GRUNDFOS LIFELINK WATER SOLUTIONS
YOUR LINK TO SUSTAINABLE WATER
WHAT IS THE MISSING LINK?

Providing reliable access to water in the developing world is a yet unsolved global issue. The missing link to sustainability in water supply can only be addressed through innovative solutions that break with conventional thinking and take a holistic and long-term approach.

Grundfos has a proud history of solving challenges through innovation, with 60 years of experience in advanced pump solutions and a continuous ambition to contribute to global sustainability. We are committed to applying our competences and developing solutions so our customers can secure sustainable water supply for the developing world.

Our vision for sustainable water supply links innovative and holistic solutions with operational, financial, environmental, and social sustainability. Grundfos Lifelink water solutions combine our innovative and reliable technology with professional service networks to support operations on the ground. We believe that partnerships across sectors and business model thinking are needed to provide sustainable and scalable solutions.

This vision confronts the global water crisis head-on, meaning solid steps can be taken towards long-term sustainable water solutions. Grundfos Lifelink is your link to sustainable water.

ACROSS RURAL AFRICA AN ESTIMATED 50,000 WATER SUPPLY POINTS HAVE FAILED MAINLY DUE TO LACK OF MONEY AND CAPACITY FOR OPERATION AND MAINTENANCE.

COMMERCIAL LOSSES IN THE WATER SUPPLIES OF DEVELOPING COUNTRIES ACCOUNT FOR $2.6 BILLION EVERY YEAR. – THIS IS MORE THAN WHAT THE WORLD BANK LENDS EACH YEAR FOR WATER PROJECTS IN DEVELOPING COUNTRIES.

GRUNDFOS IS COMMITTED TO DELIVERING SOLUTIONS THAT STRENGTHEN RELIABILITY AND SUSTAINABILITY OF WATER SUPPLY IN THE DEVELOPING WORLD.

(1) Jamie Skinner, IIEd, 2009: Where every drop counts: Tackling rural Africa’s water crisis

(2) World Bank discussion Paper No. 8, december 2006
The heart of a Grundfos Lifelink solution is the innovative water dispenser and unique water management system. Thanks to a modular approach, solutions are designed from the Grundfos product portfolio depending on context and project criteria.

With Grundfos Lifelink water solutions you can provide end-users with a reliable water supply and benefit from technology that delivers effective revenue collection, cost efficient operations and remote monitoring for full transparency and accountability. Together with professional service backup, this is the bedrock of a solution with long-term operational sustainability.

Grundfos Lifelink water solutions can adapt to small or large water schemes and build on the well-proven and vast range of Grundfos water solution pumps and systems. Whether in rural or urban settings Grundfos Lifelink technology supports efficient water service operations for water service companies, NGOs and community-based associations.

**STAND-ALONE WATER KIOSK – URBAN**

The cost-efficient solution enabling expansion of water supply in urban and peri-urban communities. The water dispenser is connected to a water supply network, acting as a stand-alone automatic water kiosk.

**COMMUNAL WATER POINT WITH WATER SUPPLY – RURAL**

The total solution for sustainable water supply in off-grid rural areas supplied by groundwater or treated surface water. Powered by proven Grundfos solar driven pumps.

**MINIGRID OF WATER POINTS WITH WATER SUPPLY – RURAL/URBAN**

The reliable and cost-efficient solution for water supply networks in rural and urban areas not connected to the main water grid. Solar driven Grundfos pumps provide water supply from groundwater or treated surface water.
A HOLISTIC APPROACH, DELIVERING 4 DIMENSIONS OF SUSTAINABILITY

Through a holistic approach taking into account the entire value chain of water supply for the developing world, Grundfos Lifelink water solutions can deliver four dimensions of sustainability for long-term, reliable water supply.

In this holistic model we also incorporate partnerships and knowledge sharing with you, our customer and partner. We engage with you on developing the best business model for your project and we collaborate with you across sectors for the most sustainable and scalable solutions.

With this comprehensive approach Grundfos Lifelink water solutions can provide four dimensions of sustainability for reliable long-term water supply:

- **TECHNICAL SUSTAINABILITY** through remote monitoring and professional service and support
- **FINANCIAL SUSTAINABILITY** through effective revenue collection and transparent revenue management
- **ENVIRONMENTAL SUSTAINABILITY** through the use of renewable energy and improved water management
- **SOCIAL SUSTAINABILITY** through reliable access to safe water – the foundation of good living standards and the key to socio-economic development

This approach to water supply provides our customers with a new level of reliability. Grundfos Lifelink water solutions combine innovation in pump technology, revenue collection and water management with a network of professional Grundfos service partners, ready to support your operational needs as they arise.
WATER SUPPLY PUMPS

Drawing from the vast range of high quality Grundfos pumps, we can provide the right solution for your project, whether a submersible or surface water pump. For example, the SQ Flex and CR Flex pumps, which are designed for both renewable and traditional energy sources. Additionally, Grundfos pumps are compact, reliable and easy to install and operate.

SOLAR PANELS

Powering the pumps through renewable solar energy creates the most sustainable and environmentally friendly pumping system available. Grundfos delivers high-quality solar panels to power the renewable energy pumps and a solar power inverter for conventional pumps that expands the reach and capacity of a solar-driven pump solution.

WATER DISPENSER

The water dispenser is designed with a simple and intuitive user interface and dispenses water precisely and with minimum wastage. The integrated system for revenue collection can ensure an automatic and transparent collection of user fees.

ADVANCED REVENUE COLLECTION SYSTEM

The unique revenue collection system is a tool to ensure closed and transparent revenue collection and is designed for integration with mobile credit platforms or with local water credit vendors. Credit can easily be loaded onto the end-user’s water card and automatically deducted when tapping water.

WATER MANAGEMENT

The online water management platform gives you a clear overview of your water points, enabling remote access to the system and user data, as well as streamlining the service and maintenance process. The system provides full accountability and easy reporting on data and performance.

REDEFINING TECHNOLOGY FOR SUSTAINABLE WATER

As a pioneer in innovative pump technology, Grundfos delivers high-quality and intelligent water solutions, leveraging the strength of mobile connectivity to deliver optimal control and reliability. Grundfos Lifelink water solutions are designed specifically for the needs of customers in the developing world.

Grundfos Lifelink water solutions rise to the challenge of effective daily operation and low life-cycle costs. The water dispenser is the foundation of each Lifelink solution and has an integrated revenue management system enabling financial transparency and efficient revenue collection. End-users can easily load credit onto water cards either through local water credit vendors or via mobile credit platforms, both ways enabling fair and transparent transactions.

Through the online water management platform, water service operators can easily monitor the performance of each water point in terms of water consumption, credit transactions, technical performance, and service needs. The comprehensive product portfolio includes pump solutions at the cutting edge of the industry and enables Grundfos to deliver a customized solution according to your specific needs.
Service and support is crucial to long-term sustainability of water supply. Effective revenue collection creates a stable flow of revenue to cover operation and maintenance costs. Local service partners ensure you get professional service and support, backed by the efficient and global Grundfos supply chain.

For long-term sustainability we make sure you have access to the right service and support from local professional service partners with the right spare parts in stock. With the revenue stream from your water points you can finance service and maintenance. The online water management platform provides remote monitoring of each water point. In case of any failure, locating the problem is simple and the service team can deal with it quickly and efficiently.

Multiple options of service and support are available, suitable for water service companies, NGOs and community-based associations. Our service partners can offer you a service contract backed up by Grundfos and based on your project design and needs. If you have a preference for service by your own service team, we can also offer comprehensive training. Grundfos and our service partners will be behind you all the way with necessary backup support and an efficient supply of spare parts.

This tailored approach to service and support ensures that each solution is linked to sustainability and a successful, long-term outcome for the people you serve.
BUSINESS MODEL KNOW-HOW FOR SUSTAINABLE OPERATIONS

The Grundfos Lifelink solution addresses the crucial dimension of financial viability in water supply, making possible a range of business models for financing of operations and even recovery of investment costs. We engage with our customers in designing and facilitating the right business models that fit your project’s needs.

To create a successful business model that ultimately provides sustainability in water supply, it is important to pay attention to every step in the value chain. The Grundfos Lifelink solution solves the missing link by enabling a continuous revenue stream to cover service and maintenance. Furthermore, it enables efficient monitoring and operations of even a large number of water points. Therefore, the Grundfos Lifelink solution opens up new opportunities for our customers to organise their water service delivery and create viable business models for water supply across rural and urban areas.

The parameters for designing the business model include:
- The source of funding and financing
- The project model and technology design
- The population base of the water project
- The organisational set-up for operation and management
- The choice of service and support.

Based on our extensive know-how and experience we engage in knowledge sharing and facilitation of the right business model together with our customers and partners.

CASE: GRUNDFOS LIFELINK DEMONSTRATION PROJECTS IN KENYA

Since 2009, Grundfos Lifelink demonstration Projects in Kenya have proved that water consumption can finance professional service and maintenance of the water solutions. In this proven case, a portfolio of forty water projects across rural and urban areas provide water every day to nearly 100,000 people.

Overall financial and technical sustainability is achieved by operating a larger portfolio of water projects. The high-yielding water projects in urban areas contribute to the ongoing operation of water projects in rural areas. By thinking bigger and linking across the rural and urban divide, this ground-breaking approach creates a new business model. The communities are relieved of the continuous struggle of managing and maintaining their water supply, and the water service operator – in this case the Grundfos organisation – is able to make a viable operational model where water consumption finances professional service and maintenance. These communities have experienced a significant improvement in living conditions due to the reliable supply of water.

“The Lifelink system makes it easy to get water and water-borne diseases have gone down significantly. Also, people are starting to grow vegetables and distribute water to nearby communities because they know the water will be there tomorrow,” explains Peter Muryansa, Assistant Chief in Musingini, Kenya.

DESIGNING A HOLISTIC BUSINESS MODEL

1. FUNDING & FINANCING
   - Identify options and partners for funding and financing of projects

2. PROJECT MODEL & TECHNOLOGY
   - Design the right project model and technology solution based on local context and project needs

3. WATER CONSUMPTION & REVENUE
   - Population base and water consumption is key to estimate the expected revenue flows and designing the right business model

4. OPERATION & MANAGEMENT
   - Organisational set-up for owning and operating the water points, including financial management and water-user support

5. TECHNICAL SERVICE & SUPPORT
   - Choice of service and support model, either own service team or contract with professional service partner

SUSTAINABILITY IN 4 DIMENSIONS

ENVIRONMENTAL

TECHNICAL

FINANCIAL

SOCIAL
Grundfos Lifelink water solutions go beyond products, services and know-how. Sustainable and scalable solutions for water supply that changes lives can only be achieved through long-standing partnerships across sectors.

Grundfos Lifelink is committed to working in cross-sector partnerships with governments, water service companies, development sector organisations and the private sector. As a global company, our reach and experience creates value at both local and global level.

By linking a diverse network of trusted partners we facilitate the right solution for every water supply situation. Whether it’s enabling funding, advising on feasible business models or finding suitable partners for each project, Grundfos Lifelink aims to take sustainable water solutions in the developing world to the next level. Entering into partnerships is not only a pledge to the future of sustainable water but also a value-adding proposition for your water service delivery.

**WORLD BUSINESS & DEVELOPMENT AWARDS**

At the Rio+20 Sustainability Conference in 2012, Grundfos Lifelink was honoured with the World Business & Development Award organised by UNDP and partners. This award recognises innovative and sustainable solutions from businesses, which help transform people’s lives and contribute to boosting sustainable growth and development.

CASE: CROSS-SECTOR PARTNERSHIP IN UGANDA

The Ministry of Water and Environment in Uganda is piloting the Grundfos Lifelink technology in four water supply projects in rural and peri-urban communities. The project results will determine the suitability of the Grundfos Lifelink solution to be included in future investments by the Ugandan water sector. The pilot project is realised with funding from the Royal Danish Embassy in Kampala and is implemented in collaboration between Grundfos and the NGO, Water Missions International, who will be the local partner responsible for the operation and maintenance of the projects with support from Grundfos.

“The Grundfos Lifelink technology is being considered as an innovative concept with a potential to address some of the major challenges regarding sustainable delivery of clean and safe drinking water supply to small towns and rural growth centres”, states Mr. David O. O. Obong, Permanent Secretary, Ministry of Water and Environment, Uganda.
For more information

www.grundfos.com/lifelink