

CETMA



EUROPEAN RESEARCH CENTER FOR TECHNOLOGIES DESIGN AND MATERIALS

CIRCULAR WIND BLADE FROM RECYCLED MATERIALS



BOOTH
5E148

PARTNERS

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WHY AND WHOM

This demonstrator was developed within the REFRESH EU project to address the growing challenge of end-of-life wind turbine blades. It targets wind energy OEMs, composite manufacturers and recyclers, demonstrating a viable route to close the loop by reusing thermally recycled glass fibers in new blade components.

PART DESCRIPTION

The product is a wind blade section integrating a non-woven mat made from thermally recycled glass fibers, used in non-structural shell layers. Manufactured by vacuum infusion, it allows direct comparison between virgin and recycled materials and demonstrates applicability in wind energy and other composite-intensive sectors.

KEY BENEFITS

Composites are the reference material for wind blades due to their lightweight, fatigue resistance and manufacturability. This solution preserves the proven performance and processing routes of conventional composite blades, while introducing recycled glass fibers as a drop-in, lower-impact option within existing industrial standards.

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