



A new generation of smart, sustainable wind turbine blades

EOLIAN is developing bio-based, repairable and recyclable vitrimer composites and advanced sensors for highly reliable and sustainable wind blades.

- ▶ Composite materials based on bio-based vitrimer polymers and basalt fibre reinforcements
- ▶ Embedded electronics enabling structural health monitoring and de-icing functions.

Facilitating a circular economy: EOLIAN blades will offer a longer service life, be faster to repair, and easier to repurpose and recycle.

Key advantages of EOLIAN blades



20% longer service life



20% faster to repair



75% reduction in ice accretion



40% lower recycling cost



15% lower turbine lifetime cost

Partners



www.eolian-project.eu

