flowless

Flowless Impact Report 2024

Partnerships, Technology, & Impact

Joining forces for community-inspired innovations and long-lasting impact

CONTENT

Greenhouse farms in Amman, Jordan, set against a backdrop of sun baked hills & terrain

Overview

Salfeet Municipality in Palestine during a field visit.

Flowless' Impact Journey: Meaningful Collaboration, Measurable Change

The past year wasn't as smooth or prosperous as we'd planned. Yet, despite the challenges, we at Flowless were able to continue our impact journey, empowering people working in water management & farmers to generate impact & enjoy their work.

Throughout 2024, we continued to work our way towards our vision "To build communities resilience through sustainable resources management", pouring our hearts and soul into it.

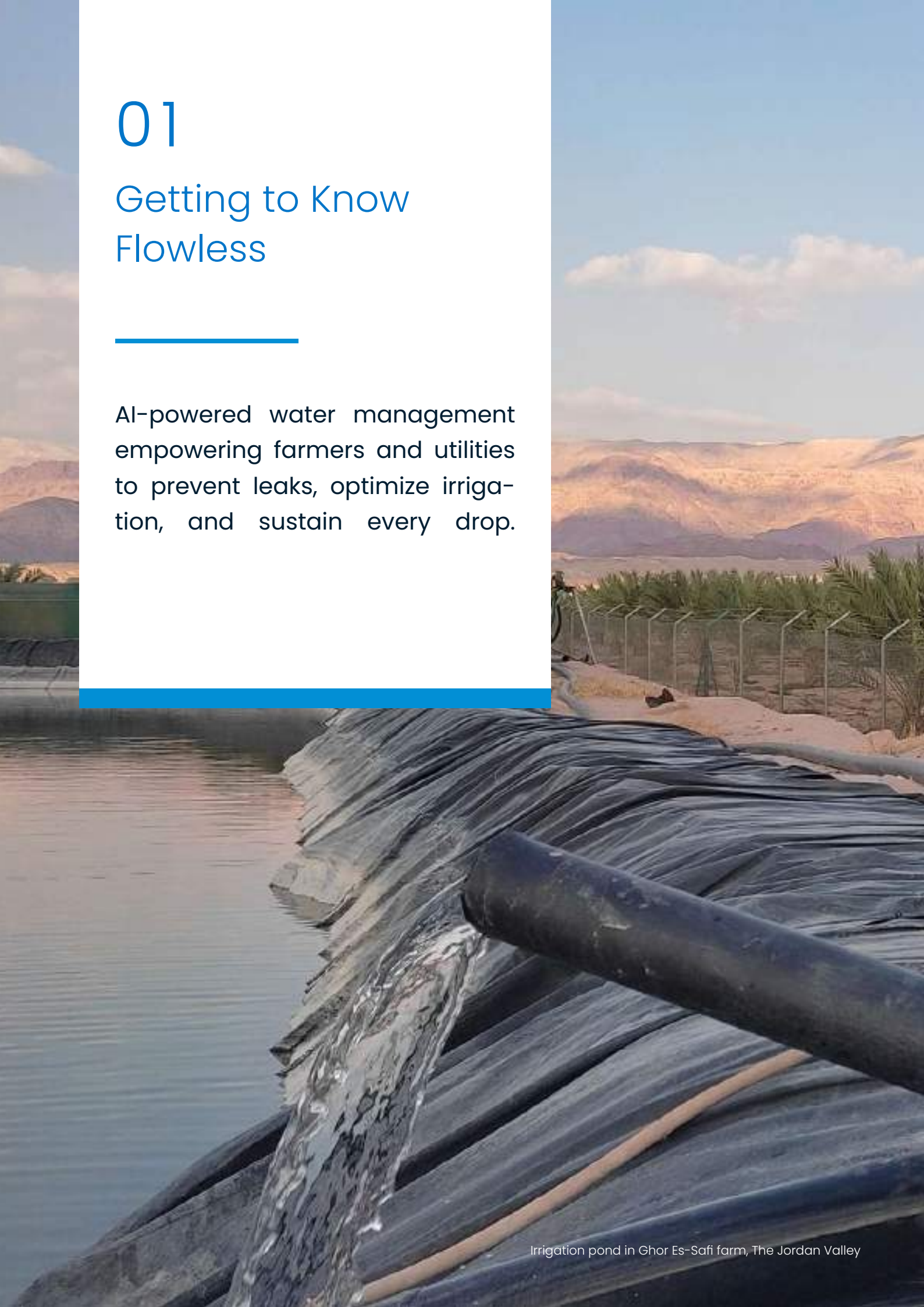
By combining innovative tech solutions with impact-driven partnerships, we were able to expand our impact above and beyond. Helping water utilities & farmers save water, reduce energy consumption, lowering carbon emissions, & boost their productivity and profitability.

This report unfolds the story of our passion, innovation, and collaborative spirit. Now, the story is yours to explore.

01

Getting to Know Flowless

AI-powered water management empowering farmers and utilities to prevent leaks, optimize irrigation, and sustain every drop.



Irrigation pond in Ghor Es-Safi farm, The Jordan Valley

Flowless: Where Technology Serves Resilience

Brief Overview

Technology is worth nothing unless it solves a real problem.

At Flowless, our purpose goes beyond technology, we focus on solving one of the most pressing issues of our time: water scarcity. Through empowerment, innovation, and collaboration, we aim to create sustainable solutions that ensure a reliable water supply for all.

Our journey begins with listening. By engaging closely with water utilities and farmers, we uncover the challenges they face every day. These insights are the foundation of our innovation, shaping solutions that are advanced, practical, and accessible.

We believe that true innovation is rooted in understanding the needs of those we serve. When our technology is put to work, the results are nothing short of amazing. Water loss is reduced, energy consumption is optimized, and costs are lowered.

These changes empower individuals and organizations to manage resources sustainably, creating a ripple effect that extends to entire communities.

Our approach focuses on creating systems that grow and adapt alongside the needs of the people who depend on them.

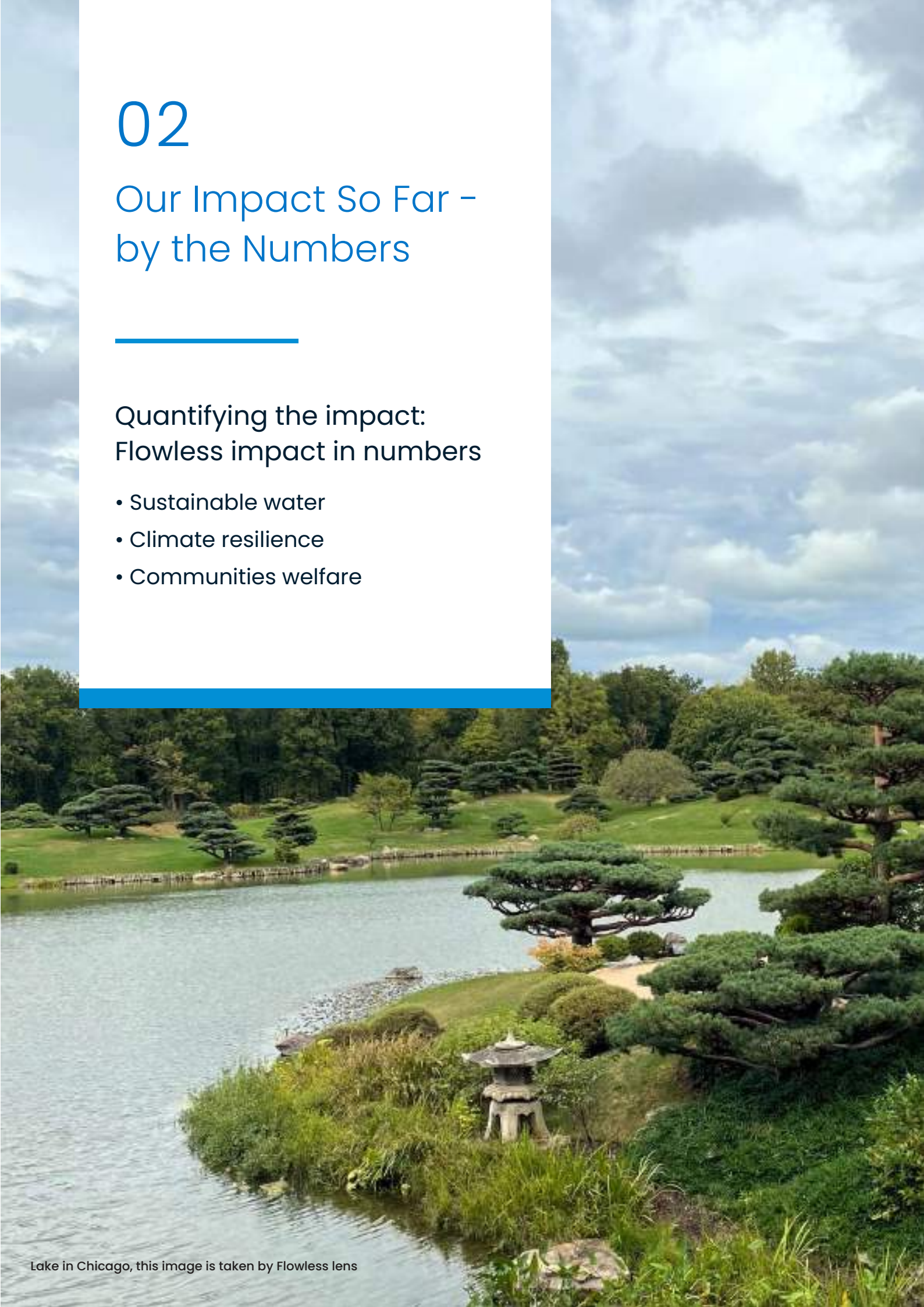
Near Hebron's sun-kissed hills; Flowless team & World Waternet during a field visit in Hebron, Palestine.

02

Our Impact So Far – by the Numbers

Quantifying the impact: Flowless impact in numbers

- Sustainable water
- Climate resilience
- Communities welfare



Lake in Chicago, this image is taken by Flowless lens

Impact Figures

Agricultural greenhouses growing cucumbers on the outskirts of Amman, Jordan.

WATER SAVINGS

652,000 m^3

Water saved by proactively detecting leaks & minimizing waste in supply networks — enough to meet the annual needs of 4,061 UK households.

ENERGY SAVINGS

220,600 kWh

Energy saved through improved pump efficiency in water networks and farms, equivalent to powering 54 UK homes annually.

JOB CREATION

$33,000 USD

Annual income generated by generating job opportunities in the agriculture & tech sectors, securing stable livelihoods and advancing community prosperity.

CLIMATE RESILIENCE

112.99 ton CO_2

Emissions reduction by reducing leaks and automating daily operations in farms & water networks. This is equivalent to planting 1,880 trees.

A closer look at how we generate our impact

A water network operator monitoring real-time water consumption metrics via the Flowless Telegram Channel.

WATER SAVINGS: WHERE THE STORY BEGINS!

Each drop counts, so we track each drop, trying to save as much as we can. Throughout our work with water utilities and farmers, we support them in quantifying water losses in their systems. Then, we equip them with the right tools to find leaks, automate operations, and cut-down losses, ultimately saving water that would otherwise be wasted.

Ain Samia, Palestine: freshwater flows steadily from a natural spring, cutting through rocky terrain

ENERGY SAVINGS

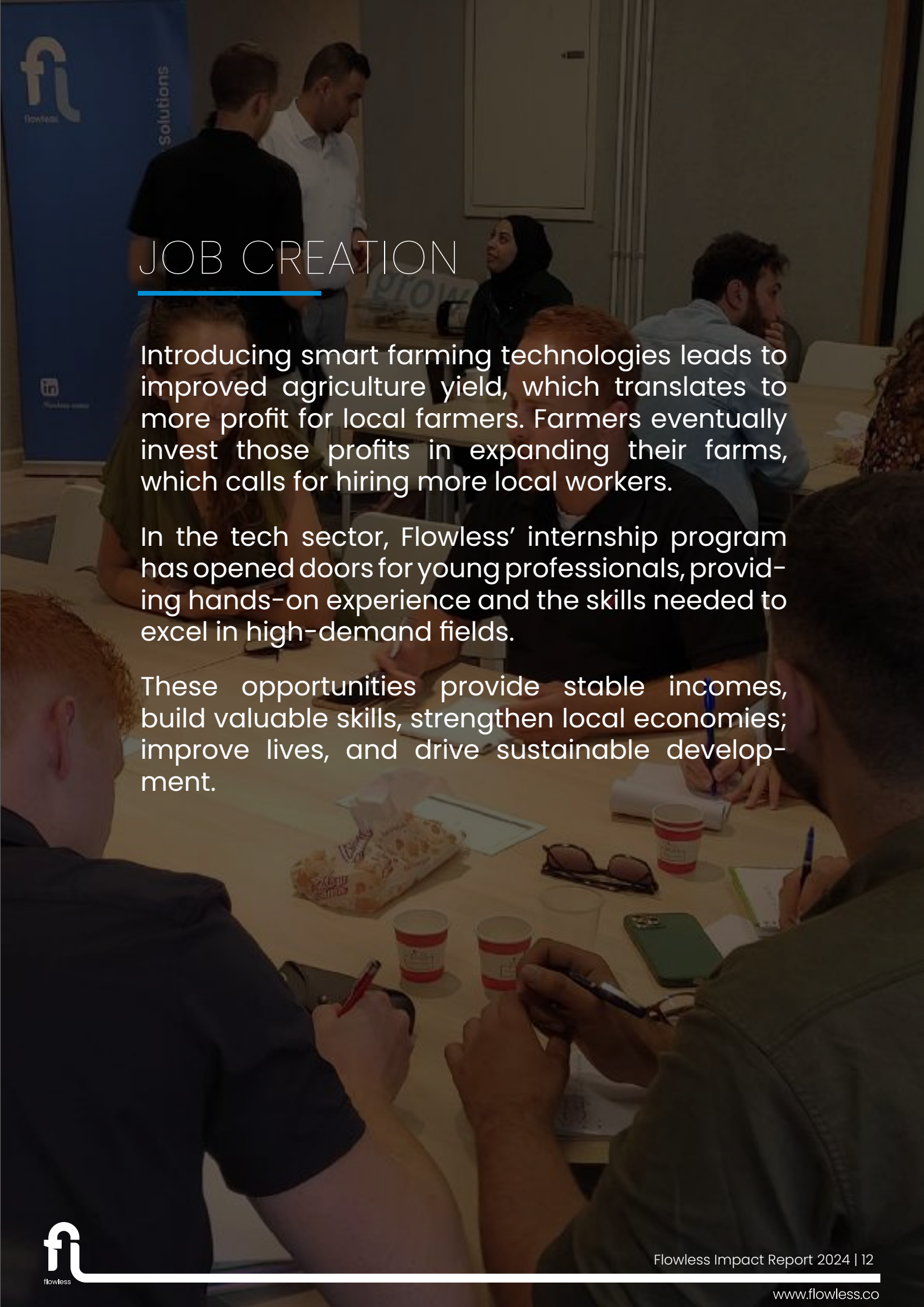
Energy is used to extract, treat, and distribute water. Higher water loss calls for more water production, which needs even more energy. What if we can conserve this energy by cutting down losses? This is exactly what we do in Flowless!

Then we take it one step further through control automation. Optimizing operations like irrigation and water pumping saves more energy by reducing runtime of pumps.

CLIMATE RESILIENCE

It's a chain! Reducing energy consumption directly leads to fewer greenhouse gas emissions. As energy use drops down, we're conserving resources and taking meaningful steps to combat climate change, improve air quality, and protect ecosystems.

For example, cutting 1,000 kg of CO2 emissions is like removing the carbon footprint of driving a car around the world twice.



JOB CREATION

Introducing smart farming technologies leads to improved agriculture yield, which translates to more profit for local farmers. Farmers eventually invest those profits in expanding their farms, which calls for hiring more local workers.

In the tech sector, Flowless' internship program has opened doors for young professionals, providing hands-on experience and the skills needed to excel in high-demand fields.

These opportunities provide stable incomes, build valuable skills, strengthen local economies; improve lives, and drive sustainable development.

Driving impact through tech innovation

Environmental Impact

Every great impact story starts with a single step, & ours begins with saving water. By focusing on reducing water loss, we unlock a chain reaction of benefits that ripple through every aspect of environmental sustainability.

For water utilities it all starts with addressing water losses. By detecting water leaks as soon as they occur & fixing them, utilities save millions of liters of water monthly. This step sets the stage for even greater outcomes.

When less water is wasted, pumps runtime is reduced. This efficiency helps utilities to use consume energy & cut down operational costs. But the impact doesn't stop there. Less energy consumption leads to fewer greenhouse gas emissions, helping utilities lower their carbon footprint & contribute to climate change mitigation.

For farmers, the story is just as compelling. By adopting precision irrigation & smarter farming techniques, farmers are able to reduce water consumption dramatically.

And there's another layer of impact: with optimized water usage, farmers can apply just the right amount of fertilizers to their crops, leading to reduced operational costs, increased crops productivity, and improved profitability.

Less waste, better life: where water conservation meets cleaner skies & healthier harvest

Economic Feasibility

Every farmer & water network operator knows the struggle: rising costs, decreasing resources, & financial losses that seem impossible to avoid.

During 2024, we set out to change that story, offering a way to cope & thrive.

For utilities, the costs saving journey began with fixing leaks, every drop saved reflected reclaimed revenue.

Automation = higher efficiency: pumps ran smarter, not harder, slashing energy bills. Data-driven decisions prioritized high-impact investments, ensuring every dollar maximized returns.

Farmers, too, found smarter ways to run their farms. Precision irrigation cut water loss and fertilizer use, lowering costs while keeping crops healthy.

Less waste means more money, showing that protecting the planet and growing profits can indeed go hand in hand.

Fixing leaks, fueling profits: saving water boosts revenues for utilities & farmers

Social Impact

For most people, the measure of a good water system is simple, turn on the tap, and water flows. But behind that steady stream lies a much bigger story. It's about the people, the tools, and the actions working tirelessly to keep water flowing.

In 2024, we set out to prove that communities could be at the heart of lasting change. *For water utilities,* the impact was clear. With tools to detect and reduce losses, they saved water and ensured it reached those who needed it most.

The impact goes beyond pipelines. Our support helps *farmers* improve their social status and well-being—reducing stress, fostering financial security, and enhancing livelihoods. By boosting productivity and cutting costs, we empower farmers to achieve stability, uplifting entire families and communities.

During 2024, our interventions led to the creation of 20 new jobs, directly contributing to local economies. These weren't just numbers on a chart—they were real opportunities for individuals to earn stable incomes, & support their families.

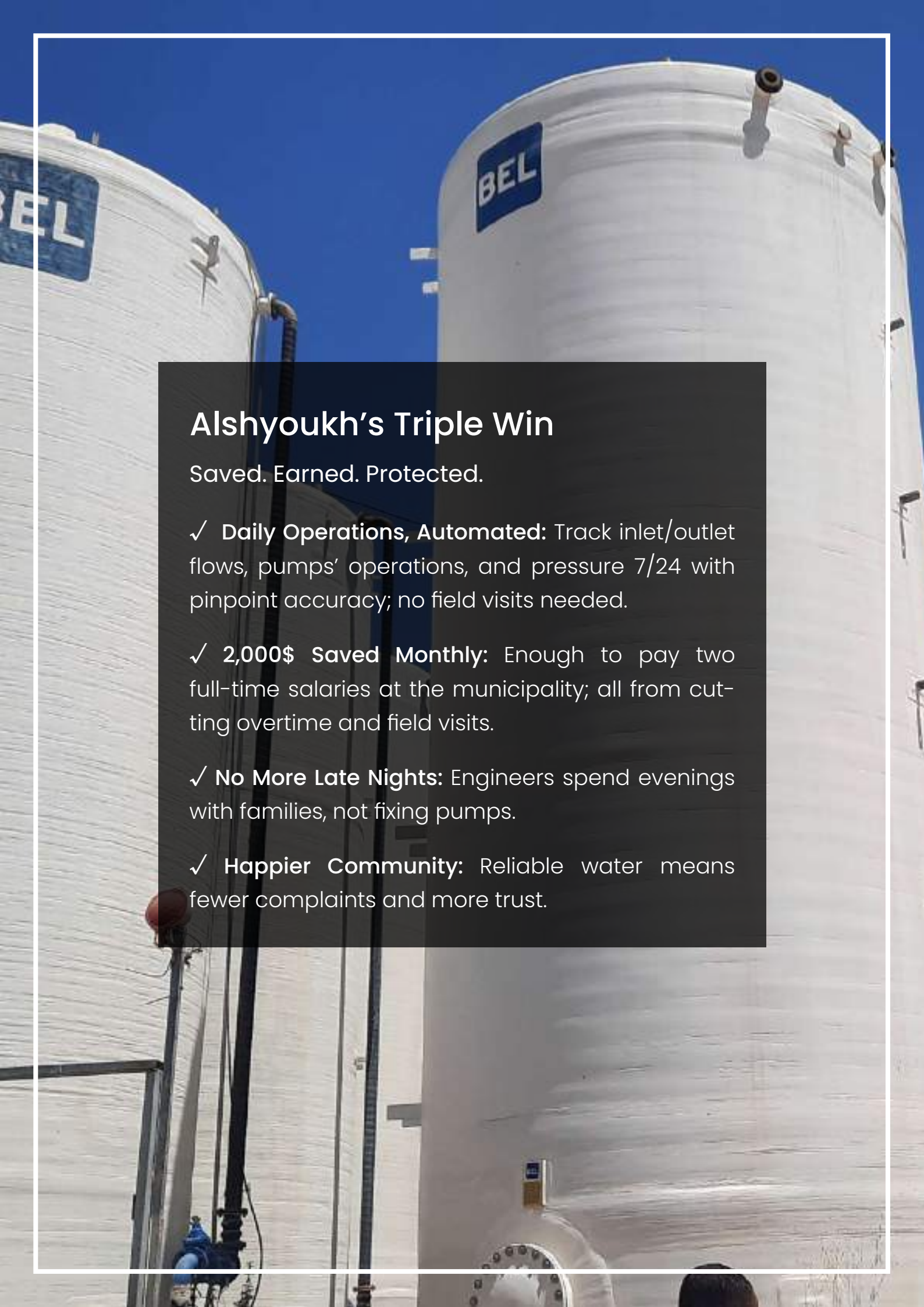
We're addressing today's needs paving the way for a future where communities are better equipped to adapt, grow, and thrive. It's a ripple effect, one drop of effort leads to waves of transformation.

Flowless Impact Model

03

Impact Stories: Spotlight on Our Impact Heroes

Shedding lights on our impact heroes, and showcasing examples of a water utilities making huge impact by utilizing Flowless' tech solutions.



Alshyoukh's Triple Win

Saved. Earned. Protected.

✓ **Daily Operations, Automated:** Track inlet/outlet flows, pumps' operations, and pressure 7/24 with pinpoint accuracy; no field visits needed.

✓ **2,000$ Saved Monthly:** Enough to pay two full-time salaries at the municipality; all from cutting overtime and field visits.

✓ **No More Late Nights:** Engineers spend evenings with families, not fixing pumps.

✓ **Happier Community:** Reliable water means fewer complaints and more trust.

Alshyoukh Municipality

From Chaos to Order: Alshyoukh Tames Operations Mayhem With Smart Automation

Water network operators don't have time for complexity. At Alshyoukh Municipality, they struggled with uncertainty and manual operations. "We're experts in water, not tech" they said. But outdated tools drained their time & resources.

Fadi Ayaydeh, the director, was looking for "A tool as simple as Google search, with actionable insights & clear visualization". No more guessing. No more spreadsheets. Just answers.

When we introduced Flowless Octopo, it was as if we had handed them their dream solution. *The simplicity, clarity, and ease of use was on the spot.*

After implementing Flowless system; they no longer need to visit the field to manually operate pumps. Instead, their water system is now fully automated.

Using his mobile phone, Fadi can monitor tank levels, track water consumption, & quantify non-revenue water (NRW). It extends to monitor team performance & optimize workflows.

“Everything changed after we automated our water system, . We monitor pumps in real-time. No more guesswork. Practical insights are at our fingertips, and we can’t imagine going back to manual work.”

Fadi Ayaydeh
Director, Alshyoukh Municipality

GoSoft

Flowless & GoSoft Join forces Building Trust Through Accurate Data

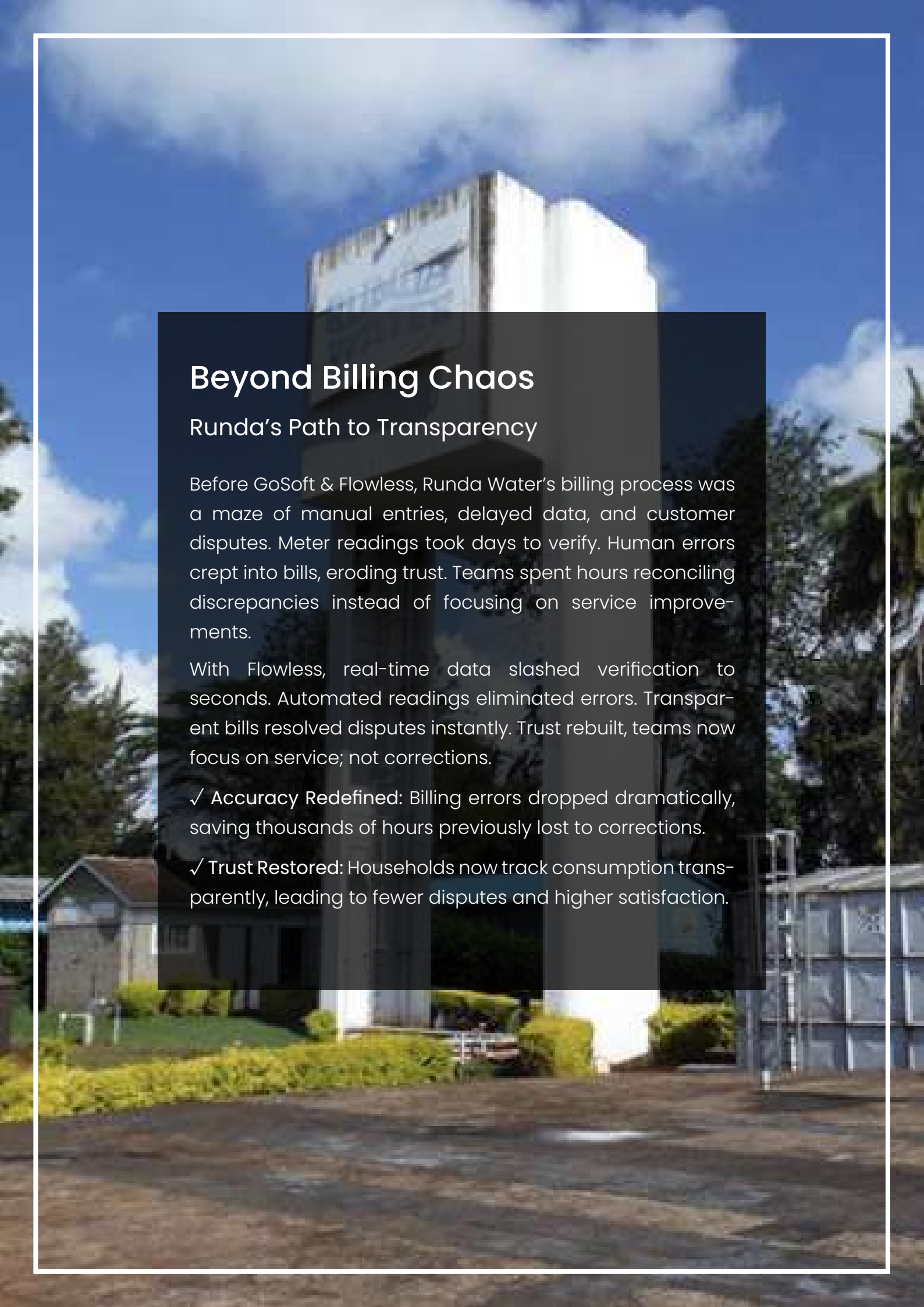
In Kenya's water sector, distrust between utilities and communities ran as deep as the cracks in aging pipelines. For years, utilities grappled with inefficiencies: meter readers spent 10-15 days each month trekking to remote areas to read meters physically, burst pipes leaked went undetected for weeks, & billing disputes eroded public confidence.

Communities, meanwhile, faced irregular supply & skepticism about their water bills. "People felt powerless," explains Christine Tantuo, GoSoft Co-Founder & CEO. "They paid bills they couldn't verify, drank from unsafe sources, and saw utilities as distant entities not partners."

Partnering with Flowless, we introduced a smart billing solution. Utilities transitioned from reactive guesswork to proactive problem-solving:

• **Operational costs** dropped by over 10,000$ per month for some water utilities through auto collection of meter readings.

• **Accuracy replaced ambiguity:** eliminating consumption disputes due to inaccurate billings



Beyond Billing Chaos

Runda's Path to Transparency

Before GoSoft & Flowless, Runda Water's billing process was a maze of manual entries, delayed data, and customer disputes. Meter readings took days to verify. Human errors crept into bills, eroding trust. Teams spent hours reconciling discrepancies instead of focusing on service improvements.

With Flowless, real-time data slashed verification to seconds. Automated readings eliminated errors. Transparent bills resolved disputes instantly. Trust rebuilt, teams now focus on service; not corrections.

✓ **Accuracy Redefined:** Billing errors dropped dramatically, saving thousands of hours previously lost to corrections.

✓ **Trust Restored:** Households now track consumption transparently, leading to fewer disputes and higher satisfaction.

By streamlining billing with GoSoft, Runda Water reduced Non-Reveue-Water (NRW) & extended its services to 8 public water points without any increase in water production.

Many people use this piped treated water, including school children, taxi drivers, athletes, & workers. ***"I used to pay KES50 per day for water but now I am able to save this and use it to buy food for my family instead because I can drink water from the water point"***

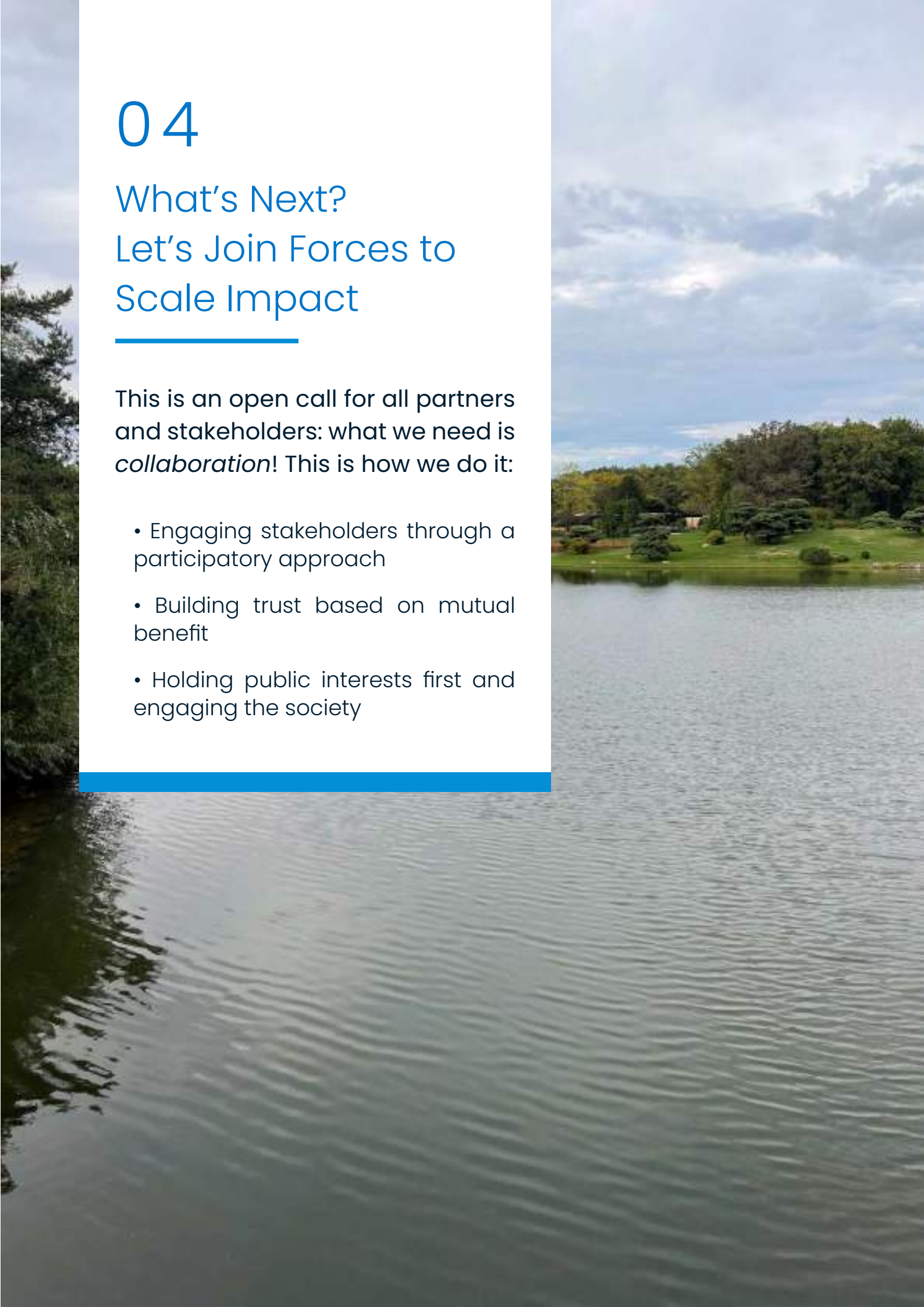
Community member
in Nairobi, Kenya

04

What's Next? Let's Join Forces to Scale Impact

This is an open call for all partners and stakeholders: what we need is *collaboration*! This is how we do it:

- Engaging stakeholders through a participatory approach
- Building trust based on mutual benefit
- Holding public interests first and engaging the society



Linking to SDG's

Eliminating waste with automated leak prevention and precision irrigation for exact water and nutrient use.

Driving inclusive growth by lowering utility costs, boosting farm yields, and creating tech-driven jobs.

Reducing carbon emissions by optimizing pumps and irrigation to slash energy waste & cut down emissions.

Ensuring safe water access through smart leak detection & real-time monitoring tools that sustain clean supply.

Sustainable Water

Building Water Resilience: Smarter Systems, Stronger Communities

Water is a shared lifeline, but keeping it flowing sustainably takes innovation and teamwork. We partner with communities to turn scarcity into security, using smart technology and shared responsibility. Here's how we work differently:

• **Empowering local leaders:** we equip utilities with easy-to-use tech to track water use in real time, fix leaks quickly, & involve residents in conservation efforts.

• **Technology that learns & grows:** creating flexible tech solutions that grow with changing needs, backed by data to spot problems early & fix them faster.

• **Trust through openness:** open communication with farmers, families, & leaders to align priorities and ensure no one is left behind.

By balancing innovation with fairness, we're helping communities survive, thrive with reliable water today and a blueprint for tomorrow.

Resilient Agriculture

Bringing Sustainable Farming to Every Field: Climate-Proof Farming Practices

Traditional farming struggles with high costs, climate shocks, & shrinking profits. Yet smallholder farmers are finding ways to shift toward resource-efficient methods. The challenge? Turning these practices into everyday habits.

Here's what we've learned from those communities:

- **Strength in shared knowledge:** Farmer cooperatives and local mentors are bridging gaps. When neighbors share their experience on control automation or smart tech solutions, trust grows faster than top-down advice.
- **Start simple, grow steady:** Begin with low-cost steps. Early wins build confidence to adopt tools like soil moisture sensors or controllers later.
- **Breaking cost barriers:** Community savings groups and "pay-as-you-grow" models let farmers try tools without debt. Shared equipment spreads benefits further.

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Call To Action

Collaborate to boost water sustainability & support thriving communities

Every partnership at Flowless fuels smarter water and farming systems; tools that help communities thrive, not just survive.

With you, we:

- **Cut waste, boost resilience:** Modernize practices so people and ecosystems endure droughts, floods, and scarcity.
- **Turn 1 into 10 impact:** Invest in tech that slashes costs while raising yields and creating jobs.
- **Solve locally, scale globally:** Adapt solutions across the MENA region and beyond, ensuring no community gets left behind.

Your partnership bridges innovation and action, creating measurable change that lasts.

Let's ensure every community thrives; with water that flows, harvests that grow, and futures rooted in resilience.

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Partnerships Technology, Impact.

Join forces to generate positive impact for sustainable resources and resilient communities. Let's work together!

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