

Repowering onshore wind

What is repowering?

Repowering is the replacement of older turbines with modern, more efficient technology, giving an existing wind farm site a new lease of life.

Why repower existing wind farms?

Many of the earliest projects in the UK and Northern Ireland, typically consented for 25 years, are now reaching the end of both their consented and operational life. Sites, with its strong wind resource has significant potential to continue contributing to Northern Ireland's energy security.

Repowering with larger but more efficient and modern turbines will allow the wind farm to generate a substantially higher amount of electricity with fewer turbines.

Without repowering, a significant portion of Northern Ireland's installed onshore wind capacity will be lost, reducing the overall volume of clean low-cost electricity at a time when Northern Ireland needs more clean power than ever before.

Why does repowering need new planning permission?

Repowering a wind farm site in Northern Ireland will almost always require a new planning application, even if turbines are being replaced on the same footprint. This is because planning permission is granted for a specific development (particular turbines of a defined height, rotor diameter, and generating capacity) not for the site specifically. Replacing those turbines with newer, typically larger models, is effectively a new development in planning terms.

What happens to the old turbines?

Up to 90% of a wind turbine is recyclable with a lot of components made of materials such as steel and concrete, which can be recycled conventionally. In line with our commitment to environmental stewardship, we are liaising with organisations who provide commercial, scalable solutions for the recycling of decommissioned wind turbine blades. This ensures sustainable reuse or repurpose rather than sent to landfill.

Will the new plans use the same infrastructure?

Partially, yes. Infrastructure such as access tracks will be re-used, wherever possible. However, the turbine foundations, turbines themselves, and electrical and control systems will be replaced and upgraded.

This is mainly due to ensure infrastructure meets safety standards of higher electrical output and heavier, taller turbines. It will also ensure all equipment will function efficiently for years to come, utilising new modern technology.

