

# WHAT IS OFFSHORE WIND?



## ENERGY SOURCE

Offshore wind energy uses the power of the wind to produce clean, renewable electricity. As there are no obstructions at sea and given the open space available, wind speeds are greater and more constant than on land. This gives offshore wind turbines better efficiency than their land-based equivalents.



## BACK TO SHORE

Wind turbines, which are installed in the waters off our coasts, harness these powerful winds and create electricity. Undersea cables transport the electricity from the wind turbines, through an offshore substation and back to shore, where it flows into the electricity network.



## ABUNDANT WIND RESOURCES

Ireland has abundant wind resources, particularly in our sea areas. These natural resources will play a vital role in the movement to a low-carbon future and in achieving carbon neutrality by 2050. Irish homes and businesses will be powered with clean, indigenous and renewable energy.

## WHY OFFSHORE WIND?

The large open space available at sea and the transportation of large components via ships are two important factors that make it possible for offshore wind turbines to have larger blades compared to onshore turbines.

These blades enable an offshore wind farm to generate large amounts of energy from the available wind. These turbines can generate energy at both low and high wind speeds from 10 km/h to 100 km/h.