

WIND TURBINE COMPONENT RECYCLING

Our commitment to provide sustainable solutions across the renewable energy sector extends to our efforts to recycle, upcycle and reuse wind turbine components.

As part of our Sustainability Master Plan and Planet Positive initiative all of our projects generate net-positive natural capital. This means that we invest in the protection, conservation and regeneration of natural ecosystems. We do this responsibly while also focusing on circularity. This means focusing on zero-waste and renewable resources, and the development of new business models to implement zero-waste projects.

HOW DOES ACCIONA ENERGÍA CURRENTLY RECYCLE, UPCYCLE AND REUSE COMPONENTS?

To date our projects in Australia have produced minimal waste. Inputs and outputs of processes are measured and assessed as part of a thorough Life Cycle Assessment (LCA), which has been produced on the example of Mt. Gellibrand. Any components, including blades, nacelles, generators and tower pieces can be reused and recycled in many ways. These include using blade material for civil works and foundations, repurposing blades as shelters, bridges or shade structures. In Navarra, Spain, ACCIONA is also constructing a blade recycling plant which will be operational in 2025. This recycling facility will turn wind blades into recycled materials that can be used in industries such as automotive and construction.



WHAT HAPPENS WHEN WIND FARMS ARE DECOMMISSIONED?

Decommissioning is dependent on many factors and in accordance with stakeholder project agreements and governed by our planning permits. The end-of-life scenarios for systems and components vary. Tower sections are dismantled, separated and recycled as steel scrap. Other Wind Turbine Generator components can be returned to the manufacturer for refurbishment and reused or sold to second-hand markets. The gear box and the generator can often be reused for other projects, as determined by the manufacturer.



WHAT ABOUT ITEMS OTHER THAN WIND TURBINE COMPONENTS?

An initiative at our MacIntyre Wind Farm has offered smaller items, such as cable drums, old tyres and wooden boxes to local community organisations and schools to be upcycled and repurposed. This has encouraged the circular economy in local communities and produced innovative ideas, such as the development of outdoor spaces including raised garden beds for outdoor education and cable drums as bar tables at show grounds.

Any other elements that cannot be reused, upcycled or recycled will be disposed of in an authorised place in accordance with Australian waste regulations.



CONTACT US

We hope you find the information in this factsheet useful. If you have any other questions for us, please don't hesitate to get in touch through one of the channels below.

Post: PO Box 24110, Melbourne VIC 3001

Community information hotline: 1800 283 550

Community Hub: community.acciona.com.au



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