	Basic wind load	50m / sec

	Seismic Zone	III
	Importance Factor & Response reduction factor	1 & 4
	Crane loads on structure & foundation	For 20T crane design
	Building Floor Height	750mm from internal road level , Varying from 0.00 to 750mm matching with internal road level
	Type of Flooring	VDF with jointed screed concrete (Spec : 375mm non plasticity soil fill + 200mm WMM + HDPE 300 micron vapour barrier sheet + 200mm thick M25 grade concrete with steel bars or steel fibres + Floor Dry Shake Hardener 4 to 5 Kg / Sqm)
	Slab Load	5 ton per sqm UDL
	Flatness of Floor	Spec to follow : Polished floor
	Slab Sealer / Hardener	MM80 / FOSROC / SIKA / BASF
	Floor Joint Sealant	Construction / Contraction / Isolation / Expansion Joints as per Industrial Flooring Standards.
	Anti-Termite Treatment	Considered
	Cable Trenches on flooring	Considered & locations to be finalized – Tentative – 1820 Rmt
C	Perimeter Wall & Inner Walls	
	Perimeter Hard Wall	Hard Wall
	Perimeter Hard Wall Height	3.6m
	Perimeter Hard Wall Material	200mm thick Solid block wall, plastered on both sides and painted
D	Doors & Windows	
	Rolling Shutters- plant & maneuvering area	7.32m x 7.32m - 4 Nos
	Rolling shutter Width (Other Areas)	4.0m
	Drive-In Doors	Sliding doors
	Fire Escape Doors	2 Hrs fire rated Hot Pressed Metal Door with standard accessories - minimum size - 0.9m x 2.1m and compliant with codes
E	Dock Equipment	
	Dock Pit- Nos	5
	Dock guards/bumpers	Considered of Gandhi Automation / Maini or similar make
F	Paint & Finishes	
	Steel, Flashings, Doors and Frames	Finish with a grey white (Ral 9002) painting will be added to the indoor side.
	Exterior Wall For Office Entrance	Exterior grade emulsion paint.
	Interior Building Painting For Toilet Block	One coat of primer plus 2 coats of emulsion.
	Finish to primary members for steel building structural members	Surface preparation plus one coat of primer plus one coat of enamel paint.
	Lightning arrestor	As per statutory requirement
G	Paint, Finishes & Improvements	
	Toilet Cubicle (Male / Female)	Design as per NBC (local code)
		- Vitrified Tiles as per architect design
		- Standard UPVC pipes for water / waste water lines
		- Standard sanitary fixtures (Jaguar / Parryware / Hindware)
	Office Elevation- Treatment	16.0m wide

	Total Nos. of Office Entries	1
	Elevation Treatment	ACP & Glazing as per design
H	Open Areas	
	Manoeuvre Area- Access to production areas	RCC, as per design.
	Hard paved blade storage area	Hard Paved, as per design.
I	Common Areas	
	Fencing & Gates	1.8m heigh barbed wire fencing with intermittent pipe support
	Gate House	RCC Building as per design
	Roads, circulation areas	Asphalt road as per design
	Storm Water Drainage Network	RCC storm water drainage system as per slope
	STP	Common STP
	Domestic water supply	Water supply from bore well supply
	Fire water supply	Common Fire Water Tank – FM Compliance

SCHEDULE D – LESSEE IMPROVEMENTS

Lessee Improvements		
A	PEB Parameters	
1	Design Code	FM
	Live Load	1.0 KN/sqm
	Basic wind load	55m / sec
	Crane girders & brackets	To Carry a load of 20T of 24 cranes across all 5 bays
	Roof Insulation (FM Approved)	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm
	Wall Insulation (FM Approved)	50mm thick rock wool insulation with support. Aluminium foil over GI wire mesh @ bottom, density of wool should be 48 Kg / Sqm
	Lift Core	Civil works connected with this work
B	Fire Fighting System	
	Fire Hydrant System, Sprinkler System, Smoke Detectors, Fire Alarm, Etc.,	Basic Design code : National Building Code (NBC) -2016 – PART IV & for sprinkler demand - FM3-26 & FM8-9
	Fire Fighting System	FM Global
C	Electrical System	
	10.5MVA to 12 MVA Power	Incoming & distribution, infrastructure & approvals
	Electrical System, including lighting in production, storage & office, open storage areas and distribution for utilities	As per design complete with sub main distribution boards and its components i.e. breakers, fuses etc.
	DG Set	As per requirement
	UPS System – 800 KVA	As per requirement
	Power Connection	Development & Liasoning
D	HVAC System	
	Air conditioning system	As per design. Includes all operation areas hazardous storage, waste storage, paint kitchen, WC areas, and HVAC room (as per space list)
	Additional HVAC support for Paint Booths	As per design of Paint booth supplier
	AHU Provisions	For molding bays AHU's are positioned @ the ridge level – 500 kg/sqm on platform locations and walkway for accessing AHU rooms Access Ladder & Good Lift Provision for accessing roof
E	CCTV & Security System	As per design
	Office Interior	
	Office interior, including partition, floor, walls etc.	Office interiors. HVAC for office included in A.11, excluding office furniture's.
G	Additional Buildings	
	Hazardous Store – 525 sq mt	RCC Building as per design
	Waste storage area – 975 sq mt	Asphalt floor Surface with MS Fence along periphery for an height of 1.8m, as per statutory requirements
	Utility Block- 2540 sq mt	RCC Building as per design
H	Others	
	Joineries / Light Fixtures / Other Equipment's	Additional Rolling Shutters, Trenches, Fire Wall, Dock Levellers, Lighting of 600 & 800 Lux

SCHEDULE E – HANDOVER CONDITION

- 16) Date of Handing Over: 15th January, 2020
- 17) Permanent power for facility however MB1 and FB1 infra complete with sub-distribution to site panels shall be fully ready (up and running), subject to TPI application submission on or before 01.03.2019 along with initial deposit.
- 18) MB1 & FB1 Structural column bracket and gantry girder to be ready by 15-09-2019 to commence rail work and other ancillary works to have crane operational by 15-12-2019.
- 19) Vacuum Pipework and Automation (MB1 and MB2) vacuum pumps rooms shall be ready to install pumps before and pump electrical panels 4. Compressed air pipework for all machinery, dust collection areas, compressors themselves - up and running, to achieve this milestone the subject utility block shall be partly made ready by AFS on or before 30.09.2019.
- 20) MB1 & MB2 Full trenches to be made ready by on or before 15.11.2019
- 21) Roof Closure and 3 sides closure (full)
- 22) Lighting fixtures functional at MB1-FB1
- 23) Floor concrete and trenches
- 24) Sprinkler pipeline tested only.
- 25) A temporary office space for at least 80 people and lunch space for 200 people
- 26) Glass kitting at least infra for 2 machines (eastman glass cutting machines) and jib cranes. (including ups cabling, power and pressurized air to each machine) – Full Functional condition
- 27) Partial completion of HVAC system for production areas, glass cutting and warehouse and Haz-Mat storage).
- 28) Utility Building – 100% completion
- 29) TPI-3rd Party schedule dated 24th January, 2019 (which is attached hereto) deadlines to be aligned
- 30) AFS to support and work along with TPI team for installing 1st mold by 1st January, 2020

SCHEDULE F – DESCRIPTION OF THE MAINTENANCE SERVICES

COMMON AREA MAINTENANCE SCOPE

Aarush Logistics Park Private Limited, is responsible for maintenance and upkeep of common area and maintenance of all items built as common park infrastructure and the charges for the same is classified as 'CAM Charges'. CAM Charges shall include among other things the following:

3. Costs incurred towards maintenance of all common areas including but not limited to:
 - p. Boundary Wall, Security Rooms, Security Gates, Boom Barriers and other security systems
 - q. Roads, Pavements and Road Furniture
 - r. Common Parking
 - s. Lawns and Landscape
 - t. Fire Tank & Fire System will be maintained in compliance with FM standards
 - u. Water Distribution System
 - v. Sewage Treatment Plant (STP) System
 - w. Electrical Systems- Park Infrastructure
 - x. Street Lighting
 - y. Common Telecom and Telecommunication System
 - z. Drainage System
 - aa. Common Restrooms
 - bb. Advertising and Signage for the Park
 - cc. CCTV
 - dd. Solid Waste Disposal

4. Costs incurred towards operations and upkeep of the common areas, operation of plant and machinery required for the park including but not limited to:
 - a. Security systems including guards and other systems deployed for the same
 - b. Electricity and consumables for operation of Street Lights, STP Systems, Water Systems, Fire Systems, Solar Systems,
 - c. Landscaping
 - d. General cleanliness and upkeep

SCHEDULE G – RENTAL SCHEDULE

[attached separately]

ANNEXURE 1 – MASTER PLAN OF THE PROJECT

[Attached separately]

ANNEXURE 2 – SKETCH OF THE SCHEDULE LAND

[Attached separately]

ANNEXURE 3 – SKETCH OF OPEN AREA

[Attached separately]

ANNEXURE 4 – LOCATION OF STORAGE AREA

[Attached separately]

ANNEXURE 5 – LIST OF APPROVALS

1. DTCP approval for the Demised Premises;
2. CTE from PCB for the Demised Premises;
3. EIA clearance for the Project;
4. No Objection Certificate from the Fire department;
5. No Objection Certificate from the Health department;
6. No Objection Certificate from the Inspector of factories

ANNEXURE 6 – RULES AND REGULATIONS

RULES & REGULATIONS OF AARUSH LOGISTICS PARK

I. Use of the Demised Premises:

- a. The Lessee agrees that the Demised Premises shall be used solely for the Permitted Use defined in the Lease Deed and for no other purposes whatsoever.
- b. In the event, the Lessee plans to use the Premises for any purpose other than as mentioned in the Lease Deed, it shall do so only after obtaining written permission from the Lessor.

II. Lessee shall at all times do, act, operate and behave in the given manner:

- (i) Lessee and/or its visitors shall ensure that they are in compliance of all laws, ordinances, orders, rules, regulations (state, municipal, central and/or other agencies of bodies having jurisdiction thereof) and/or Project Bye-laws, with reference to the use, condition or occupancy of the Premises as well as the provisions of all recorded documents affecting it.
- (ii) Lessee shall ensure that its operations are consistent with the terms and conditions laid down in the construction and operation approvals for the use, condition or occupancy of the Demised Premises. The Lessee shall also keep all statutory and/or otherwise permissions and approvals valid at all times during the sustenance of this lease.
- (iii) The Lessee's operations shouldn't exceed the capacity of the structure and utilities and should not jeopardize the structural integrity of the Demised Premises/Project or cause damage/impair to any part of the Demised Premises or the Project.
- (iv) The Lessee shall not store, use or dispose of any hazardous materials in the Demised Premises except as permitted under the Applicable Laws. In no event shall Lessee cause or permit to be discharged into the plumbing or sewage system of the Project or onto the lands/buildings underlying or adjacent to the Demised Premises any hazardous materials. The Lessee shall be solely responsible for and shall defend, indemnify, and hold Lessor and its agents harmless from and against all claims, costs and liabilities, including attorneys' fees and costs, arising out of or in connection with Lessee's storage, use and/or disposal of hazardous materials on the Demised Premises.
- (v) Lessee shall ensure that all noise generated in its use of the Demised Premises shall be confined or muffled so that it does not interfere with the businesses of or annoy the occupants and/or users of adjacent properties.
- (vi) Lessee shall ensure that all dust, fumes, odors and other emissions generated by Lessee's use of the Demised Premises shall be sufficiently dissipated in accordance with sound environmental practice and exhausted from the Demised Premises in such a manner so as not to interfere with the businesses of or annoy the occupants and/or users of adjacent properties, or cause any damage to the Demised Premises or the Project or any component part thereof or the property of adjacent property owners.

III. Use of Common Area of the Project:

- i. The common areas made available by Lessor appurtenant to the Demised Premises including gates, pedestrian ways, service roads, landscaped areas, sidewalks, service driveways, etc., shall be subject to the exclusive control and management of Lessor, as expressly reserving to Lessor, without limitation, the right to change the size, area, level, location, and arrangement of these common facilities and to remodel, upgrade or construct buildings and other improvements.

- ii. The Lessee shall have non-exclusive right to use the common areas for the purposes as stated in this Lease, subject to rules and regulations of the Project as decided by Lessor from time to time. Such rules and regulations shall not interfere with the right of Lessee to occupy and use the Demised Premises as per provisions of this Lease Deed.
- iii. The Lessee shall not interfere with rights of the Lessor or other lessee or any other person entitled to use this Common Area.
- iv. The Lessee is aware of the fact that the Lessor is underway with the construction of buildings/premises in the lands adjoining the said Demised Premises. The Lessor shall endeavor not to cause any blockage to the Demised Premises, without giving prior written notice to the effect to the Lessee. Any interference or inconvenience caused to the Lessee due to such construction or for any reasons beyond the control of the Lessor shall confer no right of any kind to the Lessee against the Lessor. The Lessor will take appropriate measure to endeavor minimum inconvenience is caused to the Lessee's operations in the Demised Premises due to the ongoing constructions.
- v. The Lessee has to inform the Lessor's facility manager in advance (at least 4 hours in advance) regarding transportation of finished product from the Demised Premises to avoid inconvenience to other tenants in the park.

IV. **Compliance with Statutory Requirements**

- a. The Lessee shall, at its own cost, comply in all respects with the provisions of every enactment as may be required for its operations including compliances under CTO, Fire, Provident Fund, Employee State Insurance, etc.

V. **Common Area Rules**

Aarush Logistics Park has framed the following general rules and regulations to be followed by the occupants of the Project. Such rules and regulations are framed with the intention to provide efficiency of operation, hassle free occupation and an excellent overall experience for all the lessee/occupants. Aarush reserves the right to make such changes to the rules and regulations without interfering with the rights of the tenants under this Lease Deed. The rules and regulations shall include among other things the following:

- a. **Restricted entry :**
 - i. Lessee shall only allow people with business inside the Project / Demised Premises
 - ii. Persons entering the Project can be subjected to reasonable check to ensure security of the park.
 - iii. Entry systems should be followed for entering into the Demised Premises
- b. **Parking**
 - i. Parking allowed only in authroised parking areas
 - ii. No parking on the road or elsewhere
- c. **Interference in other persons operations**

No blockage of road/common areas
- d. **Upkeep of the facility**
 - i. No littering common areas
 - ii. Garbage disposal as per norms
- e. **Capacity Utilisation**

Usage of common facility within the approved parameters including usage of water, electricity, discharge of sewage

VI. Adherence to Policy

The Lessee hereby undertakes to adhere to all policies, ordinances, circulars, etc. that may be issued by the Lessor and/or its agents with respect to the Demised Premises, including the following:

- a. **Signage:** Lessee may, at its expense, install signage on the Demised Premises, subject to any municipal restrictions. Except as set forth in the immediately preceding sentence, Lessee shall not place or install on or within any portion of the Demised Premises, the exterior of the buildings or the Common Areas, any other sign, advertisement, banner, placard, or picture which is visible from the exterior of the Demised Premises without Lessor's prior written consent which shall not be unreasonably withheld. Upon expiration of the Term/early termination of this Lease, the Lessor may require the Lessee to remove such signage and restore any damages caused by signage or remove it by itself and charge the Lessee, the cost of removal of such signage, together with any costs that may be incurred by Lessor to repair any damage caused thereby.
- b. **Parking:** Lessee shall be entitled to the parking spaces as provided in the Project Land. Lessee shall adhere to all of the rules and regulations as are promulgated by Lessor and to any restrictions or regulations at any time imposed by any prevalent Laws. The Lessee and/or its guest/invitees, shall not, at any time, park or permit to be parked any vehicles on any other portion of the Project. The Lessee agrees to assume responsibility for compliance by its employees and invitees with the parking provisions contained herein. Lessor reserves the right to grant easements and access rights to others for use of the parking areas on the Project, provided that such grants do not reduce parking and do not materially interfere with Lessee's use of the parking areas.
- c. **Trash Removal:** The Lessee, at its own cost and expense, shall provide trash bins or other adequate garbage disposal facilities within the Demised Premises sufficient for the interim disposal of all of its trash, garbage and waste. All such trash, garbage and waste temporarily stored in such a manner so that it is not visible from outside and Lessee shall cause such trash, garbage and waste to be regularly removed from the Demised Premises. Lessee shall keep the Demised Premises and the Common Area in a clean, safe and neat condition free and clear of all of Lessee's trash, garbage, waste and/or boxes and containers containing same at all times.

ANNEXURE 7 – LOCATION OF STORAGE AREA

[Attached separately]

ANNEXURE 8 – AGREED FORM OF THE CORPORATE GUARANTEE

February [•], 2019

To : **AARUSH (PHASE IV) LOGISTICS PARKS PRIVATE LIMITED**
Unit No.7 & 8, First Floor,
Pinnacle Building, International Tech Park,
CSIR Road, Taramani Chennai 600113.

and

AARUSH (PHASE V) LOGISTICS PARKS PRIVATE LIMITED
Unit No.7 & 8, First Floor,
Pinnacle Building, International Tech Park,
CSIR Road, Taramani Chennai 600113.

(hereinafter referred to as the "Lessor", which expression shall include its successors and permitted assigns)

Dear Sirs

CORPORATE GUARANTEE

We refer to the Agreement to Lease dated 4 February 2019 made among Aarush (Phase IV) Logistics Parks Private Limited, Aarush (Phase V) Logistics Parks Private Limited, Aarush Logistics Parks Private Limited, Aarush (Phase II) Logistics Parks Private Limited, Aarush (Phase III) Logistics Parks Private Limited, and Prospect One Manufacturing LLP (“ **Agreement** ”). Unless otherwise provided herein and except as the context may otherwise require, capitalized terms that are defined in the Agreement and are used in this Agreement shall have the same meanings given to them in the Agreement. References herein to the “ **Lease** ” shall include only the Initial Term, and also includes any period of overstaying by the Lessee with or without consent of the Lessor of this Demised Premises.

1. In consideration of your having agreed to grant lease of the Demised Premises to Prospect One Manufacturing LLP (Registration Number AAN-4797), a limited liability partnership incorporated in India with its registered office at 156/1, Shop No. 16, SMR Sartaz Plaza, Jupiter Colony, Sikh Road, Secunderabad, Hyderabad, Telangana, 500009 India (the “ **Lessee** ”), upon the terms of the Agreement to Lease dated of even date and the Lease Deed that shall be executed and registered in due course (collectively referred as “ **Lease Documents** ”), TPI Composites, Inc., a company established and existing under and by virtue of the laws of the state of Delaware, United States of America (the “ **Guarantor** ”, which expression shall include its successors and permitted assigns), with its principal office at 8501 N. Scottsdale Road, Suite 100, Scottsdale, AZ 85253 USA, hereby absolutely, irrevocably and unconditionally guarantee for the benefit of the Lessor (the “ **Beneficiary** ”) the timely, complete and satisfactory payment by the Lessee of the Lessee’s obligations to pay all amounts due and payable under the Lease Documents (the “ **Guaranteed Obligations** ”).
2. We guarantee that, if the Guaranteed Obligations are not paid in accordance with the terms of the Lease Documents by the Lessee (after any applicable notice and cure periods set forth in the Lease Documents), we shall pay the same to the Beneficiary.

3. This Guarantee shall (i) be binding upon the Guarantor, its successors and permitted assigns; (ii) inure to the benefit of and be enforceable by the Beneficiary and its successors, transferees and permitted assigns.
4. No failure or delay by the Beneficiary in exercising any power, right or remedy hereunder shall impair any of the same or operate as a waiver thereof.
5. Our liability under this Guarantee shall not be impaired, discharged, prejudiced or affected by:
 - (i) the giving of any time by the Lessor to the Lessee or by any indulgence, forbearance, concession, compromise or arrangement given by the Lessor to or made by the Lessor with the Lessee, with or without our assent;
 - (ii) No action taken or omitted by the Lessor in connection with other means of payment shall discharge, reduce, prejudice or affect the liability of the Guarantor under this Corporate Guarantee;
 - (iii) any variation to the Lease Documents;
 - (iv) the Lessee surrendering part of the Demised Premises, in which event our liability is to continue in respect of the part of the Demised Premises not surrendered;
 - (v) any legal limitation, disability or incapacity relating to the Lessee or the Guarantor;
 - (vi) any enforcement of or failure to enforce any right or remedy by the Lessor against the Lessee;
 - (vii) any claims by the Lessee to rights of set-off or counter-claim of any nature whatsoever against the Lessor;
 - (viii) the insolvency, liquidation, judicial management or dissolution of the Lessee or the appointment of a liquidator, trustee, receiver or receiver and manager of all or any part of the property of the Lessee (or any event analogous to any of the foregoing) at any time or from time to time;
 - (ix) any invalidity, irregularity, unenforceability, imperfection or avoidance or any defect in the obligations of, the Lessee or the Guarantor;
 - (x) any change in the name, constitution or otherwise of the Lessee or the Guarantor or any change in the setup of the Lessee, which may be by way of change in the constitution, winding up, voluntary or otherwise, or any merger, absorption, amalgamation or otherwise of the Lessee or the Guarantor with any other corporate entity or concern;

- (xi) the liquidation, bankruptcy or dissolution (or proceedings analogous thereto) of the Lessee and/or the Guarantor, or bankruptcy of the Guarantor, or the appointment of a receiver or administrative receiver or administrator or trustee or similar officer of any of the assets of the Lessee or the Guarantor or the occurrence of any circumstances whatsoever affecting the Lessee's and/or the Guarantor's ability to discharge its obligations under the Lease Documents; or
 - (xii) anything else by which but for this clause, may operate to exonerate us from our obligations or liabilities or affect those obligations and liabilities at law or in equity.
6. Any statement of account certified as correct by any one of the Lessor's directors, general manager, deputy general manager, finance manager or other duly authorised personnel shall (other than in the case of manifest error or fraud) be binding on us and shall be conclusive evidence against us that the sums therein certified are due and owing from the Lessee to the Lessor.
 7. Any demand for payment of money or any other notice under this Guarantee may be made by the Lessor or any firm for the time being acting as the Lessor's solicitors by letter addressed to us and sent by registered post or delivered to our addresses as stated hereinafter and a demand or notice so given or made shall be deemed to be given or made or received on the day it was so left or the day following that on which it was posted, as the case may be.
 8. This Corporate Guarantee may be enforced without the Lessor first having recourse to any other security or rights or taking any other steps or proceedings against the Guarantor or any other person and may be enforced for any balance due even after the Lessor has resorted to any one or more other means of obtaining payment or discharge of the monies obligations and liabilities hereby secured.
 9. We shall pay all reasonable legal fees (including your solicitors' charges on a full indemnity basis) and all other reasonable disbursements and out-of-pocket expenses (subject to any costs orders that the court may make in connection with enforcing payment of the monies due hereunder or otherwise howsoever in enforcing any of the terms and conditions herein contained or the breach of the terms and conditions hereunder, in which case we will only pay the Lessor's reasonable legal costs and expenses if you are the prevailing party in any dispute relating to such payment of monies or breach of such terms and conditions.
 10. Our covenants with the Lessor are given as sole or principal debtor or covenantor, with the Lessor of the Demised Premises for the time being and with all its successor in title without the need for any express assignment, and our obligations to the Lessor will last throughout the existence of Agreement to Lease and the Initial Term (as defined in the Lease Documents) and all references to " **Lessor** " in this Guarantee shall mean the Lessor of the Demised Premises for the time being.
 11. This Guarantee shall commence with effect from the date of the Agreement to Lease and shall automatically terminate upon the fifth (5th) anniversary of the Agreement unless Lessor and Lessee agree to continue the Guarantee due to reasonable financial risks of the Lessee being unable to fulfill its financial obligations under the Agreement.
 12. This Guarantee shall be binding as a continuing security on our successors and permitted assigns.

13. The Guarantor hereby represents and warrants:
- (a) It is a corporation organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has the corporate power and authority to own its properties and assets and to carry on its respective business as now being conducted;
 - (b) It has all requisite corporate power and authority to execute, deliver and perform this Guarantee. The execution, delivery and performance of this Guarantee have been duly authorized by all necessary corporate action;
 - (c) This Guarantee has been duly executed and delivered and constitutes a legal, valid and binding obligation, enforceable against it in accordance with its terms; and
 - (d) No consent, authorization, approval, order, permit or act of or from, or declaration filing with, any governmental authority or regulatory body (including, without limitation, pursuant to foreign exchange regulations in India or elsewhere) or any court or other tribunal is required for the execution, delivery or performance by it of this Guarantee.
14. Any notice and other communications provided for in this Agreement shall be in writing and shall be first transmitted by facsimile transmission/ electronic transmission, and then confirmed by postage, prepaid registered airmail or by internationally recognised courier service, in the manner as elected by the Party giving such notice to the following addresses:
- (a) In the case of notices to the Lessor:
 - Address : Unit No.7 & 8, First Floor, Pinnacle Building, International Tech Park, CSIR Road, Taramani
Chennai 600113
 - Attention : Mr Alope Bhuniya, Chief Executive Officer
 - Telephone : 022- 62212400
 - Email : legal@ascendas-firstspace.com
 - (b) In the case of notices to the Guarantor:
 - Address : 8501 N. Scottsdale Road, Suite 100
Scottsdale, AZ 85253 USA
 - Attention : General Counsel and Chief Financial Officer
 - Telephone : (480) 305-8910
- All notices shall be deemed to have been validly given on (i) the business date immediately after the date of transmission with confirmed answer back, if transmitted by facsimile transmission, or (ii) the business day after the date of sending, if transmitted by courier or registered post.
- The Parties may, from time to time, change their address or representative for receipt of notices provided for in this Agreement by giving to the other Party not less than 30 (thirty) days prior written notice.
15. If at any time any provision of this Guarantee is or becomes illegal, invalid or unenforceable in any respect under the applicable laws, rules and/or regulations, the legality, validity or enforceability of (a) the remaining provisions of this Deed and (b) such provisions under the applicable laws, rules and/or regulations shall not in any way be affected or impaired thereby.

16. This Guarantee is governed and will be construed in all respects in accordance with the laws of the Republic of India. The courts at Chennai shall have exclusive supervisory jurisdiction in relation to this Agreement.
17. If any dispute arises between the Lessor and the Guarantor hereto during the subsistence of this Agreement or thereafter, in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Agreement or regarding a question, including the questions as to whether the termination of this Agreement has been legitimate, the Parties shall endeavour to settle such dispute amicably.
18. In the case of failure by the Lessor and the Guarantor to resolve the dispute in the manner set out above within 30 (thirty) days from the date when a dispute is notified by one party to the other, the dispute shall be referred to and finally resolved by arbitration under the Singapore International Arbitration Centre in accordance with the Arbitration Rules of the Singapore International Arbitration Centre (“ **SIAC Rules** ”) for the time being in force, which rules are deemed to be incorporated by reference in this clause. The arbitration tribunal shall consist of one arbitrator appointed in accordance with the SIAC Rules. The seat, or legal place, of arbitration and venue of the arbitration shall be Mumbai, India. The language to be used in the arbitration shall be English.
19. The arbitral tribunal's award shall be substantiated in writing and the Lessor and the Guarantor shall submit to the arbitral tribunal's award which shall be enforceable in any competent court of law.

IN WITNESS WHEREOF , the Parties hereto have hereunto set and subscribed their respective hands and seals the day and year first hereinabove written

SIGNED AND DELIVERED by)
THE GUARANTOR through its)
Authorised Signatory)

SIGNED AND DELIVERED by)
THE LESSOR through its)
Authorised Signatory)

A NNEXURE 9 – LIST OF APPROVALS

7. DTCP approval for the Demised Premises
8. CTE from PCB for the Demised Premises
9. EIA clearance for the Project
10. No Objection Certificate from the Fire department
11. No Objection Certificate from the Health department
12. No Objection Certificate from the Inspector of factories

Consent of Independent Registered Public Accounting Firm

The Board of Directors
TPI Composites, Inc.:

We consent to the incorporation by reference in the registration statements on Form S-8 (Nos. 333-212648, 333-216936 and 333-223587) and on Form S-3/A (No. 333-220307) of TPI Composites, Inc. of our report dated March 4, 2019, with respect to the consolidated balance sheets of TPI Composites, Inc. as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income (loss), changes in stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements") which report appears in the December 31, 2018 annual report on Form 10-K of TPI Composites, Inc.

The audit report covering the December 31, 2018 consolidated financial statements refers to a change in the Company's method of accounting for revenue in 2018, 2017, and 2016 due to the retrospective adoption of ASC Topic 606, *Revenue from Contracts with Customers*.

/s/ KPMG LLP

Phoenix, Arizona
March 4, 2019

CERTIFICATION

I, Steven C. Lockard, certify that:

1. I have reviewed this annual report on Form 10-K of TPI Composites, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2019

By: /s/ Steven C. Lockard
Steven C. Lockard
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I, William E. Siwek, certify that:

1. I have reviewed this annual report on Form 10-K of TPI Composites, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2019

By: /s/ William E. Siwek
William E. Siwek
Chief Financial Officer
(Principal Financial and Accounting Officer)

**Certification Pursuant To
18 U.S.C. Section 1350,
As Adopted Pursuant To
Section 906 of the Sarbanes-Oxley Act of 2002**

I, Steven C. Lockard, Chief Executive Officer of TPI Composites, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the report on Form 10-K of TPI Composites, Inc. for the fiscal year ended December 31, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. Section 78m or 78o(d)); and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of TPI Composites, Inc.

Date: March 4, 2019

By: /s/ Steven C. Lockard
Steven C. Lockard
President and Chief Executive Officer
(Principal Executive Officer)

**Certification Pursuant To
18 U.S.C. Section 1350,
As Adopted Pursuant To
Section 906 of the Sarbanes-Oxley Act of 2002**

I, William E. Siwek, Chief Financial Officer of TPI Composites, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the report on Form 10-K of TPI Composites, Inc. for the fiscal year ended December 31, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. Section 78m or 78o(d)); and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of TPI Composites, Inc.

Date: March 4, 2019

By: /s/ William E. Siwek
William E. Siwek
Chief Financial Officer
(Principal Financial and Accounting Officer)