



COUNTRY FICHE NETHERLANDS

SMART SPECIALIZATION

The Netherlands has been able to build a strong maritime position in the world, thanks in part to its strategic location at the mouth of the Meuse, Rhine and Scheldt. In some sectors the Netherlands is global market leader. This includes seaports, maritime and logistics infrastructure, offshore, hydraulic engineering, transport of heavy cargo and construction of super yachts. In 2013, the maritime cluster employs around 224.000 people with some 12.000 companies and realized a total added value of € 21 billion. That is 3.3% of the GDP of the Netherlands. (Rijksoverheid, 2015)

The Dutch maritime strategy 2015-2025 offers an integral framework for the government-wide policy for the maritime cluster. The strategy places an emphasis on six cluster wide policy areas including human capital, innovation, trade, accessibility, safety and the environment and security and stability. (Rijksoverheid, 2015)

The North Sea coastline of the Netherlands is about 350 kilometres long with about 2.5 million people living in the four maritime regions. The main economic maritime activities are geographically divided into four regions:

Northern sea ports (Delfzijl, Eemshaven, Harlingen, Den Helder);

North Sea Canal (Amsterdam and surroundings);

Rhine and Meuse (Rotterdam and surroundings); and

Scheldt basin (Vlissingen and Terneuzen). (Ecorys, 2012)

The Rhine and Maas maritime region is formed by the largest port in Europe, Rotterdam, but the cluster also consists of several components. The maritime manufacturing industry - think for example of offshore and dredging vessels or superyacht construction - and suppliers to the maritime network are also important components in the maritime cluster. The cluster is also relatively strong in the field of offshore and hydraulic engineering. The Dutch cluster is also strong in the area of inland navigation; Within Europe, the Netherlands makes the most use of inland navigation as a transport modality. (Maritime Delta, 2018)

The northern provinces have a number of larger seaports in Groningen and Friesland, namely Groningen Seaports, including the Eemshaven and the ports of Delfzijl, Lauwersoog and Harlingen Seaports (Netherlands Maritime Technology, 2014). Den Helder is the largest logistics hub for Offshore in the southern part of the North Sea ("Port of Den Helder", n.d.).

When looking at the RIS strategy of the Dutch maritime regions, several strategies are found. For the Northern provinces of Groningen and Friesland (location of the northern seaports Delfzijl, Harlingen and Eemshaven), among other things, sustainable energy, water technology and smart (sensor) systems are being mentioned. In the field of water technology Wetsus is an international knowledge institute and cluster organisation, based in Friesland. When looking at the RIS strategy of the West Netherlands, there are no RIS3 items that directly connect with the blue economy. This is remarkable, since a large maritime sector is present in this area. (European Commission, n.d.)

INTELLECTUAL PROPERTY RIGHTS (IPR), REGULATIONS AND STANDARD SUPPORT

IPR

LOCAL IPR AMBASSADOR	WEBSITE	TELEPHONE NUMBER	EMAIL
NL Octrooi centrum	https://mijn.rvo.nl/octrooi-aanvragen-in-nederland	+31 (0)88 042 6660	octrooicentrum@rvo.nl

MARINE SPATIAL PLANNING

Policy Document on the North Sea 2016-2021	https://www.noordzeeloket.nl/en/Images/Policy%20Document%20on%20the%20North%20Sea%202016-2021%20%28download%29_4895.pdf
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REGULATION AND STANDARD SUPPORT

AGENCIES TO CONTACT CONCERNING STANDARDS SUPPORT

Name agency	NEN
Concerning	NEN supports the standardization process in The Netherlands.
Link to website	www.nen.nl
telephone number	(015) 2 690 391 (The Netherlands) +31 152 690 391

Name agency	Bureau Veritas Certification
Concerning	Bureau Veritas is an organisation with expertise in Testing, Inspection and Certification (TIC)
Link to website	www.bureauveritas.nl
telephone number	+31 (0)88 450 55 00

Name agency	DNV GL Netherlands
Concerning	DNV GL is a global quality assurance and risk management company providing classification, technical assurance, software and independent expert advisory services to the maritime, oil & gas, power and renewables industries.
Link to website	www.dnvgl.nl
telephone number	Rotterdam: +31 (0) 10 2922 600 Arnhem: +31 (0)26 3 56 91 11 Groningen:+31 50 700 9700 Drachten: +31 (0)512 540409

Name agency	Lloyd's Register
Concerning	Classification company
Link to website	www.lloydsregister.nl
telephone number	Marine: +31 (0)10 4145088 Energy: +31 (0)10 2014200

AGENCIES TO CONTACT CONCERNING MINISTRY OF INFRASTRUCTURE AND WATER MANAGEMENT

Name agency	Rijkswaterstaat
Concerning	Executive agency of the ministry of infrastructure and water management.
Link to website	www.rijkswaterstaat.nl
telephone number	+31 (0)8008002

Name agency	Inspectie Leefomgeving en Transport (ILT)
Concerning	Supervising agency of the ministry of infrastructure and water management
Link to website	www.ilent.nl
telephone number	+31 (0)88 489 00 00
AGENCIES TO CONTACT CONCERNING MINISTRY OF ECONOMIC AFFAIRS AND CLIMATE POLICY	
Name agency	Staatstoezicht op de mijnen (SodM)
Concerning	Supervising agency for mineral and energy production in the Netherlands. They monitor the safety and environmental protection of mining activities, the gas network and wind at sea.
Link to website	www.sodm.nl
telephone number	+31 (0)70 379 8400
Name agency	Netherlands food and consumer product safety authority (NVWA)
Concerning	Agency of the Ministry of Economic Affairs that monitors the health of animals and plants, animal welfare and the safety of food and consumer products. In addition, the NVWA supervises compliance with nature legislation.
Link to website	www.nvwa.nl
telephone number	+31 (0)8 82 23 33 33 (cross border) 0900-03 88 (The Netherlands)
Name agency	Netherlands Enterprise Agency (RVO.nl)
Concerning	Netherlands Enterprise Agency (RVO.nl) stimulates entrepreneurs in sustainable, agricultural, innovative and international business. It helps entrepreneurs with funding, networking, know-how and compliance with laws and regulations.
Link to website	www.rvo.nl
telephone number	+31 70 379 80 00 (cross border) 088 042 42 42 (The Netherlands)

PERMITS AND EXEMPTIONS

MINERAL EXTRACTION	
Name permit	Earth removal permit
Issuing authority	Rijkswaterstaat
Applies to	Extraction of minerals located in shallow water (less than 100 metres deep), such as the extraction of sand or shells.
Link to website	https://www.rijkswaterstaat.nl/water/wetten-regels-en-vergunningen/overige-wetten/ontgrondingenwet/index.aspx
Name permit	Mining permit
Issuing authority	Directoraat-Generaal Energie, Telecom en Mededinging (ETM)
Applies to	Extraction of minerals from deep subsoil. This generally involves oil or gas, but it also includes rock salt and geothermal heat.
Link to website	https://www.rijksoverheid.nl/ministeries/ministerie-van-economische-zaken-en-klimaat

FISHERY	
Name permit	European fishing permit
Issuing authority	Rijksdienst voor Ondernemend Nederland
Applies to	Fishing in the North Sea
Link to website	www.rvo.nl
DUMPING AT SEA	
Name permit	Waterpermit
Issuing authority	Rijkswaterstaat
Applies to	Discharge of substances at the North Sea, such as cooling water or sewage water purification plant
Link to website	www.omgevingsloket.nl
INSTALLATIONS AT SEA	
Name permit	Waterpermit
Issuing authority	Rijkswaterstaat
Applies to	Build or position 'installations' in, on, above, under or over the seabed of the North Sea. If such structures also fall under the Mining Act, then you only require a permit in accordance with the Mining Act.
Link to website	www.omgevingsloket.nl
NATURE2000 AREAS	
Name permit	Permit nature conservation act
Issuing authority	Rijksdienst voor Ondernemend Nederland
Applies to	Activities in or in the vicinity of a Natura2000 area
Link to website	www.rvo.nl
FLORA AND FAUNA	
Name exemption	Exemption nature conservation act
Issuing authority	Rijksdienst voor Ondernemend Nederland
Applies to	Activities that endanger protected animal species
Link to website	www.rvo.nl
WRECKS AND ARCHAEOLOGICAL OBJECTS	
Name permit	Monument permit
Issuing authority	Rijksdienst voor het Cultureel Erfgoed
Applies to	Activities in the vicinity of shipwrecks and other man-made structures
Link to website	www.cultureelerfgoed.nl

CROSS BORDER FINANCIAL INSTRUMENTS

TYPE OF FINANCIAL INSTRUMENT	Loans
NAME FINANCIAL INSTRUMENT	Dutch Trade and Investment Fund (DTIF)
DESCRIPTION	The Dutch Trade and Investment Fund (DTIF) offers loans, guarantees and export financing for Dutch companies that want to expand their businesses internationally. DTIF consists of two components: Investment and Exports.
WEBSITE	https://english.rvo.nl/subsidies-programmes/dutch-trade-and-investment-fund-dtif

TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	Subsidy scheme for demonstration projects, feasibility studies and investment preparation studies (DHI)
DESCRIPTION	The DHI scheme supports Dutch enterprises that want to invest in or execute a project in emerging markets and in developing countries.
WEBSITE	https://english.rvo.nl/subsidies-programmes/dhi
TYPE OF FINANCIAL INSTRUMENT	Tax concessions
NAME FINANCIAL INSTRUMENT	WBSO (R&D tax credit)
DESCRIPTION	With the WBSO, companies can lower the wage costs for research and development (R&D) and other R&D costs and expenditures, such as prototypes or research equipment. You can deduct the tax benefit in your tax return to the Netherlands Tax and Customs Administration.
WEBSITE	https://rvo.nl
TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	System integration at the North Sea (Systeemintegratie op de Noordzee)
DESCRIPTION	This subsidy scheme focuses on research and development of new components, products, tools and services that enable large quantities of offshore windenergy to be integrated against low economic costs.
WEBSITE	https://rvo.nl
TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	Take off
DESCRIPTION	The science-wide financial instrument Take-off stimulates activity and entrepreneurship from Dutch knowledge institutions. Academic entrepreneurs, but also starters from higher professional education institutions and starters who use knowledge from institutions for Applied Research Organizations (TO2), can bring their innovative research results to the market.
WEBSITE	https://www.nwo.nl/onderzoek-en-resultaten/programmas/take-off
TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	MIT-R&D-samenwerkingsprojecten
DESCRIPTION	Grants are given for feasibility projects of SME companies.
WEBSITE	https://www.rvo.nl/subsidies-regelingen/mit-rd-samenwerkingsprojecten
TYPE OF FINANCIAL INSTRUMENT	Loan
NAME FINANCIAL INSTRUMENT	Innovation Credit
DESCRIPTION	With the innovation credit SMEs are given financial support for risky innovation projects. In this way the government fills the gap in the capital market in a phase where entrepreneurs are busy getting things going, but have not yet generated returns.
WEBSITE	https://english.rvo.nl/subsidies-programmes/innovation-credit
TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	Green deal
DESCRIPTION	The Green Deal approach in the Netherlands is an accessible way for companies, other stakeholder organizations, local and regional government and interest groups to work with Central Government on green growth and social issues. The aim is to remove

	barriers to help sustainable initiatives get off the ground and to accelerate this process where possible.
WEBSITE	https://www.rvo.nl/onderwerpen/duurzaam-ondernemen/groene-economie/green-deal
TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	Renewable energy
DESCRIPTION	The Renewable Energy subsidy aims to achieve the energy objectives for less costs with innovative projects.
WEBSITE	https://www.rvo.nl/subsidies-regelingen/subsidies-energie-innovatie-topsector-energie/hernieuwbare-energie
TYPE OF FINANCIAL INSTRUMENT	Grant
NAME FINANCIAL INSTRUMENT	Subsidy scheme for Sustainable Shipbuilding (SDS)
DESCRIPTION	The Subsidy Scheme for Sustainable Shipbuilding (SDS) is intended for shipyards that want to carry out a shipbuilding innovation project that contributes to sustainable development.
WEBSITE	https://www.rvo.nl/subsidies-regelingen/subsidieregeling-duurzame-scheepsbouw-sds

SME ORIENTED INCUBATOR SUPPORT



young entrepreneurs are here!

NAME	Yeah!
MAIN TOPICS	Consultancy Business For Startups And Sme's.
ADRESS	Herestraat 106 9711 Lm Groningen
WEBSITE	Http://www.Yeah.Eu/



Incubator Duurzame Energie Alkmaar

NAME	Idea voor duurzame energie
MAIN TOPICS	Incubator idea helps entrepreneurs to bring innovative ideas in the field of renewable energy to the market.
ADRESS	Bergerweg 200 – building c 1817 mn alkmaar
WEBSITE	Https://idea-nhn.nl/

YES! DELFT

NAME	Yes!delft
MAIN TOPICS	A tech incubator for startups in the fields of blockchain, artificial intelligence, cleantech, medtech, aviation, robotics and complex technology.
ADDRESS	Molengraaffsingel 12 2629 jd delft
WEBSITE	https://www.yesdelft.com/

EnTranCe ENERGY TRANSITION CENTRE

NAME	Entrance
MAIN TOPICS	EnTranCe is the hotspot of the Hanze University of applied sciences for businesses and innovations. It has the facilities, technologies and network to develop plans into the energy products and services the energy market demands.
ADDRESS	Zernikelaan 17 9747 aa Groningen
WEBSITE	http://en-tran-ce.org/



NAME	Robovalley
MAIN TOPICS	Hub for robotic innovators, helps companies or start-ups that want to settle in delft.
ADDRESS	Julianalaan 67a 2628 bc delft
WEBSITE	http://www.robovalley.com/



NAME	Buccaneer delft
MAIN TOPICS	Buccaneer delft mobilizes the energy and offshore industry, facilitating high-impact partnerships to accelerate growth of scale-ups.
ADDRESS	Paardenmarkt 1 2611 pa, delft
WEBSITE	https://buccaneerdelft.com/

PORTXL

NAME	Portxl
MAIN TOPICS	Entrepreneurship hub for innovation in logistic, maritime and energy
ADRESS	Marconistraat 16, 12th floor 3029 ak rotterdam
WEBSITE	https://portxl.org/



NAME	Green deal
MAIN TOPICS	Stimulating sustainable innovation by the government, by aiding the implementation of sustainable initiatives.
ADRESS	/
WEBSITE	https://www.greendeals.nl/

PROTOTYPING AND LABORATORY/TESTING INFRASTRUCTURES AND CO-WORKING SPACES



NAME	Dmec (dutch marine energy centre)
TYPE OF TECHNOLOGY	Tidal technology
FACILITIES	- Inshore test site at den oever, suitable for performance, installation, survival, o&m and demonstration tests; - offshore marsdiep test site, suitable for performance, installation, survival, o&m, and demonstration tests.
TRL LEVEL	6-9
WEBSITE	https://www.dutchmarineenergy.com/



NAME	Tu delft
TYPE OF TECHNOLOGY	Tidal technology Wave technology
FACILITIES	- Wave flume, simulating waves and stream. Suitable for performance, installation, survival, o&m and demonstration tests; - stream flume, simulating stream. Suitable for performance, installation, survival, o&m and demonstration tests; - stream tank, simulating stream. Suitable for performance, installation, survival, o&m, and demonstration tests.
TRL LEVEL	1-3
WEBSITE	https://www.tudelft.nl/ocean-energy/



NAME	Wageningen university & research
TYPE OF TECHNOLOGY	Tidal technology
FACILITIES	- Straight flume, simulating stream, suitable for performance and hydrodynamics tests of river simulations (sedimentation, dam prototypes); - tilting flume, simulating stream, suitable for performance tests.
TRL LEVEL	1-3
WEBSITE	https://www.wur.nl/



NAME	Hogeschool zeeland
TYPE OF TECHNOLOGY	Tidal technology Wave technology
FACILITIES	- Wave basin, simulating waves and (tidal) streams. Suitable for proof of principle tests of dam systems (including turbines); - stream flume, simulating (tidal) streams. Suitable for proof of principle tests of dam systems (including turbines).
TRL LEVEL	1-3
WEBSITE	https://hz.nl/

NAME	Deltares
TYPE OF TECHNOLOGY	Tidal technology Wave technology
FACILITIES	<ul style="list-style-type: none"> - Atlantic basin, simulating waves and (tidal) currents. Suitable for performance and survival tests; - pacific basin, simulating waves, suitable for performance and survival tests; - delta basin, simulating waves and (tidal) currents. Suitable for performance and survival tests; - intake and outfall basin (ios), simulating tidal range. Suitable for performance and survival tests; - delta flume, simulating waves. Suitable for performance and survival tests; - scheldt flume, simulating waves and (tidal) currents. Suitable for performance and survival tests.
TRL LEVEL	1-6
WEBSITE	https://www.deltares.nl/en/



NAME	Marin
TYPE OF TECHNOLOGY	Tidal technology Wave technology Otec technology
FACILITIES	<ul style="list-style-type: none"> - Offshore basin, simulating waves, currents, wind. Suitable for performance and installation tests - deepwater towing tank, simulating tow tests. Suitable for performance, installation and survival tests - depressurised wave basin, simulating waves and low air pressures. Suitable for performance tests; - concept basin, simulating waves and wind, suitable for performance tests; - shallow water basin, simulating waves. Suitable for performance and installation tests; - cavitation tunnel, simulating low pressures. Suitable for cavitation observation.
TRL LEVEL	3-6
WEBSITE	http://www.marin.nl/web/home.htm



NAME	Ttc-gd
TYPE OF TECHNOLOGY	Tidal technology
FACILITIES	Inshore grevelingendam site, when completed, tidal technology center grevelingendam (ttc-gd) at the 'flakkeese spuisluis' in the grevelingendam will provide developers of tidal energy technologies with the means to test, certify and showcase their products in fully operational tidal contexts.
TRL LEVEL	4-8
WEBSITE	https://www.bt-projects.com/portfolio-items/tidal-technology-center-grevelingendam/



NAME	Nioz
TYPE OF TECHNOLOGY	Tidal technology Wave technology Otec technology Salinity gradient technology
FACILITIES	Test bassin, simulating dynamic tank. Suitable for performance and component testing; Pressure tank, simulating high pressure. Suitable for performance, operation and component testing;
TRL LEVEL	1-9
WEBSITE	https://www.nioz.nl/en



NAME	Fisheries innovation center (visserij innovatiecentrum zuid-west nederland)
TYPE OF TECHNOLOGY	Fishing techniques
FACILITIES	The fisheries innovation center supports projects that promote technical innovations and contribute to the sustainability of the fishing sector. In a test pool, gears and networks are tested in as realistic an environment as possible.
TRL LEVEL	1-9
WEBSITE	https://visserij-innovatiecentrum.nl/

LITERATURE LIST

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