# Ireland and the Netherlands

A Partnership for International Business



# Netherlands



# Ireland and the Netherlands: Developing offshore wind together

Ireland and the Netherlands have enjoyed robust political and economic relations for decades. As maritime nations and members of the European Union, we are outward-looking countries with shared interests and challenges when it comes to trade, maritime infrastructure, connectivity and climate change. Together, we face the same challenges in growing demand for energy and reducing CO2 emissions, all contributing to our ambitious transition to renewable energy.

Across these fields, the Netherlands is cooperating closely with international partners, governments, the business community, and knowledge institutions. The Netherlands has a 400-kilometre coastline with relatively shallow waters and a strong maritime sector, creating perfect conditions to develop offshore wind innovations. A small coastline doesn't mean small results. The Netherlands already generates a quarter of Europe's offshore wind capacity.

With Ireland seeking to develop its offshore wind energy value chain, the Netherlands can support their mission through knowledge and expertise exchange. Both countries are strategically located by the North Sea and the Atlantic Ocean, with Ireland also surrounded by the Celtic and the Irish Seas. These are all favourable conditions for constructing offshore wind farms. With their ambitious plans, Ireland and the Netherlands reinforce their positions to boost offshore wind energy. This makes their goals for energy neutrality in 2050 more than feasible.

#### **Opportunities for Ireland**

Like many other EU members, Ireland needs to make a major effort in the energy transition and has ambitious plans for the development of offshore wind. The goal is to operationalise 7 gigawatts (GW) of offshore wind by 2030. However, the potential is much larger and is estimated at 70 - 100 GW. With the development of offshore wind, the country will generate more energy than it needs at times. That's why Ireland is also looking into developing green hydrogen technologies to store the surplus of energy for its own use later, and as an export product that will play a central role in securing green energy for Europe.

### Research, training and technology

Starting in the early nineties, increased government subsidies resulted in a flourishing offshore wind sector. Reducing costs and improving efficiency meant the industry no longer relied solely on government funding. The national government has stated that by 2050, all energy produced in the Netherlands will come from renewable sources. By 2030, a predicted 21 GW of energy will come from offshore wind farms – 40% of the country's domestic energy consumption.

The Netherlands is strongly committed to achieving international climate agreements, but we cannot do it alone. International collaboration and strong partnerships are key for a more sustainable future. Offshore wind energy is one of the many prospects within our reach. Not only does it contribute significantly to the energy transition, but it also offers promising economic growth and employment opportunities.

## Why work with us?

We believe, the way we produce energy should not contribute to climate change. Offshore wind energy is one of the Netherlands' most essential pillars of climate policy. The Netherlands was the first country to apply non-price criteria in its offshore wind tenders, where qualitative aspects considered include the knowledge and experience of the project parties, the circular design of the wind farms, knowledge sharing, and restoring the marine wildlife and ecosystem. With proven experience in marine engineering and offshore wind installation, technology and expertise developed in the Netherlands are in demand for developing offshore wind farms all over the world. With Ireland looking at offshore wind energy to accelerate its transition to clean energy, the Netherlands can be a valuable partner for sharing experiences.

The Dutch Offshore Wind Energy Roadmap identifies the vital tasks that must be undertaken to achieve the desired wind energy capacity by 2050. Today, 4.5 GW of offshore wind capacity is either installed or under construction in the Dutch North Sea. The Netherlands is now aiming for 21 GW to be operating by around 2030/31. Looking even further ahead, the Netherlands is expected to need between 38 GW and 72 GW of operational offshore wind power by 2050 to achieve its net zero ambition. The Netherlands is keen to offer this expertise and guidance across the entire offshore wind value chain, from offshore installation and transport to maintenance and educational training. The sector already has substantial experience and skills in constructing unique vessels, foundations engineering and installation, wind turbine installation, safety training and handling systems. All of which can support Ireland's next energy transition chapter.

## Towards a long-term partnership

With a cluster of Dutch offshore wind experts representing the PIB Offshore Wind Ireland, the Netherlands aims to share knowledge and expertise with Irish businesses in the energy sector. By actively collaborating with our local partners in the supply chain, focusing on teamwork, collaboration, and innovation across the board, we ensure every wind farm has an economical, safely operating, and sustainable future. Together, we can prove that offshore wind is a powerful solution to achieve climate goals while effectively contributing to economic opportunities from renewable energy. Ultimately, this leads to high certainty for project developers, increased investor confidence, and lower overall costs.

We look forward to continuing collaborations.

Let's develop offshore wind solutions and solve global challenges together!



## Partners

#### GustoMSC | NOY

**SC | NOV** is a leading technology and equipment provider to the global energy industry. GustoMSC, part of the NOV Marine and Construction business, is recognised for providing advanced design and engineering consultancy for wind turbine installation vessels and floating offshore wind foundations and associated equipment. In close cooperation with our clients, we translate experience, science and technical knowledge into realistic and innovative ideas.

www.nov.com/gustomsc



HSM Offshore Energy is a reputable EPCIC Contractor that has delivered for over 22 years Offshore HV Substations with capacities of up to 1060 MW. Our two modern yards are situated in the greater Rotterdam Harbour area and feature open North Sea access, deep water load-out quays and large climatecontrolled construction and assembly halls for platform topsides and module projects. There is also a large open space area for substructure construction. www.hsmoffshoreenergy.com



InGEO2 is a specialist geotechnical consulting company based in Delft. It provides innovative geotechnical solutions to a range of clients in the public and private sectors. The company offers a unique value proposition to clients by implementing the latest research and development in geotechnics into engineering practice. The key focus of the company is to facilitate the development of offshore renewables projects across the globe. www.ingeo2.com



IQIP® offers total solutions for construction projects in the offshore wind, coastal & civil, oil & gas markets, as well as decommissioning. In addition to supplying innovative and high-quality equipment, we continuously invest in operating safely and environmentally friendly. With consultancy, engineering, production and installation, IQIP offers reliable tailor-made solutions to help customers optimise their operational efficiency and reduce project risks. www.iqip.com

Lobster Robotics is using robots to develop a service to provide highresolution seabed photography. Ireland has a lot of potential for offshore wind development, and our data can help developers make timely and supported decisions, whether related to benthic ecology, seabed characterisation, archaeology, or UXO identification. Furthermore, our data can be used as a ground truth for all other measurements (sidescan, grab samples, etc.) currently used by the industry standard. www.lobster-robotics.com

**MAMMOET** 

At Mammoet, we can play a crucial role in the Irish offshore wind market by facilitating the movement of fabricated components from production to storage to vessels, ensuring a continuous flow of production. Our comprehensive management of the seaborne transport and storage scope, including load-in and load-out, sea fastening, shipping agents, and port marshalling, significantly reduces project interfaces and risks, making us an invaluable partner in your offshore wind projects.

www.mammoet.com

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Monobase Wind is a design and engineering company based in the Netherlands that specialises in naval architecture and offshore substructure design. Monobase Wind first introduced an innovative self-installing Gravity Base Foundation to the market. In 2020, Monobase Wind also introduced the MSPAR, a smart floating foundation that marries the best SPAR and semi-submersible designs. This hybrid design not only offers the operational stability of a SPAR but also boasts a shallow draft during assembly and T&I, ensuring efficient performance in all conditions. www.monobasewind.com

N-Sea is an integrated total subsea solutions provider in Survey, IRM & Construction, Subsea Cable Repair & Installation, and UXO ID & Disposal. We deliver total solutions for subsea infrastructures and assets that meet the needs of our clients and the international oil & gas, and renewable industries, considering a safe environment. We want to create a sustainable business and increase our profitability through solid project management and full client awareness.

www.n-sea.com

For over 60 years, Royal BAM Group NV has been shaping Ireland's national infrastructure. As a leading construction, civil engineering, PPP investment, and facilities management company, we help public and private sector clients reduce carbon emissions and enhance sustainability over the lifecycle of their buildings and infrastructure. BAM successfully retained its leadership place on CDP's prestigious 'A List' for climate change.

TNO innovation for life

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TNO's Wind Energy's core mission is to reduce the cost of offshore wind energy. They focus on supporting offshore (floating) wind in Ireland through various activities. These include measuring offshore wind climate and floating LiDAR validation, optimising floater design through wind turbine knowledge, wind farm control/wake steering, maximising AEP and integrating it into the energy system, and developing installation, O&M, decommission strategies, as well as considering the life cycle assessment and CO2 footprint over the lifetime of the project. www.tno.nl



Delft University of Technology (TU Delft) is a leading international university that combines science, engineering and design. At TU Delft, over 1000 researchers are active in energy transition, collaborating with leading national and international partners. In the offshore energy domain, TU Delft delivers evidence-based and technology-driven research and innovation in a broad range of topics such as wind energy, solar energy, marine energy, hydrogen, system integration, floating systems, circularity, low-impact installation, nature-inclusive design and port strategies.

https://www.tudelft.nl/en/innovation-impact/business-collaboration/energy/ wind-energy



Van Oord is a Dutch family-owned company with over 155 years of experience as an international marine contractor. Our dedication to marine ingenuity drives our commitment to creating a better world for future generations. With more than two decades of proven experience and an impressive track record in constructing offshore wind projects, Van Oord is leading the way in the energy transition. As an offshore wind contractor, we focus on the entire lifecycle of offshore wind farm development, including designing and engineering wind farm infrastructure, the installation of subsea foundations, electrical infrastructure and offshore wind turbines, as well as heavy maintenance and repair.

www.vanoord.com



# Curious to learn more? Get in touch!

Holland Home of Wind Energy (HHWE) is the independent export association for Dutch (-based) wind power companies. HHWE represents, supports, and unites its members in pioneering emerging wind markets across the globe. With an active, result driven export strategy and a strong focus on cooperation, innovation, and sharing knowledge and networks, HHWE is a committed partner for Dutch wind power companies.

www.hhwe.eu



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