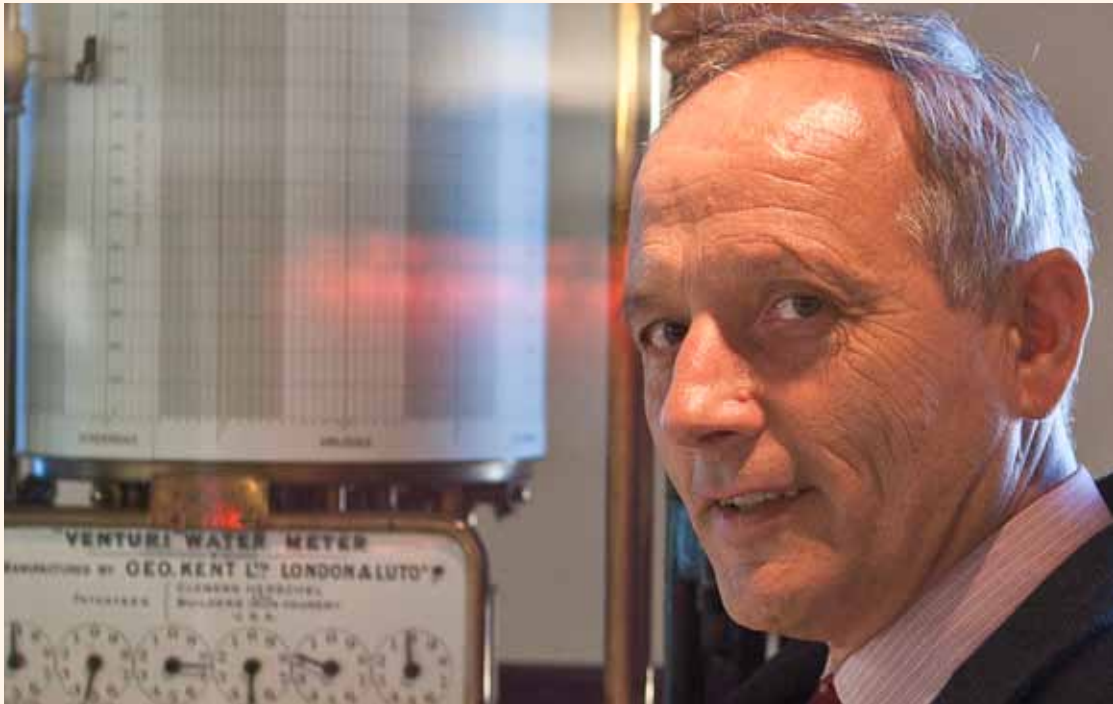




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## North Water

### *High-quality solutions: interesting for the Germany market as well*

The Dutch and water: a stormy relationship. The water has brought trade and prosperity as well as frequent disasters, floods and inconvenience. It is essential to mobility, agriculture, industry, in short: one of the most important, if not *the* most important, commodities of society. For centuries, the Dutch have considered having good, useful water in all but limitless quantities as a matter-of-fact. We changed our minds over the last couple of decades, however. The concept of water management, which Dutch Crown Prince Willem Alexander also works hard to promote, emerged. One of the consequences of this new approach to dealing with water is that the focus now lies on the environment, sustainability, reusing wastewater and continuously developing industrial applications of water. North Water, a commercial joint venture of Waterbedrijf Groningen and Evides, is one of the pioneers in the field of water treatment and wastewater purification for companies and industrial complexes. We spoke

with Managing Director Piet de Boks about North Water's ambitions.

"North Water has been involved in a significant number of projects ever since its foundation, some five years ago. We have dedicated and expanded a lot of expertise over time. You might describe our specialty as the aim to achieve, as much as possible, a total, integral chain approach to water," De Boks explains. "North Water operates on the DBFO concept, which stands for Design, Build, Finance & Operate, which is to say: we design, build, finance and operate systems having to do with water. We do so highly successfully and for a large number of clients in the Northern Netherlands, with our current focus being on the chemistry cluster of Delfzijl and Eemshaven and the industrial estates in Veendam and Ter Apelkanaal. Because there is much benefit to be gained with an integral approach to such business concentrations, provided that we



deliberate and make the necessary arrangements at an early stage.”

#### **ZAWZI project**

One project that North Water looks back on with a smile – and that can be considered a demonstration project for the future – is the ZAWZI project. This unusual abbreviation stands for the Dutch Zout Afval Water Zuiverings Installatie: Salty Wastewater Purification Plant. This project was a collaboration of North Water and the Northern Netherlands Directorate-General for Public Works and Water Management, the Hunze & Aa’s Water Board, Groningen Seaports and the companies at Oosterhoorn chemistry estate. It was a lengthy process, which started in 2003 when the Stichting UFO (Utility Facilities Oosterhorn foundation), a regional platform of (semi) industrial businesses and authorities, went looking for a solution for the discharge of salty wastewater. As those discharges threatened to become a problem for the vulnerable Ems-Dollart area, a joint sustainable solution had to be found. North Water built a total bio-end purification system for the entire Oosterhorn industrial complex, which was put into operation in 2008.

#### **Integral area approach**

“The ZAWZI project is an excellent example of our vision on the area as a whole,” De Boks comments. “Not only will a joint approach be more effective and improve the degree of purification, but the integral approach also offers benefits of scale like reduced energy consumption, staff costs and other savings. An added benefit is the fact we can achieve a higher purification result by combining the different kinds of wastewater. North Water’s know-how was perfect for this project: managing the purification involves taking many factors into account and ensuring that these are in balance with one another. We also gained a lot of new experience in the course of this project, which we will be able to use in other projects in the Northern Netherlands as well as in Germany.”

#### **Outsourcing**

The fact that an organisation like North Water takes a steering role in the integral water chain management of industrial complexes is a logical development, says Piet de Boks. “This discipline is where governmental responsibilities and the responsibilities of production companies meet,” De Boks continues. “It’s not the government’s primary task to lead such a project, while companies tend to focus on their own business processes. North Water is the perfect party to take control here.



The added value of North Water's contributions has many interesting aspects. In addition to the benefits I already mentioned, with respect to energy, development and personnel expenses, it is cheaper to build infrastructure together. Furthermore, we can use the unique expertise of our parent companies. Re-using wastewater, for instance, is a hot topic. A unique, large-scale project is currently ongoing in Terneuzen, which involves communal wastewater being purified in a Membrane Bioreactor, to be subsequently processed into demineralised water for industrial use. Companies that outsource the supply of process water or the purification of wastewater get optimum, lasting solutions at far less costs, and are also able to focus more on their own core business."

#### **Eemshaven**

The developments in Eemshaven have accelerated. After a long start-up period, the sale of industrial estates went very fast.

"It is mainly the energy sector that is currently building on a large scale at that location," comments De Boks. "North Water has ready-made plans for the energy companies' water management. It is important to pay attention to this in this early stage, to jointly tackle things instead of coming up with individual, ad hoc solutions, which will inevitably be more expensive and less efficient. We developed a feasible, sustainable future scenario for the water supplies of the entire area. In this case, we are thinking of a water plant that can supply water to the industry, in a customised manner, with surface water as its source and drinking water as a back-up. The water that we intend to supply will be of excellent quality and delivery will be highly reliable.

Both the power companies and the other businesses have expressed a major interest in this."

#### **Our neighbours in the east**

So much technological knowledge and expertise should not be limited to just the northern market, naturally. "We currently actively focus on the German market," confirms De Boks. "The challenge in Germany is to make companies and authorities aware of the opportunities that North Water has to offer. The organisation of the water sector is somewhat different in Germany. Instead of a few large national corporations, they have a large number of smaller, locally operating players. But there are also many large industrial players and so there is a role for North Water and our expertise with water in the industry. We are open to cooperation with local players. The matter will take patience, but it matches with our business targets. Because we take into account the development of DBFO projects for the industry with all local implications takes time. Our partnerships tend to last, often running for decades. Sustainability and future-focus are concepts that require collaborations of many years. In the end, all parties will benefit. The environment, nature, governments and the business community: indeed, everyone in society. It is the ultimate win-win concept."

