



Enabling Delta Life



'Corporate Social Responsibility and Sustainability' are at the core of the work done by Deltares. It is what we do, and who we are. This annual report describes how our projects and our research contribute to this area. We use Deltares knowledge to help solve or mitigate major challenges facing the planet. Our mission 'Enabling Delta Life' fits in well with this ambition.

The Sustainable Development Goals (SDGs) serve as a guideline for responsible growth. In 2016, we stated that the achievement of these goals in the years would be given a prominent place in our vision of corporate social responsibility. We want to enhance our impact on the SDGs and make that impact known.

That means we want to give a good example ourselves. We practise what we preach. That is why we are constantly involved – and this was the case once again in 2016 – in improvements to our own business operations. Some examples:



New Deltares Data Center



Deltares built a new Data Center in 2016. An important guiding principle for the design was that this new facility had to be as energy-efficient as possible. Energy consumption has been reduced drastically by using direct cooling with outside air as much as possible. That effect has been further enhanced by purchasing new IT equipment with a higher temperature tolerance, reducing the need for cooling. When the new Data Center goes into operation, we expect to save approximately 325,000 kWh annually.



**-325,000
kWh**

Optimisation of energy management

A range of improvements were made in 2016 to further optimise energy management at Deltares. For example, the settings of pumps and boilers were fine tuned so that they only go into operation when they are really needed. Improvements have also been made to the monitoring of spikes in gas consumption so that boilers don't burn for longer than necessary. We have insulated a large number of components in our central heating system such as pumps and valves, reducing unnecessary heat loss and ensuring that heat is taken faster to where it is needed. Finally, the old transformers have been replaced by new, more efficient installations and the lights in our restaurant have been replaced by new, energy-efficient LED bulbs.



IT4kids

Deltares donated its outdated computer hardware to IT4kids for the third year in a row. This organisation is an initiative



of the IT supplier, the Infotheek Groep. Since 2013, IT4Kids has been supporting organisations and projects that contribute to the development of children, particularly through sports activities. It is estimated that more than 400,000 children in the Netherlands are unable to play sports due to money difficulties. By donating the obsolete ICT equipment through the Infotheek Groep to IT4Kids, Deltares hopes that more children will be able to engage in sports and games.

100%

Dutch wind energy!

Greenchoice has convinced Deltares that they invest most in sustainability and so a new three-year energy contract was signed with Greenchoice on 1 January 2016.

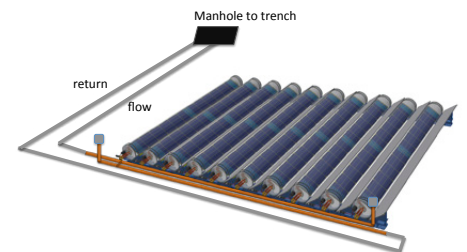
Greenchoice is the only provider that delivers no energy at all from fossil fuels or nuclear plants.

Deltares is proud to say that all the electricity that we purchase, consists of 100% Dutch wind energy. In addition, we also generate solar energy.

The volume of gas consumed by Deltares will be compensated in the future with CO₂ certificates from forestry projects. These projects are not only located abroad. In the Netherlands also, Greenchoice is involved in the construction of forests in order to encourage biodiversity and nature recovery in our country. The new De Haar Park Forest on the Haarzuilens estate is a good example. Seven thousand trees were planted there in four days. To celebrate the new contract, a number of trees were also planted here on behalf of Deltares.



Experiments at our own location with PVT panels



PV is the abbreviation for photovoltaics, the physical phenomenon in which light is converted into electricity. The T stands for Thermal, in other words heat. So PVT panels generate both electricity and heat.

As part of the Climate-KIC project Energy from European Aquifers, we will be experimenting on our own location with this technology. By establishing a link with the aquifer thermal energy system that is already in place for our Tetra building, we can use the cooling water from the solar panels to store more heat in the subsurface than was previously possible. That heat is used in our Salt-Fresh Hall, which is also connected to the aquifer thermal energy system, reducing the need to use the standard heating system. Heating up the water that has already been warmed up in the offices provides more heating capacity in the winter and using that capacity results, in turn, in more cooling capacity in the summer.