Netherlands

Spain, Portugal and the Netherlands

Shaping the future of floating offshore wind together

Credits: VanOord

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Spain and Portugal are advancing rapidly towards their renewable energy ambitions, with plans to deploy 4–5 GW of offshore wind by 2030. Much of this capacity will rely on floating technologies suited to the deep waters of the Atlantic coastline. As both nations build the foundations of a new offshore wind industry, the Netherlands offers a long-term partnership rooted in practical experience and shared ambition.

Over the past 25 years, the Netherlands has developed a mature and fully integrated offshore wind sector in the demanding conditions of the North Sea. Dutch companies, research institutions, and public authorities work across the full value chain: From floating components, engineering, and installation through to port infrastructure, ecology, digital systems, and circular design. This includes substantial policy experience in regulation, marine spatial planning, and nature-inclusive development.

Unlocking one of Europe's most promising energy frontiers

Spain and Portugal have the opportunity to unlock one of Europe's most promising energy frontiers. The Iberian Peninsula offers exceptional wind resources, strong industrial capabilities, and a strategic position to become a leader in floating offshore wind. Both nations are at a pivotal moment in the energy transition and the potential extends well beyond clean electricity. Scaling up offshore wind will strengthen energy independence, create high-skilled jobs, boost industrial competitiveness, and accelerate port modernisation.

The Partner for International Business (PIB) Offshore Wind Spain and Portugal connects Dutch capabilities with this momentum. The programme supports collaboration across the full project lifecycle: From early site studies and port development to floating components, digitalisation, workforce training, and nature-inclusive design. It aims to create long-term opportunities for Spanish and Portuguese companies to access operational experience, while enabling Dutch companies to contribute to a competitive offshore wind market across the Iberian Peninsula.

Credits: VanOord

Research, training, and technology

Research, innovation, and capacity-building underpin this partnership. Knowledge-to-knowledge (K2K) cooperation between research institutes, innovation networks, and training providers supports joint studies, exchange missions, and expert dialogues. These efforts advance environmental modelling, digital solutions, skills training, and engineering capabilities across all three countries.

Workforce development is a shared priority. As Spain and Portugal scale their offshore wind sectors, local technicians and engineers will be needed at every stage. Dutch experience in offshore project execution, safety standards, and technical training can help build strong national talent pipelines.

In parallel, government-to-government (G2G) cooperation supports clear and predictable frameworks, including tender criteria, marine spatial planning, sustainability requirements, and nature-inclusive design, areas where Dutch models offer tested approaches.

Why the Netherlands?

Today, 4.5 GW of offshore wind capacity is installed or under construction in the Dutch North Sea. The national roadmap targets 21 GW by around 2033, roughly 75% of current electricity demand, and between 38 and 72 GW by 2050 to reach net zero. We are navigating similar challenges that Spain and Portugal face, from harsh sea environments to permitting and grid integration to supply chain development and ecological impact.

Plus, Dutch companies have substantial experience in vessel construction, component engineering and installation, turbine installation, safety training, and handling systems. We are keen to share this experience and to learn from the experiences and innovations that Iberian partners bring to floating offshore wind in deeper, more exposed waters.

Towards a long-term partnership

Spain, Portugal, and the Netherlands have the opportunity to drive the floating energy transition forward. The foundations for our partnership are in place. Together, we can develop offshore wind responsibly, efficiently, and for the long term.

Coordinator

NedZero Wind Energy Association

NedZero the Dutch Wind Energy Association, represents the full Dutch wind energy value chain, from developers and OEMs to contractors, ports, knowledge institutes and investors. Its mission is to accelerate the transition to a fully CO_2-free energy system, with offshore wind as a key pillar. NedZero supports innovation, collaboration and international market development.
https://nedzero.nl/en

Partners

RelyOn

RelyOn provides safety, rescue and survival training for high-risk industries, including offshore wind and maritime sectors. Its services include competence management, crisis training and digital learning solutions. RelyOn helps organisations prevent accidents, protect personnel, and maintain high safety standards in complex operational environments.
https://relyon.com/

twindo

Twindo is a digital platform designed for field teams operating renewable energy assets. Using AI-powered workflows, it improves inspections, reporting, and condition monitoring while ensuring high-quality data capture. Active across wind, solar, and energy storage, Twindo supports over 6 GW of assets, improving efficiency, governance, and operational performance.
https://www.twindo.ai/

DMEC

DMEC is a non-profit accelerator and knowledge centre for offshore renewable energy. It advances innovation, market development, and policy across offshore wind, marine energy, and offshore storage. By combining technical expertise, financial models, and industry insight, DMEC develops integrated, nature-positive solutions aligned with market and regional needs.
https://dmec.eu/

AFRY

AFRY is an international engineering consultancy supporting offshore wind projects across the full lifecycle; from feasibility and permitting to construction, grid integration, and operations. With strong expertise in floating wind, nature-inclusive design, and tender support and management, AFRY supports governments, developers, and investors worldwide.
https://afry.com/en

TouchWind is a Dutch startup developing a floating wind turbine with a tilted rotor design, optimised for extreme offshore conditions. The technology reduces wake effects, increases efficiency, and allows operation in broader weather windows. TouchWind's technology has the potential to significantly lower the cost of floating offshore wind.
https://touchwind.org/

TKF, founded in 1930, is a leading Dutch supplier of subsea power and data cable systems for offshore wind and critical infrastructure worldwide. Part of TKH Group, TKF combines specialised application knowledge with innovation, reliability, and sustainability, delivering customised solutions that support long-term performance and responsible offshore energy development.
https://www.tkf.nl/en

Tarucca develops advanced optical sensing systems that monitor offshore wind assets from shore. Its technology measures vibration, strain and temperature in blades, subsea cables, and floating structures. Combining photonics, AI, and digital twins, Tarucca enables predictive maintenance, lifetime extension, and improved asset reliability.
https://www.tarucca.com/

iPS Powerful People is a global HR partner for offshore wind, renewables, maritime, and civil industries. Since 1988, the company has delivered recruitment, crewing, secondment, and international payroll services for blue- and white-collar roles. iPS supports major offshore wind projects worldwide with certified, compliant solutions.
https://ipspowerfulpeople.com/

Smulders HSM is an integrated EPCIC contractor specialising in high-voltage substations, green hydrogen platforms and complex offshore structures. With over 60 years of experience and more than 150 projects delivered, HSM supports offshore wind developers with engineering excellence, fabrication and installation capabilities.
https://www.smulders.com/en/home/

Oceans of Energy is the world's first company to deploy offshore solar systems proven to survive North Sea winter storms. Its floating "waterlily" technology enables large-scale solar power generation at sea, preserving land space while enhancing marine biodiversity. Offshore solar complements offshore wind and supports coastal energy systems.
https://oceansofenergy.blue/

DUC Marine Group is a Netherlands-based subsea and offshore contractor active since 1984. The company delivers inspection, repair and maintenance, cable interventions, scour protection and in-water surveys using integrated dive, ROV and survey services. DUC offers rapid mobilisation and end-to-end offshore delivery.
https://ducmarinegroup.com/

Collaboration partners

InnovationQuarter is the regional economic development agency for the Province of Zuid-Holland in the Netherlands. It supports innovative startups and scale-ups by helping them innovate, secure funding, and grow internationally. The organisation also attracts foreign companies to the region and fosters collaboration between entrepreneurs, knowledge institutions, and government partners. Through investment funds, expertise, and extensive networks, InnovationQuarter strengthens the region's innovation ecosystem and global competitiveness.
https://www.innovationquarter.nl/

TKI Offshore Energy is a Dutch public-private partnership driving innovation in offshore wind, hydrogen, and sustainable energy systems. It connects industry, research institutions, and government to accelerate the energy transition through collaborative R&D projects and strategic roadmaps. TKI Offshore Energy facilitates funding opportunities, coordinates multi-stakeholder initiatives, and helps organizations navigate offshore energy innovation from research to market deployment.
https://topsectorenergie.nl/en/maak-kennis-met-tse/tki-offshore-energy/

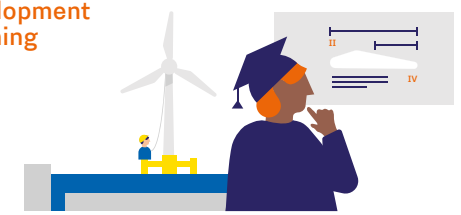
The Netherlands Enterprise Agency (RVO) supports entrepreneurs, knowledge institutes, NGOs, and policymakers in developing innovative and sustainable projects. As part of the Dutch Ministry of Economic Affairs, RVO provides funding instruments, policy support and international networks to strengthen collaboration and accelerate the energy transition.
https://english.rvo.nl/

Offshore wind value chain

Overall technical project design

AFRY

Research & development Education & training



iPS powerful people

DMEC

RelyOn

Project development

AFRY

Equipment and components

TKF CONNECTIVITY SOLUTIONS

Oceans of Energy

EIFFAGE SMULDERS

TouchWind

Transport and installation

DEME MARINE GROUP

Operations and maintenance

DEME MARINE GROUP

Tarucca

twindo

Let’s partner up!

By working together, we can shape the future of Spains and Portugals offshore wind sector. Let’s share knowledge, expertise, and innovative solutions to drive offshore wind forward together

Coordinator

NedZero
Wind Energy Association

Brennus van Os van den Abeelen
Manager Export Promotion & Internationalisation
brennus.vanos@nedzero.nl

Scan the QR code for more information:

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