

News Release

Ashland leading composites industry to advance wind turbine recycling

BARCELONA, SPAIN, July 10, 2019 – WindEurope, the European Chemical Industry Council (CEFIC) and the European Composites Industry Association (EuCIA) have created a cross-sector platform to advance novel approaches to the recycling of wind turbine blades. As a member of CEFIC, Ashland is supporting the efforts of promoting cement production as true recycling and developing alternative recycling technologies.

In 2018 wind energy supplied 14 percent of the electricity in the European Union (EU) with 130,000 wind turbines and the number is expected to grow in the coming decades. Wind turbine blades are made up of a composite material, which boosts the performance of wind energy by allowing lighter and longer blades. Today, 2.5 million tons of composite material are in use in the wind energy sector.

In the next five years 12,000 wind turbines are expected to be decommissioned. Broadening the range of recycling options is critical for the industry's development.

Composite materials are being recycled today at commercial scale through cement co-processing, where the cement raw materials are being partially replaced by the glass fibres and fillers in the composite, and the organic fraction replaces coal as a fuel. Through that process, the carbon dioxide output of the cement manufacturing process can be significantly reduced (up to 16 percent reduction is possible if composites represent 75 percent of cement raw materials).

"The wind energy sector has always been at the forefront of using composites as they are instrumental to sustainable energy generation," said Stefan Osterwind, vice president of Europe, the Middle East, Africa and India (EMEA & India) for Ashland and chairman of the CEFIC UPR sector group. "As a global supplier to wind blade and nacelle producers, we hope to set an industry standard where learnings from wind turbine recycling will then be transferred to other markets to enhance the overall sustainability of composites."

Besides recycling through cement co-processing, alternative technologies like mechanical recycling, solvolysis and pyrolysis are being developed, ultimately providing the industry with additional solutions for end of life.

About Ashland

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FOR FURTHER INFORMATION:

Media Relations: Sandra Derthick 614-790-5420 <u>saderthick@ashland.com</u>