



**Innovation
Quarter**

InnovationQuarter

Chris van Voorden

Direction Foreign Investments

Introduction to InnovationQuarter

Shareholders

- the Dutch Ministry of Economic Affairs and the Province of South-Holland



Ministerie van Economische Zaken



- Delft, The Hague, Drechtsteden, Leiden, Rotterdam, Westland & Zoetermeer



- the three universities of Delft (Technical), Leiden & Erasmus Rotterdam and the two academic medical centers Erasmus MC & LUMC.





We fund cutting edge and fast growing businesses with our own investment fund (InnovationQuarter **Capital**).



We organize co-operation between innovative companies, knowledge institutions and government (InnovationQuarter **Business Development**).



We assist foreign enterprises setting up their business in West Holland (InnovationQuarter **Foreign Investments**).

About our region

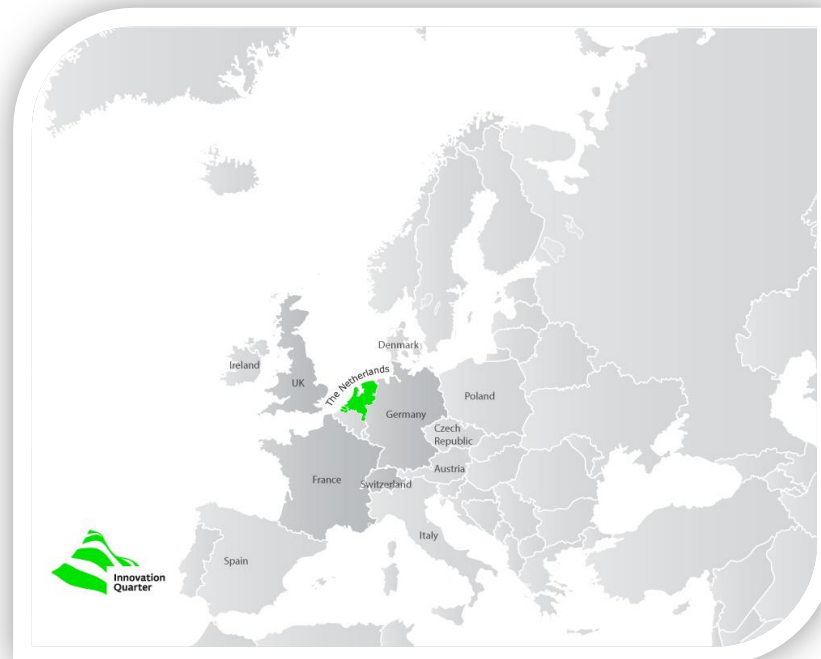
App. 3.5 million inhabitants

>21 % total GDP in The Netherlands

The Port of Rotterdam, nr 1 port in Europe

3 Internationally renowned universities

Technological top institutes (TNO, ESA, Deltares)



Ranks among the world leaders in the field of

- Maritime & Logistics;
- Life Sciences & Health;
- Cleantech (including Water & Delta technology, Bio Based Economy, Sustainable Energy);
- Security and Justice (The Hague Security Delta);
- Horticulture & Agrifood and
- High-tech Systems.

The region has the highest R&D expenditure in the Netherlands, a growth of export well above average and has doubled its foreign investments over the last fifteen years.

Sectors have strong international connections. This makes the region attractive for countless types of companies and an excellent breeding ground for innovation.

PORT OF ROTTERDAM aims to be the the WORLD'S SMARTEST AND MOST SUSTAINABLE PORT

24/7 deep sea access in IN EUROPE'S #1 PORT.



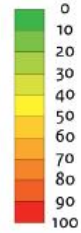
Able to facilitate OFF THE SCALE offshore wind terminals

Figuur B2.7

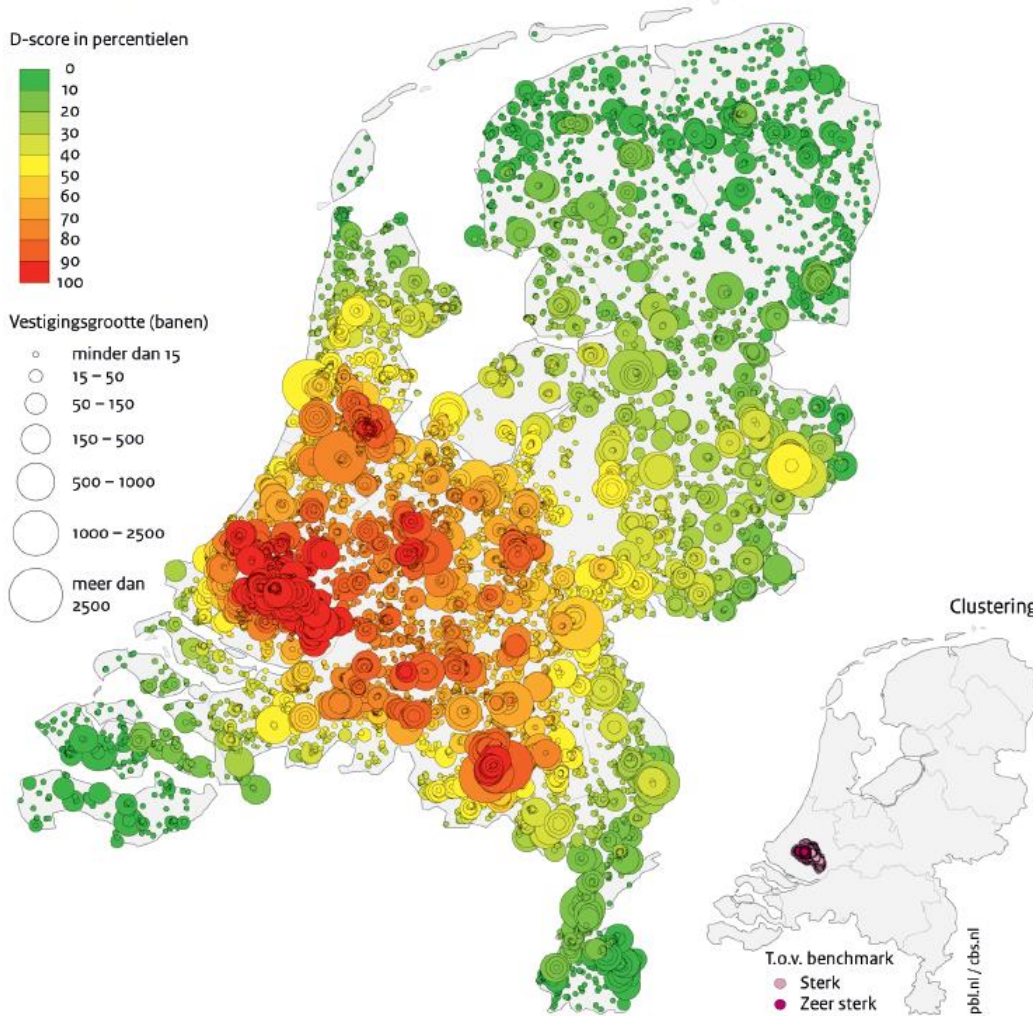
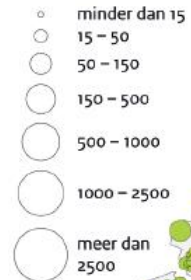
Ruimtelijke spreiding van vestigingen in de topsector HTSM – maakindustrie

Concentratiepatroon

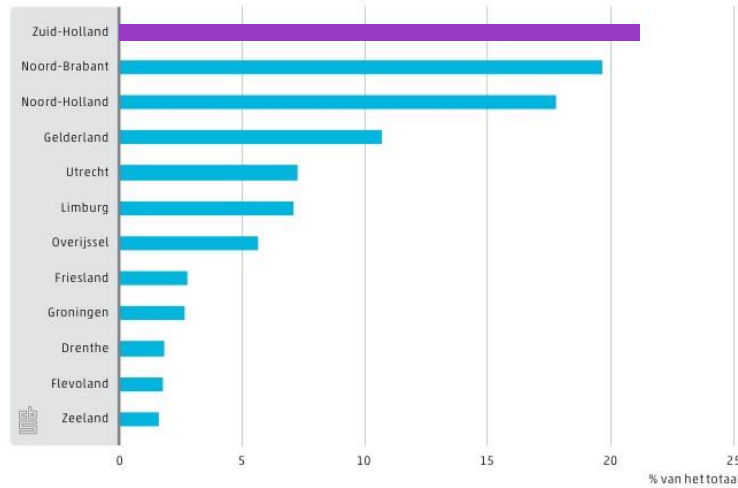
D-score in percentielen



Vestigingsgrootte (banen)

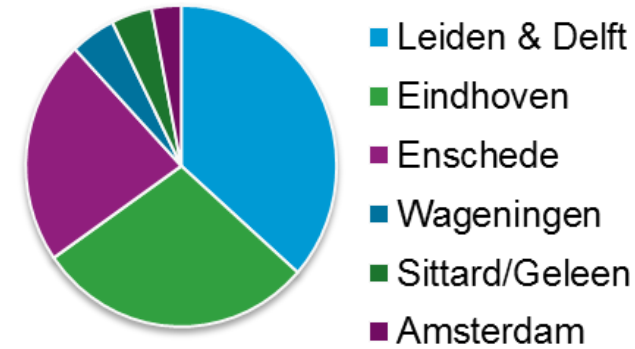


3.2.1 Investerings in onderzoek en ontwikkeling, 2012**

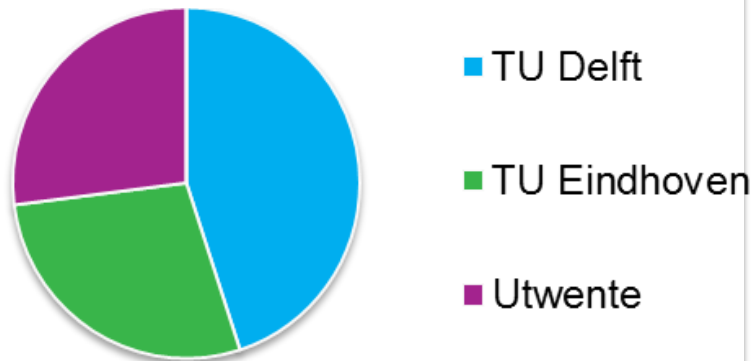


Bron: CBS, regionale rekeningen.

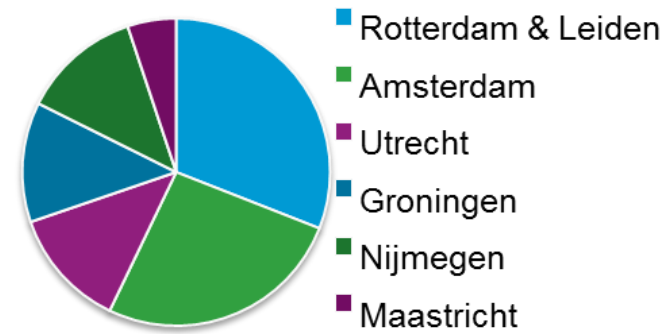
Innovation campuses (# industrial jobs)



Universities of Technology – R&D size



University Medical Centres – R&D size



Maritime & Offshore

The Netherlands, and especially Zuid Holland, is a
hotspot for

Maritime & Offshore Industry

The region hosts one of the most diversified maritime clusters in the world.

The cluster consists of companies active in:

- Design;
- Shipbuilding;
- Maintenance;
- Asset owners;
- Suppliers;
- Maritime service suppliers.

As well as a world renowned university: **Delft University of Technology (TU Delft)**, which is ranked among the top technological universities worldwide.

The heart of the maritime cluster, the Maritime Delta, is located in the region and hosts one of the largest and most diversified maritime clusters in the world:

- 70,000 people are employed.
- 4,000 companies.

- Project development: Shell, Eneco, Dong Energy
- Wind energy financing & insurance: Marsh, Aon, Rabobank
- Training and education: STC group, Falck, Jules Dock, Height Specialists
- Engineering, Procurement, Construction : Van Oord, Huisman, Mammoth, GustoMSC, and Installation SBM Offshore, KCI
- Foundation supplier: Sif Group, ZPMC
- Manufacturing & assembly: Sif Group, NKT cables, HSM, NAMI, Hollandia, Keppel Verolme, HFG
- Vessels and equipment: Royal IHC, Damen, GustoMSC
- Turbine installation/Maritime contractors: Van Oord, Boskalis, Mammoth, Seaway Heavy Lift, Stemat, Jumbo, Dockwise, Jack-Up Barge
- Foundation Installation: Van Oord, Seaway Heavy lifting,
- Cable installation: Van Oord, VBMS
- Offshore maintenance: Ampelmann, Barge Master.
- R&D: TU Delft, ECN, TNO
- Transport, mobilisation, repair & conversion: Rotterdam Offshore Group, Broekman Logistics, Franklin Offshore, Rhénus Logistics, Damen

Hotspots where innovations are developed include:

- RDM Rotterdam;
- YES!Delft;
- Buccaneer Delft;
- Cambridge Innovation Center (CIC Rotterdam).

YES!Delft - 4th position in the European UBI Index 2015 list of excellent university incubators. Since its foundation 10 years ago YES!Delft has supported more than 160 start ups and hundreds of technologies were patented

Additionally there are accelerator programs and innovation platforms specifically for maritime and offshore companies:

- PortXL;
- Port Innovation Lab;
- Our Oceans Challenge;
- Buccaneer Development Program and
- Maritime Delta.

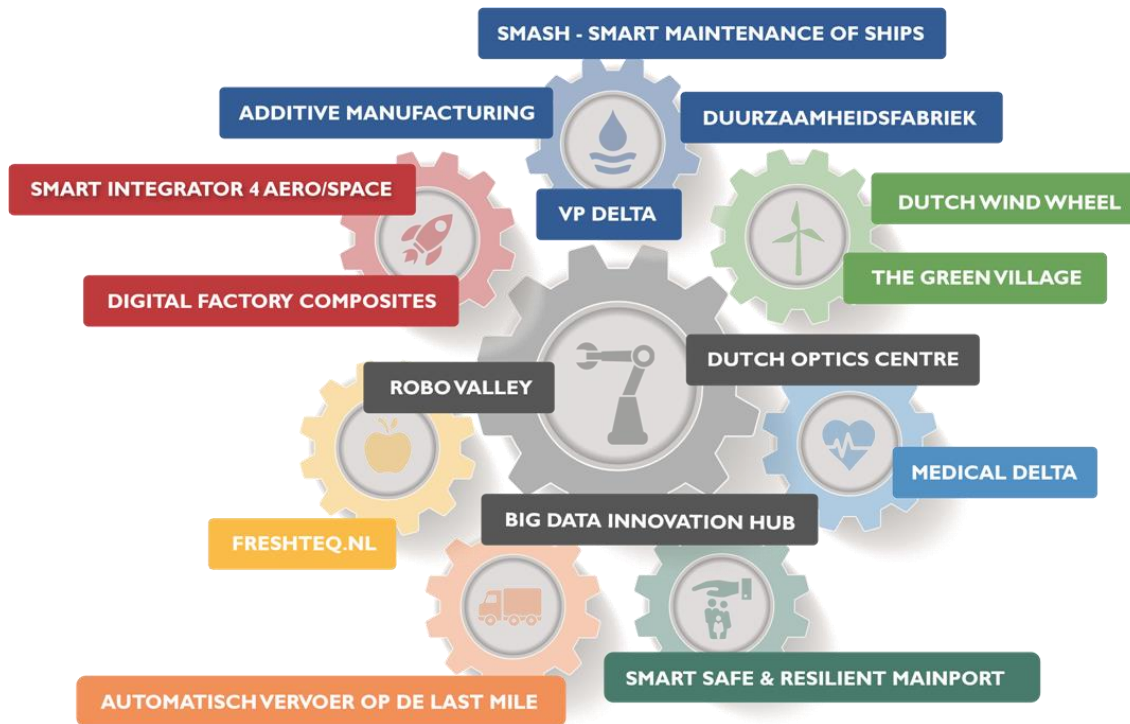
Maritime Delta is an alliance of companies, governments and knowledge & educational institutions active in the maritime delta. The strong position is enabled through among others a versatile maritime industry, the largest fleet in Europe and largest port capacity in the world. Additionally, The Netherlands is leading worldwide in the field of offshore services and development of complex marine systems.



The Rotterdam region has a strong position to play a major role on the international market for offshore wind energy. Everything is in place to be the 'Offshore Wind Delta' of the world:

- Presence of companies involved in the development of offshore wind energy.
- First-class port facilities with space, quay length and depths and open to the sea.
- Training and education facilities for offshore developments.
- Space for manufacturing, assembly construction, maintenance and storage.





- The Green Village (Delft) will provide an environment to accelerate radical innovations in the field of energy systems.
- 3D Printing/ Additive Manufacturing for maritime industry, a field lab aimed at positioning Rotterdam as the 3D metal big parts hub;
- SMASH, Smart Maintenance of Ships, aimed at predictable maintenance and lower maintenance costs,
- Digital Factory Composites, a field lab for developing digital solutions for upscaling the production of composite products;
- Smart Industry, Innovations in maritime automation, producing ships and propulsion systems using robotics.

The field labs are developed by knowledge institutes like TU Delft, Universities of Applied Science in Rotterdam and The Hague, TNO, municipalities, companies such as Siemens, Huisman, Heerema, Alliander, organisations such as InnovationQuarter and many others.

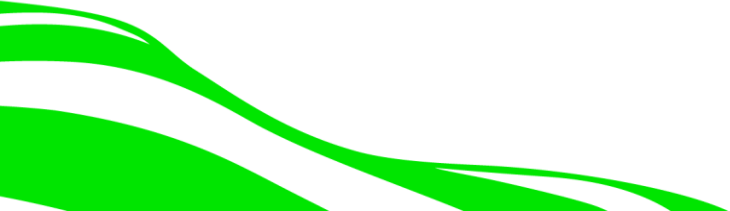
Thank you



Thank you for your attention!

More information:

Mr. Loek Becker Hoff
Sr. Account Manager Cleantech
Tel: 00316 12 22 69 07
Mail: loek.beckerhoff@innovationquarter.nl
Web: www.innovationquarter.eu



TU Delft/DUWIND

- Research on wind energy at the Delft University of Technology began 30 years ago. Nowadays DUWIND is the wind energy network of TU Delft.
- Its research program covers almost all aspects of modern wind turbine technology.
- DUWIND co-operates closely with the wind energy group ECN. DUWIND and ECN together form the Dutch node of the European Academy of Wind Energy EAWC.
- Test facilities are available at the Wind Tunnel Lab. Here multiple wind tunnels are available for research.

GROW

GROW is a consortium of companies and knowledge institutes in the Netherlands that executes a common research, development and demonstration (RD&D) program to overcome the challenges of offshore wind.

Founding fathers: Delft Offshore Turbine, ECN, Eneco, Lagerwey, LM Wind Power, Royal IHC, RWE, Shell, Siemens, Sif Group, TenneT, TNO, TU Delft, Van Oord, and Volker Stevin International.

The GROW consortium works on realizing two objectives.

1. To expand the role of offshore wind in the energy system overall by reducing costs and increasing value.
2. To strengthen the Dutch offshore wind sector - development of new products and processes.



Recently a number of Rotterdam offshore companies signed a manifesto with the aim to strengthen the Rotterdam cluster and to indicate the commitment to the development of offshore wind energy, not only in construction but also in exploitation, maintenance and services. The port further aims to create an "Offshore Center Maasvlakte II", which will provide room for companies involved in offshore wind, offshore oil and gas and decommissioning.

Van Oord, Boskalis, Mammoet, SIF Group, Ampelmann, Falck, STC-Group, Keppel Verolme, Eneco, Marsh, Rabobank, Jules Dock, Havenbedrijf Rotterdam, gemeente Rotterdam en Rotterdam Partners





The maritime centre of Europe

The Netherlands is the maritime centre of Europe. The heart of the cluster, the Maritime Delta, is located in the region stretching from the Maasvlakte to Gorinchem and Werkendam. And hosts one of the largest and most diversified maritime clusters in the world:

- 70,000 people are employed.
- 4,000 companies.

Maritime Delta is an alliance of companies, governments and knowledge & educational institutions active in the maritime delta. The strong position is enabled through among others a versatile maritime industry, the largest fleet in Europe and largest port capacity in the world. Additionally, The Netherlands is leading worldwide in the field of offshore services and development of complex marine systems.

