

THE COMPLEX END-OF-LIFE OF WIND TURBINE BLADES – CHALLENGES AND OPPORTUNITIES IN THE RECYCLING OF COMPOSITE MATERIALS

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ABSTRACT

The recycling of wind turbine blades and of polymer composites in general has been studied for the last three decades, but recycling solutions are still rare. Wind turbine blades are components designed for a service life of at least 20 to 25 years. Their complex structure mainly made of glass fiber reinforced polymer composites is a challenge for recycling. This presentation gives an overview of the technical challenges related to the recycling of wind turbine blades and highlight the importance of a holistic approach to establish successful end-of-life value chain.

KEYWORDS

Recycling; wind turbine blades; end-of-life;