

GRUNDFOS THINKS WATER WISE WATER ACTIVITIES 2015



be
think
innovate

GRUNDFOS 



We are facing a big challenge – but the solutions are here

Hundreds of millions of people without access to clean drinking water, droughts affecting productive farmlands, and flooding endangering inhabitants around the world: this is today's reality. It is also why the World Economic Forum has once again named the global water crisis as the biggest threat facing the planet over the next decade.

As a business, we have a responsibility to reduce our water consumption and think water wise. By 2025, our aim is to reduce our total water consumption by 50% compared to 2008 levels. In 2015, we reduced our water consumption by 2% compared to 2014. This gives us a total reduction of 34% compared to 2008 levels.

In Grundfos, we believe that our responsibility goes beyond our own operations. We recognise the challenge the world is facing and we believe that collaboration is key to overcoming it. By providing sustainable water solutions such as wastewater treatment, better distribution of water, and providing access to clean drinking water, our customers are able to minimise their negative impact and even create a more positive impact. The Grundfos purpose states;

“Grundfos is a global leader in advanced pump solutions and a trendsetter in water technology. We contribute to global sustainability by pioneering technologies that improve quality of life for people and care for the planet.” Working towards a positive impact lies deep within our existence and our purpose as a business.

During COP21 in Paris, Grundfos was awarded the prestigious United Nations' Momentum for Change Lighthouse Activity Award. This award shows that through intelligent and sustainable design solutions such as LifeLink Water Solutions, Grundfos can improve the quality of life for people in the developing world by providing them with clean water.

Step-by-step and day-by-day, we take action to develop solutions that overcome the challenges the world is facing. In the following cases, you can read about our work to improve the world's water situation. Enjoy your reading, and Think Water Wise.

Mads Nipper,
Group President & CEO

Dirty water transformed into clean drinking water in Mexico

A focus on people and helping those that are most vulnerable is deeply rooted in Grundfos' DNA and is part of our values. As demonstrated below, local Grundfos companies take this responsibility seriously and work to make a difference in their communities.

Taking part and improving lives

At Grundfos, it is globally recognised that running a sustainable business means investing in the sustainability and wellbeing of the communities in which we operate.

For example, in the small village of Noria de las Flores in the Mexican state of San Luis Potosí, 300 residents are benefiting from a new solar water system donated by Grundfos Mexico. Before the system was installed, villagers relied

on a dirty well located two kilometres from their village for drinking water. In addition to the health risks of drinking dirty water, collecting enough water for the family was physically strenuous and took time that could be devoted to other tasks.

By installing the new water system, residents are enjoying a significantly higher standard of living as it has eased the job of collecting clean






water and has freed more time for other tasks. Choosing to install an SQFlex pump means that the village is not dependent on electricity. The pump uses solar cells to operate which is essential in an area where electricity is a scarce resource.

A sense of meaning

Victor Gonzalez Moreira, Human Resources Analyst at Grundfos Mexico, explains that this type of initiative brings value to the business: “When employees work to help their local community, it gives them a sense of meaning and it enriches the lives of the people in the village.”

He also reveals that Grundfos Mexico, which is located in the same region as Noria de las Flores, is planning another initiative to improve water accessibility in the area: “We want to reflect the Grundfos values in our surrounding community and we expect to make future alliances to achieve goals that benefit as many people as possible.” This shows that through a united and dedicated effort, water challenges can be addressed and access to clean quality water can become a reality.



Grundfos and Kenyan water utility bring affordable water to Nairobi slums

Grundfos and a local water utility in Nairobi have proven that a joint effort can make clean drinking water more accessible and affordable to the city's residents.

One of Nairobi's greatest challenges is providing its residents with clean water. The African metropolis is projected to grow by 2 million people over the next 10 years. This puts massive

pressure on the existing water networks. The local water utility, Nairobi City Water & Sewerage Company, has joined forces with Grundfos to address this critical challenge.

Public-private partnerships shape positive water future

It is the first time that such a collaboration has taken place between a public institution and Grundfos in Africa. The project involves Grundfos' Lifelink solutions, including the newly



developed AQtap, which is a fully automated water dispenser. By using the AQtap solution, the credit distribution is a closed system that eliminates commercial losses and provides transparent water rates for the people of Nairobi. It also gives residents in the poorest parts of the city access to affordable water solutions. Lifelink solutions have been installed at four sites so far, bringing water to those who need it most.


Philip Gichuki, Managing Director of Nairobi City Water and Sewerage Company, is happy about the partnership and explains that the solution provided by Grundfos enables them to minimise water waste, and reach more people for the same amount of water as before.

Future perspective

By building partnerships between public and private companies and drawing on each other's expertise and resources, much can be achieved. David Githendu, Deputy General Manager of Grundfos Kenya, says: "It has given us a unique opportunity to get to know the needs of a large water utility from the inside. At the same time, it brings us close to a potential business partner who is aiming to grow capabilities in scale and technology over the coming years. In Nairobi, there are 4,000 water kiosks, which could be equipped with the AQtap, so we're following the development closely." This demonstrates the potential to provide many more people with access to water.

Smart water management

The AQtap is an intelligent water solution tailored for use in developing countries. It is a system based on innovative technology and mobile connectivity, which enables people to tap water from a water kiosk whenever they need it using a WaterCard.



Grundfos pumps keep water at bay

When rising waters turn into a flood, the consequences can be severe and sometimes claim lives. However, the risks can be brought under control to ensure the safety of people living along the shoreline.

From Semarang, Indonesia to Louisville, USA

Excessive water can be very damaging if it is not controlled. The port city of Semarang in Indonesia is home of two million people and is a bustling centre of trade. The low-lying city is wedged between the ocean and mountains, making it vulnerable to floods. These floods can be devastating for residents and cause damage to both homes and businesses.

Meanwhile, residents of Louisville in the US state of Kentucky are also familiar with the

danger of flooding. Although the neighbouring Ohio River is a source of life and a gateway for commerce, it also has the power to cause catastrophic disasters.

Pumps with plenty of muscle

Thanks to cooperation between local and global institutions, a new pumping station (complete with Grundfos pumps) has been implemented successfully in Semarang making the city better equipped to manage flood risks. The project is beneficial for Grundfos in two



ways. Firstly it is good business, and secondly it is in line with The Grundfos Purpose- “contributing to global sustainability by pioneering technologies that improve quality of life for people and care for the planet”. Managing Director for Grundfos Indonesia, Gert Borrits, says: “This project has been very important for us because we have been able to make a difference for our fellow citizens through our work and solutions”.

In Louisville, Grundfos has also played a major part by working closely with local operators to ensure pumping stations are functioning well. A new pumping station, consisting of Grundfos Peerless pumps with a combined pumping capacity of 3.8 million litres of water per-minute, helps to manage water levels and protect homes and businesses.

These projects require close collaboration and knowledge-sharing to succeed in protecting and improving water management.

Promoting sustainable

“With great products come great responsibility”. This loose interpretation of a famous movie quote is a very real cornerstone of Grundfos’ business. It is also the main reason the company actively works with governments and decision makers to share knowledge of sustainable water solutions.

In late 2015, at a water conference in Gujarat, India, Grundfos Group President, Mads Nipper, discussed the importance of working with green technology to combat some of the climate challenges facing the world. Among other things, he highlighted the advantages of decentralised water supplies that are powered by solar driven solutions. Solar water systems are promising solutions for countries like India, where there is plenty of sun but little stability when it comes to power supply.



water solutions in India

From regional to national level

At the conference, Grundfos India's Managing Director, Ranganath N. Krishna, signed a 'Memorandum of Understanding' with local water company, Gujarat Water Supply & Sewerage Board. The agreement ensures the supply and distribution of solar driven solutions for the local water supplies. This is very much in line with The Grundfos Purpose that seeks

to deliver sustainable solutions to improve the quality of life for people while caring for the planet.

Gujarat's progressive and proactive approach to sustainable water solutions is seen as a model for other Indian states to follow. Many other states have adopted similar solutions to improve sustainable access to drinking water across India. This is not only good for communities, but also for Grundfos as there are now increased sales opportunities.



Reducing our water consumption

As a company that produces water and energy efficient solutions, Grundfos plays a vital part in helping others reduce their negative environmental impact. Therefore, it is only natural that we also work to reduce our own water and energy consumption.

Cooling a factory using rain water

The summer in Taiwan is very hot and temperatures can soar to nearly 40 degrees Celsius. This can cause some very hot conditions for employees working in factories, especially those without air conditioning.

This was the situation at Grundfos' production company in Taiwan. However, a cross-functional team consisting of people from different work areas in Grundfos has found a solution to the problem of high temperatures in the

factory. By collecting rainwater during the rainy season in a 300 cubic metre water tank, Grundfos is able to cool the building during the summer months. The collected rainwater is used to flood the factory roof, which lowers the temperature of the factory floor by 2 degrees Celsius. This solution is more efficient and sustainable than traditional air conditioning solutions, and employees in the factory are benefiting from a more comfortable working environment.

Reusing wastewater

Like rainwater, wastewater can be a valuable water source. Grundfos' sister company in Denmark, Sintex, has demonstrated that reusing wastewater is an efficient way to reduce water consumption and minimise further waste. In the past, the wastewater from the Sintex factory was hauled away for external treatment. Now the wastewater is treated on-site through an evaporation and condensation plant. The water can then be reused during production.

This process has reduced wastewater going to external treatment by 90 per cent and has saved 450 cubic metres of clean municipality water each year. However, evaporation is not free of cost, but with modern vacuum evaporators, the electricity consumption is limited. In this case, the extra electricity consumption of 17.5 MWh per year actually emits less CO₂ than the transportation of wastewater for external treatment.

These initiatives are just two examples of how Grundfos sites work to reduce water consumption. Each year, best practice is shared through

out the company so similar measures can be implemented elsewhere.

Local initiatives all over the world

Grundfos' commitment to water reduction is driven by a desire to cut total water consumption by 50 per cent of 2008 level by 2025. Local water initiatives are the key to reducing Grundfos' overall water consumption across the 56 countries in which the company operates.

