2.1 billion people lack access to consistently safe drinking water.¹

**THE OPPORTUNITY**

Digital finance enables water and sanitation providers to serve low-income households, while also supporting the sustainable expansion of utility networks.

**CHALLENGES**

- In many countries, water providers who rely on cash struggle to serve rural customers because *metering, billing, and payment collections are slow, costly, and insecure*.²
- Utilities in many countries barely cover their costs: The ratio of revenue to operating expenses in 2014 was just 1.09 in low-income countries compared to 1.42 in high-income countries.⁴
- People in some emerging economies face *prohibitively high costs* to access basic sanitation or safe water in their homes. Upfront costs can often equal the monthly income of poorer households.⁶

**SOLUTIONS**

- Using digital channels for metering, billing, and collections *lowers operating expenses*, *secures cash flows*, and enables providers to expand *safe water* access to rural customers.³
- Pay-as-you-go water ATMs and smart meters can help utilities to *reduce late payments*, *reduce water use that is not paid for*, and *sustainably expand access*.⁵
- Micro-loans and *layaway products* can help bring safe, *sustainable services* within reach for low-income households. Digital wallets can make it easier to save and pay for water and sanitation upgrades, ultimately saving lives.⁷
“Ensure availability and sustainable management of water and sanitation for all.”

**GHANA**  By introducing digital payments and prepaid smart meters, Safe Water Network more than doubled its per-liter payment collection rate between 2016 and 2017, helping the company sustainably expand access to safe drinking water.⁸

**KENYA**  Digital billing and payment services developed by software company Wonderkid helped a Kenyan water utility to increase its revenue collected by 28% in 18 months.⁹

**TANZANIA**  A water payment’s digitization project resulted in tripling water utility payments and reducing water collection waiting time from 3 hours to 10 minutes on average within a year, benefiting women in particular.¹⁰,¹¹,¹²

**BANGLADESH**  The national government and the World Bank have partnered to support micro-financed installation of hygienic toilets, leveraging mobile money for loan repayments. 16,500 toilets were installed in 2017, with a long-term goal to reach 170,000.¹³

* These represent only a few of the many important challenges and solutions. They should not be read as an exhaustive list.