

## Arkema supports the wind power industry in its transition towards sustainable energy

**Partner of the ZEBRA (Zero wastE Blade ReseArch) project driven by IRT-Jules Verne, which brings together leading players and technical centres around an ambitious project addressing the design and production of the first 100% recyclable wind turbine blade, Arkema is strengthening its position as a key player in the thermoplastic composite market with its Elium® resin. This resin is perfectly in line with the circular economy approach that the Group has initiated for both its operations and its products.**

On 22 September, the ZEBRA (Zero wastE Blade ReseArch) consortium was launched, a project of excellence aiming to create the first 100% recyclable wind turbine. Arkema is pleased to be at the heart of this consortium alongside Canoe, Engie, LM Wind Power, Owens Corning and Suez, and to contribute to the development of environmentally friendly and sustainable solutions for wind power with its high performance materials.

With its Elium® thermoplastic liquid resin and its structural adhesives, Arkema offers a breakthrough innovation in the composites market, opening up new perspectives in many sectors, and especially in the production of wind turbine blades.

The Elium® resin-based composite parts:

- **can be used on the same production lines as those currently used for composite parts based on thermosetting resins**: many industrial projects have already been validated with the Elium® resin, for example, the infusion manufacturing of racing monohulls or multihulls, the pultrusion of reinforcing bars and cables for the construction industry and automotive parts
- **are 100% recyclable**, a major advantage of Elium® resin, through a mechanical or chemical recycling process of scraps and end-of-life composite parts.

With this ZEBRA project, which focuses on developing and optimizing each stage of the manufacturing process, the wind energy sector is aiming for 100% recyclability.

Arkema's Elium® thermoplastic resin is therefore key to this project. Thanks to its exceptional physical-mechanical properties combined with its complete recyclability, confirmed by a large number of test results, it will enable the wind energy sector to take a major step forward, in particular by enabling to include this criterion in the tender specifications.

Furthermore, the ability to chemically recycle the resin enables it to be used "ad infinitum", preserving the same properties as a virgin resin, making this technology a perfect fit for the circular economy.

"Recycling end-of-life wind turbines is a major industrial and environmental challenge for the wind power industry, due to the considerable volumes involved. Being at the heart of the ZEBRA project, thanks to our expertise and our wide range of polymers for composites, we are contributing to the performance of the wind energy sector by

aligning it with an operational circularity approach," stated Guillaume Clédat, Global sales and development director for Elium® resin.

Arkema's position in this consortium demonstrates the Group's commitment and its strong will to be part of a product design model with a circular economy approach. Arkema's ambition is to provide sustainable and innovative solutions, contributing to the United Nations' Sustainable Development Goals (SDGs), and more specifically with this project, to SDG 7: "Ensure access to affordable, reliable, sustainable and modern energy for all".

*Building on its unique set of expertise in materials science, **Arkema** offers a portfolio of first-class technologies to address ever-growing demand for new and sustainable materials. With the ambition to become in 2024 a pure player in Specialty Materials, the Group is structured into 3 complementary, resilient and highly innovative segments dedicated to Specialty Materials -Adhesive solutions, Advanced Materials, and Coating Solutions- accounting for some 80% of Group sales, and a well-positioned and competitive Intermediates segment. Arkema offers cutting-edge technological solutions to meet the challenges of, among other things, new energies, access to water, recycling, urbanization and mobility, and fosters a permanent dialogue with all its stakeholders. The Group reported sales of €8.7 billion in 2019, and operates in some 55 countries with 20,500 employees worldwide. [www.arkema.com](http://www.arkema.com)*

#### **INVESTOR RELATIONS CONTACTS**

Béatrice Zilm	+33 1 49 00 75 58	<a href="mailto:beatrice.zilm@arkema.com">beatrice.zilm@arkema.com</a>
Arié Taïeb	+33 1 49 00 72 07	<a href="mailto:arie.taieb@arkema.com">arie.taieb@arkema.com</a>
Peter Farren	+33 1 49 00 73 12	<a href="mailto:peter.farren@arkema.com">peter.farren@arkema.com</a>
Caroline Chung	+33 1 49 00 74 37	<a href="mailto:caroline.chung@arkema.com">caroline.chung@arkema.com</a>

#### **MEDIA CONTACTS**

Gilles Galinier	+33 1 49 00 70 07	<a href="mailto:gilles.galinier@arkema.com">gilles.galinier@arkema.com</a>
Véronique Obrecht	+33 1 49 00 88 41	<a href="mailto:veronique.obrecht@arkema.com">veronique.obrecht@arkema.com</a>

**Arkema**

420, rue d'Estienne d'Orves – F-92705 Colombes Cedex – France

Tel.: +33 1 49 00 80 80 – Fax: +33 1 49 00 83 96

A French société anonyme (limited company) with share capital of €767,364,760 – Registered in Nanterre: RCS 445 074 685

[arkema.com](http://arkema.com)