

'BRIO PROJECT' VIDEO VOICE TRANSCRIPTION

Marisa Alvarado, Project Manager: “BRIO is a Project financed in the framework of the LIFE programme. This project is coordinated by Iberdrola with the participation of the Gaiker-IK4 and Tecnalía Technology Centres.”

“It arises from the need to manage a waste product by wind turbine blades when they reach the end of their useful lives. The aims of this Project include publishing good practice guides for dismantling wind farms and legislative recommendations to assist with the management of these type of waste product.”

“The first stage of the Project was undertaken in June 2015 in Glasgow, where two blades from a Scottish Power wind farm in the United Kingdom were pre-treated.”

“The second stage of the Project consisting of separating the materials and recovering the fibres, is now being carried out at the Gaiker facilities in the Zaimundo technology park in Bilbao.”

Íñigo Cacho, Gaiker-IK4 Researcher: “During the second plan year of the LIFE-BRIO Project, we have completed the process of mechanically recycling the wind turbine blades. The material from Scotland was a pre-crushed material, which has now been subjected to stages of automatic separation of foams using optical methods, thus separating it into one fraction of foam and another of composite which contains glass fibre.”

“Once the nuclei based on recycled material has been procured, the multi-layer panels will be obtained by means of a continuous lamination process, through which two skins of a polyethylene and polypropylene polymeric material are added to the nuclei by means of a lamination process that consists of heating them so that they adhere, thus obtaining the multi-layer panel.”

David García, Tecnalía Researcher: “Once the turbine blade has been generated at Gaiker, Tecnalía receives a fibre concentrate, which will be used as reinforcement fibres for producing precast concrete.”

Marisa Alvarado, Project Manager: “The anticipated results include a reduction in CO₂ emissions associated with the management processes for the types of waste product, and the achievement of recycling rates for these types of material better than 75%.”

“What are the benefits we expect to obtain? A reduction in the cost associated with dismantling wind farms and a reduction in the environmental impact associated with their life cycle.”