

TPI Composites, Tex-Tech, and Carbon Rivers Partner in Turning End-of-Life Wind Blades to Liners for Cured in Place Pipe

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SCOTTSDALE, Ariz., March 08, 2023 (GLOBE NEWSWIRE) -- TPI Composites, Inc., (TPI) (Nasdaq: TPIC) has partnered with Tex-Tech (Kernersville, NC) and Carbon Rivers (Knoxville, TN) in a pilot program to process end-of-life wind blades, pyrolyze the material and process the recovered glass fiber into liners for cured in place pipe (CIPP). CIPP gives new life to damaged pipelines without the excavation of streets through rehabilitation of existing water mains and waste lines by lining the walls of the existing pipe with a hardened synthetic fiber tube.

With this partnership, TPI is able to contribute to a circular economy providing end-of-life wind blades to Carbon Rivers who has created a pilot line for the recycling process through high-temperature pyrolysis. The result is recovery of valuable lightweight hydrocarbons as feedstocks for new products as well the glass fiber, the primary reinforcement in wind turbine blades. These reinforcements are received by Tex-Tech, who then integrate the glass fiber with other materials to create a non-woven liner, the primary component used in CIPP operations. This liner design significantly increases the properties of the installation resulting in lower costs and improved long-term performance.



The Tex-Tech product and results from testing conducted by TPI were recently presented at the “Underground Construction Technology” conference in Orlando, Florida. Vincent Gallacher, Director of Research & Product Development at Tex Tech said “We have a strong corporate belief in creating sustainable supply chains that lead to the efficient use of raw materials to reduce overall waste. Our involvement with TPI and Carbon Rivers, establishes a path for reuse of end-of-life wind turbine blades which exemplifies this principle for the betterment of our customers, our company and society.”

Steve Nolet, Senior Director of Innovation & Technology from TPI notes, "Supporting new applications for end-of-life wind turbine blades is an important focus of our efforts at TPI. We are very excited about the prospect of keeping blades out of landfills while extending the life of our critical infrastructure with CIPP. Our partnership with Carbon Rivers and Tex Tech enables this future pathway."

Creating a sustainable circular economy for recycling fiberglass composites, including wind turbine blades, has been a challenging problem for the wind energy industry. Pyrolysis of these materials offers a sustainable thermal process for material recovery and identifying applications for the recovered glass fiber is a critical part of closing the loop.

David Morgan, Chief Strategy Officer at Carbon Rivers observed, "Upcycled glass fiber circular economies are not just necessary for wind energy, automotive, and marine industries but recovered materials are also essential for infrastructure and underground pipe systems. The property enhancements from the use of recycled glass fiber in these applications is an innovative step."

About TPI Composites, Inc.

TPI Composites, Inc. is a global company focused on innovative and sustainable solutions to decarbonize and electrify the world. TPI delivers high-quality, cost-effective composite solutions through long-term relationships with leading OEMs in the wind and automotive markets. TPI is headquartered in Scottsdale, Arizona and operates factories in the U.S., Mexico, Türkiye and India. TPI operates additional engineering development centers in Denmark and Germany and global service training centers in the U.S. and Spain.

About Carbon Rivers, Inc.

Carbon Rivers is a Certified Small Business founded by engineers and scientists, headquartered in Knoxville, TN. We maintain and cherish our deep relationship with East Tennessee industry partners and regional research institutions to provide innovative products, ideas, and solutions for automotive, energy, safety and security industries in both the public and private sector.

About Tex Tech Industries.

Tex-Tech Industries is a global supplier of materials science-based solutions for demanding end use markets where performance and reliability are counted upon. With global headquarters located in Kernersville, North Carolina (USA) and manufacturing, R&D and sales sites located throughout North America and Europe, Tex-Tech is able to service our partners across the globe in key markets such as aerospace and defense, medical, agriculture and automotive.

TPI Investor Relations

480-315-8742

investors@tpicomposites.com

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/7135921e-ac57-4286-b1fb-a327572b6290>



Source: TPI Composites, Inc.

Cured-in-place-pipe installation with UV light to accelerate resin cure.



Using glass fiber to replace PET felt, improves the rate of UV curing