



March 17, 2021

To: House Energy Committee Members
From: Ed Rivet, Executive Director
Re: Recycling Wind Turbine Blades

Per the question raised by Rep. Outman during the presentation by DTE Energy at last week's committee hearing, below please find news items/announcements showing the commercially viable industry developing specifically around the recycling of wind turbine blades. It would be irresponsible to place them in a landfill, both environmentally and as a waste of a valuable, usable commodity.

American ingenuity is already resolving this question.

GE announces first US wind turbine blade recycling program with Veolia

Dec. 9, 2020
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Dive Brief:

- GE Renewable Energy announced Tuesday a multi-year agreement with Veolia North America for the first U.S. wind turbine blade recycling program of its kind.
- The majority of blades from onshore turbines that GE changes out during repowering efforts will be shredded and used to replace raw materials for cement manufacturing, creating a "circular economy for composite materials," Anne McEntee, CEO of GE Renewable Energy's Digital Services, said in a statement. In Europe, such recycling processes have grown to commercial scale, and GE plans to deploy the program at scale quickly.
- The process will make wind turbines fully recyclable, while reducing carbon dioxide emissions from cement production by a net 27%, according to environmental impact analysis by Quantis U.S. The reprocessed blade has a net-positive environmental impact by replacing coal or other raw materials in the cement production process, according to GE.
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Global Fiberglass Solutions Becomes the First US-Based Company to Commercially Recycle Wind Turbine Blades into Viable Products

Markets Insider

Sweetwater, Texas, Jan. 29, 2019 -- On January 8, 2019, the Global Fiberglass Solutions recycling and green manufacturing plant in Sweetwater, Texas began commercial production of its flagship product offering, a manufacturing-grade pellet. From the look of the thousands of tiny pellets streaming from manufacturing machinery at a scale fit for Texas' Big Country, one wouldn't initially guess they once made up a massive wind turbine blade. This is how Global Fiberglass Solutions is advancing recycling science – again.

The pellets for sale—under the brand name EcoPoly Pellets—are a thermoplastic fiberglass pellet usable in injection mold and extrusion manufacturing processes. Made from a customized blend of wind turbine blade material, EcoPoly Pellets are made to order for customers based on the requirements of the customer's own manufacturing process. GFS has initiated distribution options for pellet purchasing and the company is eager to speak with procurement and technical professionals from manufacturing companies interested in a truly sustainable recycled material. This innovation is a major advance in composite materials science to benefit commercial enterprise.

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Global Fiberglass Solutions' recycled manufacturing pellet represents the company's innovation in repurposing waste material (decommissioned wind turbine blades) into green manufactured products that are commercially viable. Business and consumer interest in this type of material and product is at an all-time high and will continue to grow as the global economy continues to face modern environmental challenges. Deferring waste from landfill and then using it for new, environmentally sustainable products represents a huge win-win for businesses enacting sustainable measures worldwide.

What can be manufactured with EcoPoly Pellets? If the composite item can be made with pellets, GFS can customize EcoPoly Pellets to make it as well. Options previously tested by GFS include decking boards, warehouse pallets, parking bollards and much more.

The further upside of EcoPoly Pellets is that they are also certified to be recycled from wind turbine blades through GFS' BladeTracker material tracking software. In addition, GFS can recycle products manufactured with its material after it has reached its end use. For manufacturers looking for ways to be sustainable and go landfill-free, Global Fiberglass Solutions is their answer.