FIDO
PLUS

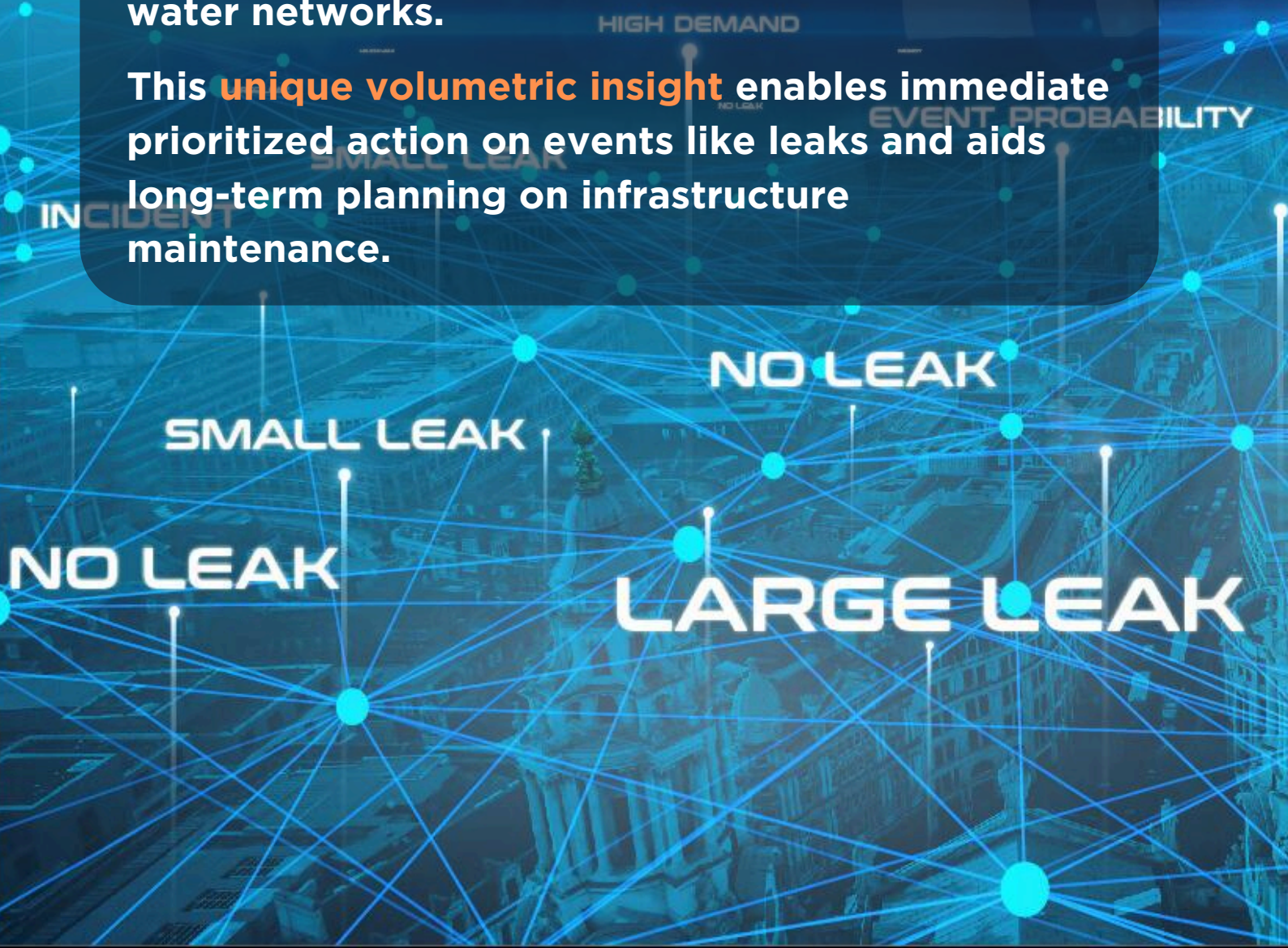Creating a world without water scarcity

AI . WATER . IMPACT.

About FIDO

FIDO Tech is a pioneering global software company based in the UK and the US.

Our innovative AI uses powerful volumetric analysis of vast curated water datasets to help humans make consistently better decisions about managing the world's most precious resource.

FIDO AI quantifies the real-time impact of physical, technological or human activities in water networks.

This **unique volumetric insight** enables immediate prioritized action on events like leaks and aids long-term planning on infrastructure maintenance.

FIDO Plus enables corporations with water stewardship goals to scale up their impact by funding the deployment of FIDO AI through commercial arrangements with local utilities in return for rapid local watershed replenishment.

Volumetric results are independently validated using the Alliance for Water Stewardship's volumetric water benefit accounting methodology and are reportable against environmental social and governance (ESG) or water risk targets.

FIDO Plus: Part of Microsoft's strategy...

...for being water positive

"We continue to drive innovation in water, through first-of-their kind replenishment projects like **FIDO, which leverages AI-enabled acoustic analysis to reduce water loss** from leakage."

...for accelerating progress with AI

"The projects use FIDO's AI-enabled acoustic leak analysis to identify and track leaks over a distance of 350 km within the networks. Once leaks are identified, the local water utilities will conduct repairs. Over a 10-year period, **FIDO plans to track volumetric benefits alongside other complementary benefits, including greenhouse gas reductions.**"

...for investing to accelerate progress

"Project supply is particularly low in high water stress basins where many companies have operations. In some regions, few to no pre-designed projects ready for investment and implementation are available. We are tackling this by **building supply and working to scale projects, like FIDO,** so they are available to others.

Microsoft

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This first-of-its-kind leak detection technology replenishment project in London with FIDO Tech will reduce water lost to leakage in London's aging distribution network, leveraging FIDO's AI-enabled acoustic leak analysis and is expected to save millions of cubic metres of water per year.

Melanie Nakagawa
Chief Sustainability Officer, Microsoft

Join a global movement

FIDO Plus builds long-term unconventional partnerships with utilities, corporations and civil society around the common goal of water equity

Demonstrable ESG performance

Immediate . Localized . Auditable . Transparent
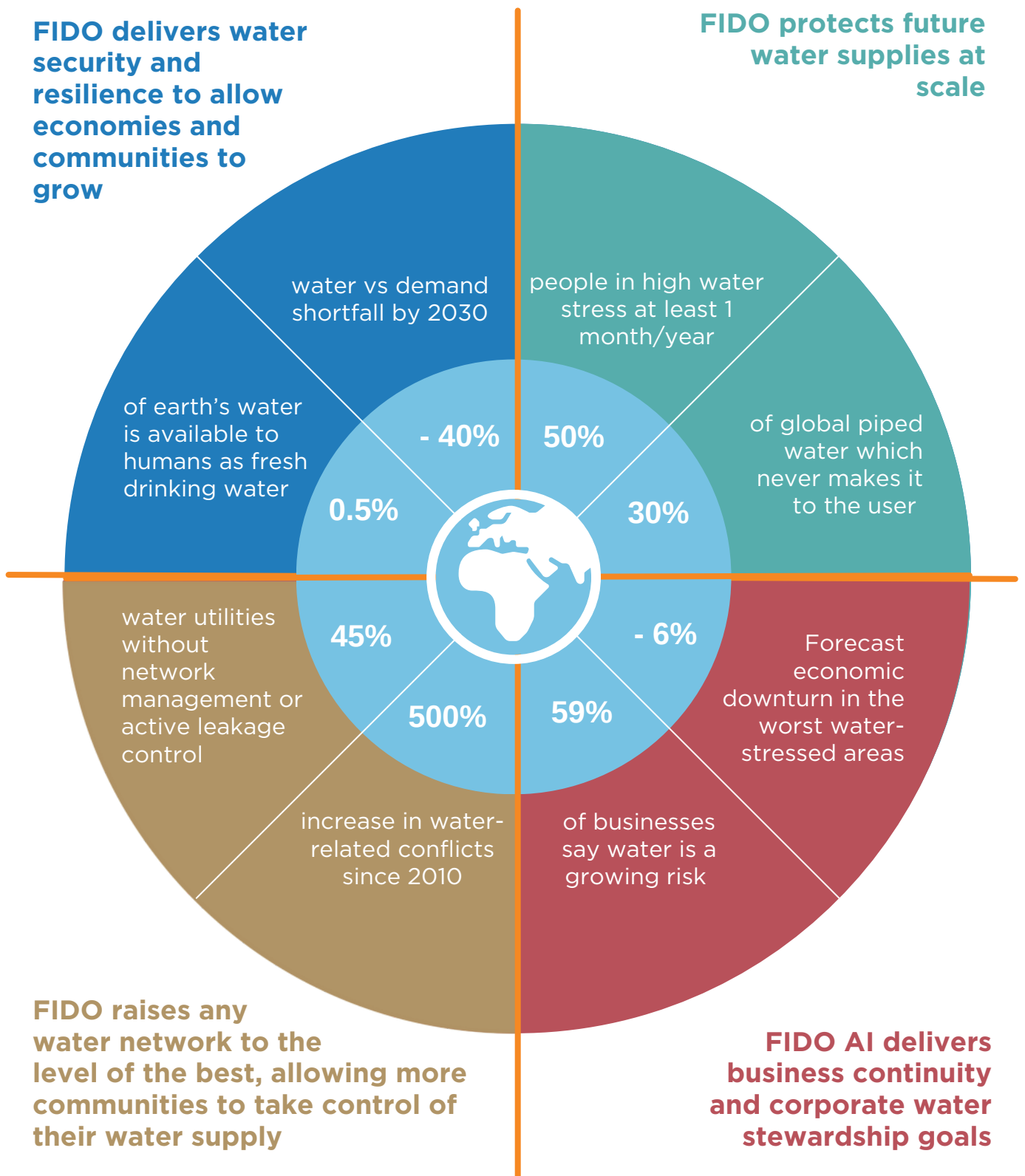
How FIDO Plus supports corporations

- **FIDO Plus' goal is to support corporates in reaching their water goals by deploying accurate actionable AI, strengthening local watersheds and improving community water access through collective action**

- **FIDO Plus delivers a healthier, more resilient watershed through prioritized leakage and non-revenue water (NRW) reduction and AI led prevention.**

- **FIDO Plus has a long-term perspective and continues to monitor the network to ensure leakage remains low and that any new leaks are immediately identified. Each leak is turned into a living asset and is tracked and reported to give exact auditable water volumetric savings.**

- **FIDO supported the creation of the volumetric water benefit accounting methodology which is used to measure and track FIDO AI's ability to detect and prevent water leaks. FIDO Plus reports use VWBA.**

- **FIDO Plus works towards SDG6 by delivering outcomes in those areas where water stress is at its highest.**
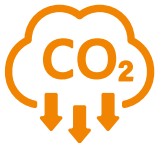
Why FIDO Plus?

FIDO delivers water security and resilience to allow economies and communities to grow

FIDO protects future water supplies at scale

water vs demand shortfall by 2030 — **- 40%**

people in high water stress at least 1 month/year — **50%**

of earth's water is available to humans as fresh drinking water — **0.5%**

of global piped water which never makes it to the user — **30%**

water utilities without network management or active leakage control — **45%**

Forecast economic downturn in the worst water-stressed areas — **- 6%**

increase in water-related conflicts since 2010 — **500%**

of businesses say water is a growing risk — **59%**

FIDO raises any water network to the level of the best, allowing more communities to take control of their water supply

FIDO AI delivers business continuity and corporate water stewardship goals

Water saved = carbon saved

Every litre of water saved by FIDO Plus reduces carbon emissions too, because that water no longer needs to be replaced in the system.

We work with the local utility to work out the carbon emitted per unit of water produced, including extraction, treatment and distribution. Then we calculate the carbon saved using our validated volumetric water savings.

Building institutional capacity

FIDO Plus increases knowledge capacity in water utilities through training and experience of advanced AI-led leak detection. We enable utilities to build strong business cases for soft loans to take forward FIDO AI on their networks for long term benefit.

Corporate risk and ESG reporting

Water features increasingly on corporate risk registers as a business critical resource and as a reputational marker for stakeholders, investors and consumers.

FIDO gathers baseline data on the local utility's non-revenue water as part of its pre-project discovery, and transparently tracks auditable quantifiable water replenishment performance against this benchmark using volumetric water benefit accounting - an international standard for water stewardship reporting.

Community engagement

FIDO encourages local stakeholder involvement in community water resilience. We can work with you to build an engagement programme to meet your goals.

How FIDO Plus works

FIDO Plus delivers the power of FIDO AI using our auditable, end-to-end process, #TheFIDOWay

#TheFIDOWay was designed with leakage experts to deliver transparent, verified results every time.

... with long-term contracts to secure and sustain the benefits

Improved institutional capacity

Sustained water resilience

Economic and business continuity

Environmental recovery

Community and cross-sector engagement

Benefits of proactive maintenance

Volumetric water benefit accounting (VWBA)

All leaks identified by FIDO AI are monitored for the duration of the project. This gives a granular auditable evidence chain which includes how each leak degrades over time, the time and effectiveness of the repair, the volume of water saved and the ongoing integrity of the local water network.
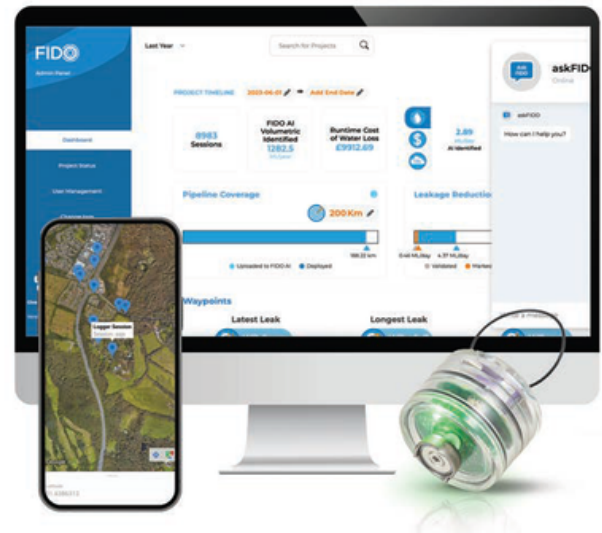
Transparency

FIDO Plus only counts water savings which can be directly attributed to our activity.

We do this by calculating the water loss baseline for the selected network and assessing how much leakage the utility already detects itself. We call the utility-found leakage the 'delta' level. Where no activity has taken place, the delta is zero.

Then, using data, from the utility, our own extensive global dataset and the delta level, we estimate how many leaks FIDO Plus will find per km of pipeline, as well as the likely water savings from fixing the largest.

Verification

Actual water saved is verified against measured changes in water flow post-repair, giving VWBA assurance and a confirmation feedback for the AI.
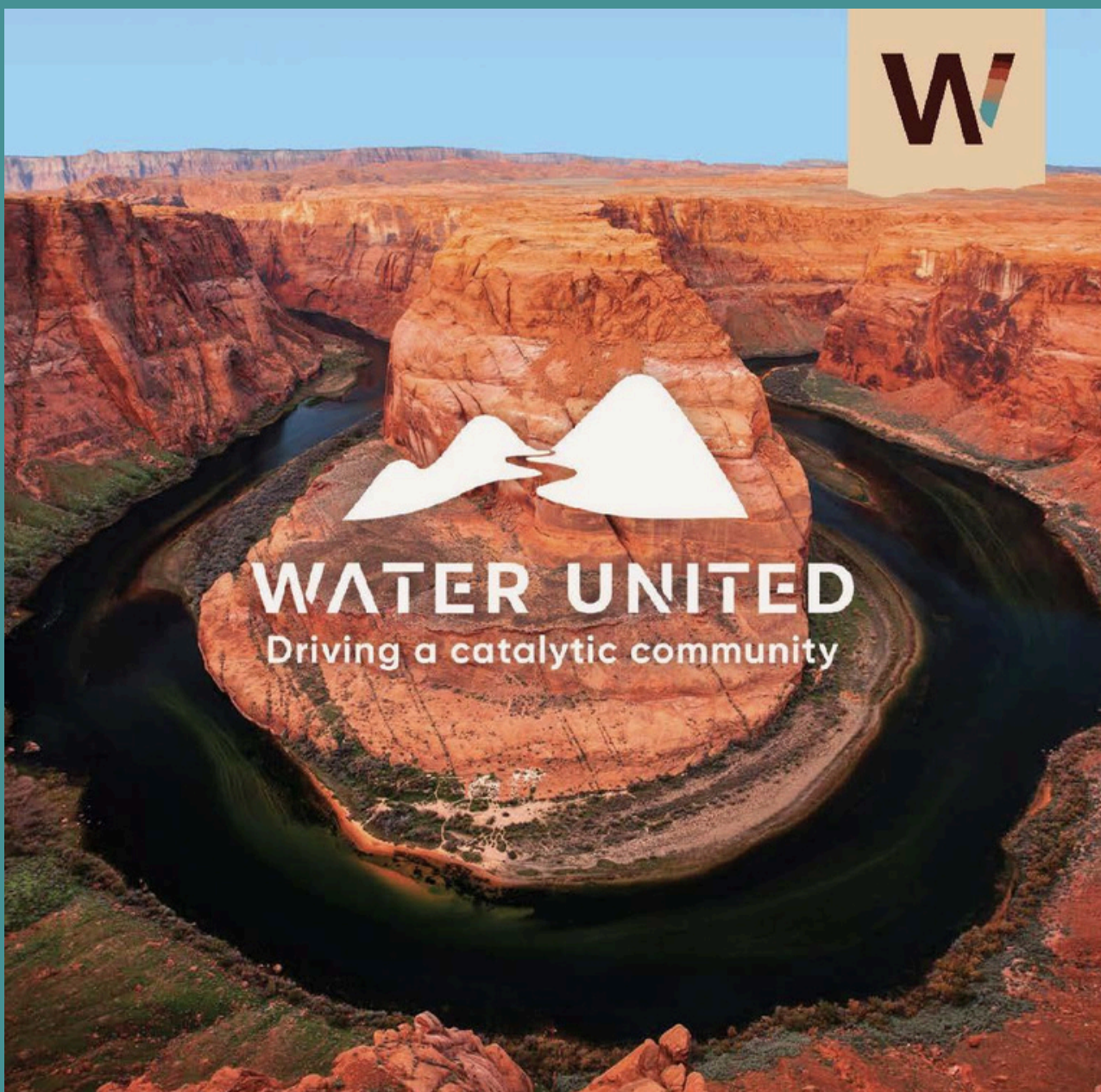

Capacity and resilience

FIDO AI monitors the network to ensure any repair work we instigate holds firm. Under VWBA, we can claim water savings for up to three years following the date of repair.

Continued monitoring by FIDO Plus gives utilities considerable AI verified data about network performance to help better use limited resource, improve maintenance regimes and inform long term investment decisions.

This helps deliver ongoing capacity and network resilience with all the consequent benefits for community water availability and affordability.

FIDO Plus in the Colorado River basin as part of Water United

A Catalytic Water Community

Join the world's top companies as a climate and water leader

Water United is a community which unites multiple public and private sector projects to accelerate coordinated water action at a river basin level.

Starting with tackling water scarcity by using FIDO Plus to find large hidden leaks and save millions of gallons of water, Water United aims to attract more stakeholders across technologies and sectors to work together catalytically and solve the Colorado watershed's crippling crisis.

Help build a lasting legacy

Every partner that shares data with FIDO AI improves our knowledge about the complex inter-relationships between human activities and water supplies.

As FIDO AI creates connections between datasets and sectors that were previously siloed, it will build out its AI model to deliver AI-led actions and informed decision making across the river basin for the long-term benefit of all.

Community engagement

FIDO Plus offers many opportunities for corporate and utility partners to engage meaningfully with communities and empower people to take an active role in their community's water provision.

From STEM education in schools and colleges, through widescale community involvement in water management, to helping achieve shared stakeholder understanding of complex watershed interactions using powerful AI-led visualisations, we are brimming with ideas.

We are actively seeking FIDO Plus partners to work with us to help bring mutual projects to fruition.

Water apprentices playing a FIDO hunt-the-leak game

Case study: Gamification of leak detection

We are working with a FIDO Plus partner to develop an innovative gamified approach to community water leak detection with social, economic and environmental benefits.

The game will let members of the public collect data from FIDO in-field sensors using their own smartphone in exchange for tradeable app rewards or community investment credits, while increasing utility capacity and rasing consumer awareness of water issues.

Artist interpretation. Not actual game screen image.

Document sources

0.5 of earth's water is available to humans as fresh drinking water	According to **National Geographic**, of all the water on Earth more than 99 percent is unusable by humans and many other living things.
40% shortfall in water availability to meet demand	According to the **Global Commission on the Economics of Water**'s report *Turning the Tide (2023)*, we face a 40% shortfall in freshwater supply by 2030, with severe shortages in water-constrained regions. See p10.
50% of people in high water stress at least 1 month a year	According to the **World Resources Institute** *Aqueduct Water Risk Atlas (2023)*, at least 50% of the world's population — c. 4 billion people — live under highly water-stressed conditions for at least one month of the year.
30% of global piped water which is non-revenue water	An **International Water Association** article, '*Quantifying the global non-revenue water problem*', by Liemberger & Wyatt (2019) calculated aggregate NRW as 30% of water system input volumes across the world.
6% reduction in GDP in world's most water stressed areas	The **World Bank** report *High and Dry (2016)* predicted that some regions could see growth rates decline by as much as 6 % of GDP by 2050 as a result of water-related losses in agriculture, health, income, and property. See p5.
500% increase in water-triggered conflicts in the last decade	According to the **Pacific Institute** *Water Conflict Chronology 2023*, in the 10 years since 2014 there have been 468 conflicts in which water was a trigger. For the 10 years prior to 2014, there were 92.
59% of leaders believe water poses a growing risk to their business	A 2022 **Ecolab-GreenBiz** survey of companies found that 59% of respondents, agreed that water is a growing business risk.
45% of water utilities without network management or ALC	Figure from FIDO experience of water utility leak detection programme maturity worldwide.

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