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# Consequences of sea level rise

Sea level rise could be much faster than expected after 2050. This is a possible scenario facing the Netherlands and other low-lying coastal areas. A rise in the sea level has enormous implications for people and the economy worldwide. These mostly fertile coastal areas grow food for hundreds of millions of people.

[See the website for more information](#)





# National watering can



The Netherlands is the delta region where the Meuse and Rhine rivers flow into the North Sea. The amount of water coming into the country through these major rivers exceeds the amount of rainwater three times over. Most of this fresh water flows straight to the sea. The diversion and temporary storage of water in the subsurface is a logical and effective solution that is still largely unexploited.

[See the website for more information](#)





# Heat from water



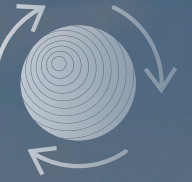
Aquathermal energy systems, the harvesting of heat from waste and surface water, can meet a substantial proportion of Dutch heat requirements in the future. The Aquathermal Viewer describes the potential of aquathermal energy in the Netherlands. In addition to a quick scan of the potential of thermal energy from surface water (TEO), waste water (TEA) and drinking water (TED), the viewer also provides an extra in-depth overview of the feasibility of aquathermal energy in a given area.

[See the website for more information](#)





# Trial dike made from dried sediment



The Hunze en Aa's water authority has built a forty-metre-long trial dike in front of the sea dike on the Dollard. They used clay taken from the clay ripening plants that processed sediment from the seaport channel of Delfzijl and the Breebaart polder. Researchers from Deltares and Ecoshape hope the trial dike will demonstrate that a safe dike can be made from circular materials.

[See the website for more information](#)





# New approach to hydrological modelling



Water managers are continuously making decisions to manage flood risks. These decisions are taken in the short term, for example during droughts, or precisely when there is a risk of flooding. But also in the long term on the basis of hydrological models. Researchers from Deltares and Wageningen University studied a new design for a model of this kind for the Rhine. This modelling approach can be used in any river basin worldwide. The results were published in the AGU 'Water Resources Research' journal.

[See the website for more information](#)





# Risks for the Marshall Islands in the picture



Natural disasters and sea level rise threaten the livelihoods of the inhabitants of the Majuro Atoll, who number almost 30,000. Natural resources and local ecosystems are also under threat.

The Marshall Islands government is working with Deltares on an assessment of the current and future risks facing the atoll.

Possible mitigation measures are also being examined.

[See the website for more information](#)



# Super-sized soil samples



Super-sized soil samples are being taken at the peat meadow test site of the Zegveld Knowledge Transfer Centre (in the Dutch municipality of Woerden) with the aim of predicting the extent of land subsidence due to the compression of peat. The diameter of these samples is 40 cm. Researchers are using them to determine the geotechnical properties of the peat, such as compressibility, density and the organic matter and carbon content.

[See the website for more information](#)





# Global water data now easily accessible



Deltares launched a new platform in 2020 – BlueEarth Data – with global data relating to oceans, coasts and rivers. BlueEarth Data combines a range of forecasting systems and data services in a single web-based platform where users can view, inspect and download the data free of charge. The BlueEarth platform is available to water specialists and managers throughout the world.

See the website for more information





# Proper management of vital infrastructure often a complex puzzle



Rijkswaterstaat, water authorities and municipal authorities invest about 16 billion euros annually in the construction, management and maintenance of infrastructure such as roads, dikes, waterways, sewers, cables, pipelines and other engineering structures. The proper management of these infrastructure assets is often a complex puzzle. As a result of economic developments, the demands on these assets are becoming increasingly challenging. The ROBAMCI approach looks at the physical components and the network from this perspective in a system-oriented approach. Everything is designed to maintain the services that the network has to perform. Now and in the future.

[See the website for more information](#)





# SMEs win free testing time in research facility

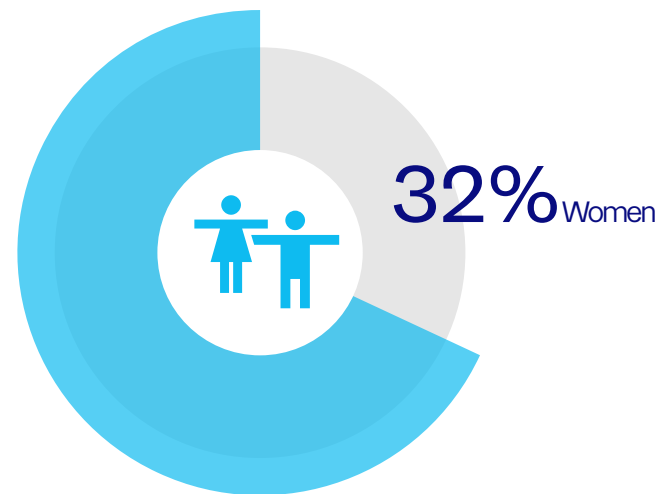
Last summer, to support innovation by start-ups and SMEs, Deltares offered eighty hours of free testing time in its experimental facilities. The start-ups were asked to submit a research proposal. In early October, the nine SMEs who responded were told whether the offer would be open to them. Reefy and Oceans of Energy came out on top.

See the website for more information



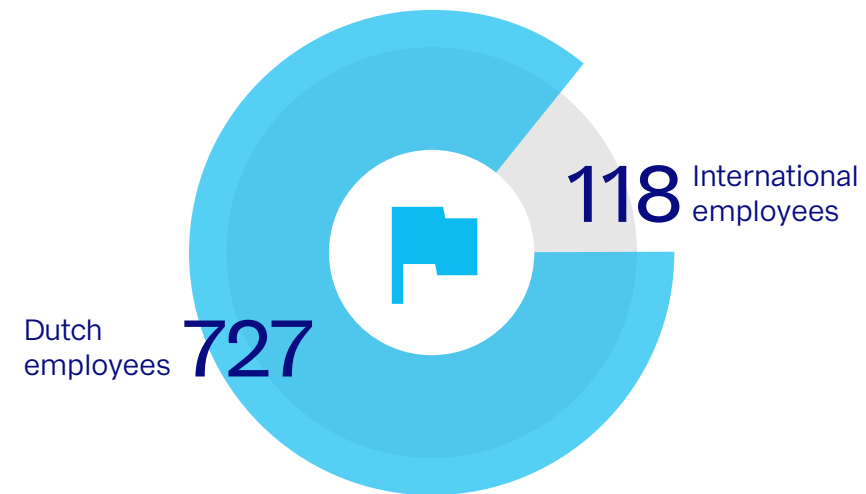


## Employees



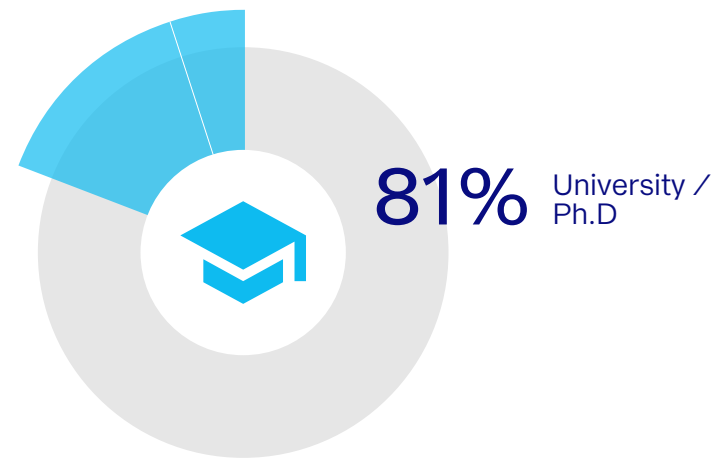
877 employees (780 fte)	<b>845</b> employees (748 fte)
33% women	<b>32%</b> women
67% men	<b>68%</b> men

## Nationalities



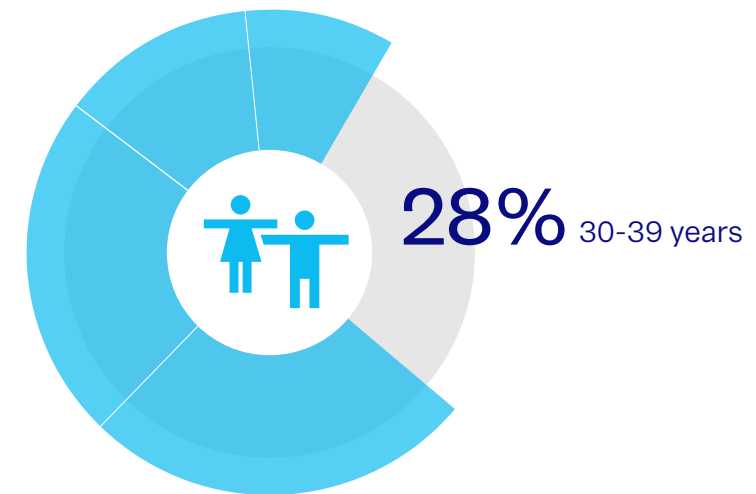
39 Nationalities	<b>42</b> Nationalities
762 Netherland	<b>727</b> Nederland
79 Europa (not including NL)	<b>78</b> Europa (not including NL)
14 America	<b>13</b> America
14 Asia/Oceania	<b>21</b> Asia/Oceania
8 Africa	<b>6</b> Africa
877 Total	<b>845</b> Total





55% University	<b>53%</b> University
24% Ph.D	<b>28%</b> Ph.D
16% Higher Vocational Education	<b>5%</b> Higher Vocational Education
5% Other	<b>14%</b> Other

## Age



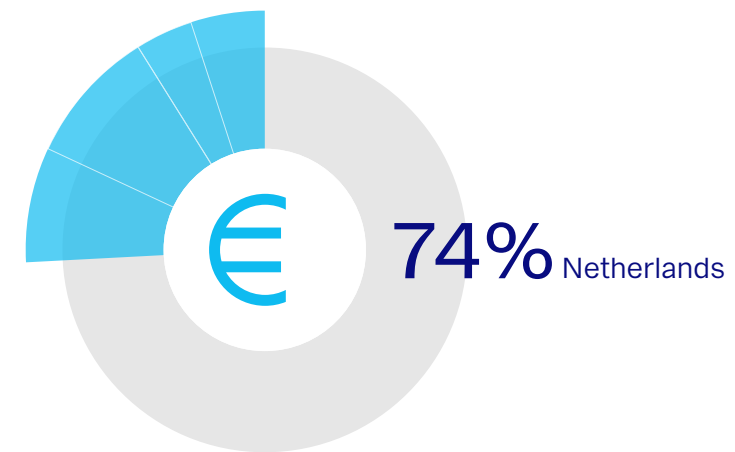
25% < 35	<b>10%</b> < 29
28% 35-44	<b>28%</b> 30-39
22% 45-54	<b>26%</b> 40-49
23% 55-64	<b>23%</b> 50-59
2% > 65	<b>13%</b> 60+

## Net turnover



€ 119 million	<b>€ 112 million</b>
€ 103 million gross margin	<b>€ 99 million</b> gross margin
€ 16 million outsourced work	<b>€ 23 million</b> outsourced work

## Turnover distribution



72% Netherlands	<b>74% Netherlands</b>
9% Europe	<b>8% Europe</b>
9% Asia	<b>9% Asia</b>
4% America	<b>4% America</b>
6% Rest of the world	<b>5% Rest of the world</b>



