



Ørsted's ReCoral project aims to grow coral on the bases of wind turbines | Photo source Pixabay

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## USING OCEAN WIND FARMS TO HELP CORAL REEFS



AGRICULTURE & ENERGY

### A Danish energy company is using the stable environment at the base of ocean wind farms as a habitat for coral

**Spotted:** Coral reefs support more than a quarter of all marine fish species, and are a vital source of food and economic security for hundreds of millions of people. But coral ecosystems are also among the most vulnerable on the planet. Recent studies indicate that around half of the world's coral reefs have already been destroyed, and if nothing is done, the majority of the rest will be gone within 30 years. Now, a project by Danish energy company Ørsted aims to provide a 'safe haven' for corals by growing them at the base of wind turbines.

Ørsted's ReCoral project takes advantage of the more stable temperatures around the base of wind farms. These limit the risk of coral bleaching – when warm water causes the coral to expel the algae living in their tissues. In a proof-of-concept trial, the company collected bundles of coral eggs that washed up on beaches around the Penghu Islands near Taiwan. These were incubated in a laboratory until they become viable coral larvae.

The larvae were then taken to the wind turbine foundations at the Greater Changhua Wind Farm, 35-60 kilometres off the coast, and released into custom enclosures attached to the foundation with magnets. If successful, the next step is to expand the concept to other wind farms, and eventually to other types of offshore foundation in tropical waters. The hope is that mature, windfarm-grown corals will support healthy stocks of fish, as well as other reef species.

This is not the only project spotted by Springwise that hopes to reverse the degradation of coral reefs. Some projects attempt to grow coral on [artificial structures](#). Others use [coral seeding](#), which involves spreading lab-grown coral larvae on deteriorated reef sites.

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## **Takeaway:**

In a coral reef restoration guide released by the United Nations Environment Programme, the release of coral larvae is seen as 'potentially one of the most scalable methods for coral reef restoration.' Ørsted's ReCoral project could play a major role in this. It is also unique, as it seeks to attach larvae to artificial structures in deeper offshore waters – an approach that hasn't been attempted before. If successful, it could pave the way for seeding coral reefs on other offshore structures, and perhaps rescue coral reefs from the severe danger caused by climate change.