HitMat 2021 Circular composites for wind turbine blades

Julie Teuwen, j.j.e.teuwen@tudelft.nl Franz Bormann, <u>F.Bormann@m2i.nl</u>

2050 circularity challenge

How can we support the wind industry towards a circular and sustainable future?





Increasing demand of wind turbine blades





CircWind

From material optimization to circular system rethinking, the challenging case of sustainable wind turbine blades





Source: Fred Wright





Vision

To revolutionise wind turbine blades through the development of a general framework as a catalyst for the transition towards sustainable material alternatives.





Groundwork – previous consortium workshops







NWA-ORC initiative

Primary NWA route Circular economy and resource efficiency: sustainable circular impact

Primary cluster question What are the features of a circular economy and how can we achieve it?







NL

Targeted output / outcome / impact

General framework for the transition towards circular material

Towards circular wind turbine blades

Large-scale uptake in the composites sector



Sustainable alternatives for nonrecyclable composite products Strong contribution to 2050 circularity goals

- New markets (alternative materials, repair, recycling, etc.)
- New education programmes



Dank voor uw aandacht



Q.



www.hollandhightech.nl

