

Offshore Wind



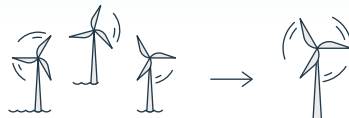
Our projects offer us opportunities to increase biodiversity and strengthen the natural environment. Ecological Design Principles (EDPs) help designers systematically integrate nature into projects. The EDPs make it possible to create designs that benefit both people and nature in a feasible and practical manner.

Because our projects vary in terms of their phasing and scale, the application and impact of the EDPs also differ. In this series of visualisations, we show how each project can help strengthen the ecosystem through the use of the EDPs.

Offshore wind energy plays a crucial role in the energy transition and, at the same time, offers opportunities to **integrate nature-enhancing and nature-protecting measures** into the design of wind farms.



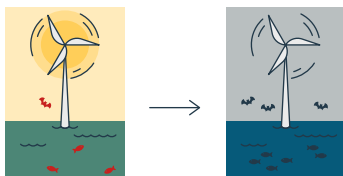
Shut down the wind turbines or run them at low speed during migratory periods to prevent collisions between the rotor blades and birds and bats.



Install higher-capacity wind turbines, because, although larger turbines have a greater individual impact on nature (such as disturbance both above and below the water), fewer wind turbines will be needed in the wind farm. As a result, the net impact on nature is smaller.



Design taller wind turbines to position the rotor blades above the foraging height (for example, 35 metres) and reduce the risk of birds colliding with the rotor blades.



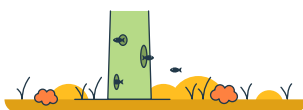
Minimise light disturbance for birds and bats. Adjust the intensity, frequency and colour accordingly. It is better to use less light than to choose an animal-friendly colour, as different species are affected by different colours.



Restore the seabed ecosystem by, for example, depositing substrate containing oyster spawn. This may lead to the formation of a shellfish reef over time.



Create nature-inclusive erosion protection around wind turbine piles and close to cable intersections by using natural materials and putting larger stones in place. This helps to create a more stable reef with hiding places for fish and bottom-dwelling creatures.



Create openings in turbine piles so that the interior of the turbine pile can serve as a habitat for marine species.



Minimise disturbance to fish, sharks and rays caused by electromagnetic fields around cables. Bury the cables deeper, or modify the cable design to reduce the reach of the electromagnetic field.