

**Sustainability is at the core of everything we do** — from our operations to the solutions we provide that impact communities worldwide. Setting high sustainability standards drives our growth and purpose: building a resilient company, advancing smarter water use, and empowering customers to solve global water challenges.

Water use and management account for about 10% of global GHG emissions. To address this, it is essential that the sector takes concrete actions to operate more sustainably.

Our 2023 Sustainability Report shows how we are concretely contributing to this goal. For time-constrained readers, the report has been summarized into five key areas of impact. Find out more about each of them.

- [1 Decarbonizing water: how we help](#)
- [2 Our products and innovation](#)
- [3 Our operations and supply chain](#)
- [4 Our people](#)
- [5 Our community impact](#)



More details on our product innovation and Xylem Innovation Labs can be found in our [2023 Sustainability Report](#).

# Decarbonizing Water: Today's technology for a carbon-free tomorrow



Water use and management accounts for roughly 10% of global GHG emissions, including the energy to move water, agriculture-related use, treatment, and many other areas in which water services are critical to our daily lives. Water and wastewater utility operations alone are estimated to contribute more than 2%.

## Leading the Way to Net Zero in Our Operations

Xylem supports its clients in reducing their carbon footprint by decarbonizing our operations and providing high-efficiency technologies to solve water management challenges with low operation emissions.

Our continuous efforts to decarbonize our impact in the water sector are seen across our operation and value chain. We are resubmitting our SBTi targets as a combined company, with validation of GHG reduction targets expected by 2025.

Operations:	Supply Chain:	Our Solutions:
78% of electricity came from renewable sources in 2023.*	>35% of legacy Xylem's global supplier base by spend had completed and submitted their CDP climate disclosures.	>100% of our goal to reduce water's carbon footprint has been achieved by enabling customers to mitigate over 3.95 M metric tons of CO2e since 2019.

\* Estimate from Global Water Intelligence

## Partnering with our customers

Xylem's transparency on our emissions and decarbonization roadmap provides partners with the information needed to inform their supply chain and GHG-related goals.

**Our product sustainability reports outline emissions from throughout the lifecycle of the product**, allowing customers to define embedded carbon in their product, account for environmental impact in their procurement process, and assess operational emissions of the installed solution.

The reductions in environmental impact that our solutions enable is our product's "handprint." More on handprint calculations and our product sustainability can be found in our [2022](#) and [2023](#) Sustainability Reports.



Sample of Xylem's Product Sustainability Report available on Xylem Technical Product Information pages – <https://tpi.xylem.com/>.

## Partnering to Decarbonize the Water Sector

The water sector and Water Utilities are primed to lead the global [Race to Zero](#). Xylem's customers' main sources of operational emissions can be mitigated with Xylem's deep expertise and solutions, including equipment, service maintenance, and holistic digital solutions.

Real-time decision-making optimizes existing infrastructure, which reduces the need for new construction and mitigates excessive chemical use, addressing two of the largest sources of Scope 3 emissions for water service providers.

**Decarbonization solutions also reduce water losses and cut costs, streamlining operating processes while making them safer and more resilient.**

Beyond operational benefits, our solutions help customers make progress on their decarbonization targets. Leading Utilities have already implemented practical approaches to mitigate emissions of greenhouse gas while making the water sector more sustainable, resilient, and water secure.

Utilities show that water sector GHG emissions are a solvable problem. Their experiences provide a blueprint for moving further, and faster. Achieving Net Zero emissions is not merely an ambitious goal, but a realistic evolution of how water and wastewater are to be managed.



**Aguas Andinas** in Santiago, Chile, is prioritizing data-backed targets that have already reduced emissions by 25%.



**Beijing Drainage Group** in China is using digital tools to achieve decarbonization targets aligned with the city's carbon-neutrality goals, already reducing energy consumption by 15%.



**Watercare**, a New Zealand utility, is modernizing its network to phase out fossil fuels and embracing renewable energy through the country's first floating solar



**Ruhrverband**, Germany, is taking a comprehensive approach to understanding energy use and mitigating emissions, scaling effective process emission management and setting ambitious targets like energy neutrality by 2024.

## Decarbonizing the Water Sector

Water and wastewater utility operations are estimated to contribute more than 2% of global GHG emissions. Water use and management accounts for roughly 10%, including the energy to move water, agriculture-related use, treatment, and many other areas in which water services are critical to our daily lives.

- Today's technology can provide substantial energy reductions, with further innovation possible for comprehensive decarbonization of the water sector.
- [Net Zero: The Race We All Win](#) details how utilities can make meaningful reductions to their GHG emissions.



In April 2024, Global Water Intelligence recognized Xylem's leadership for the second time, with its **"Net Zero Champion" Award**

More details on our decarbonization strategy can be found in our [2023 Sustainability Report](#).



### We will accelerate the water sector's need to decarbonize through:

- Working with partners to increase the resources available for utilities on net-zero journey.
- Partnering with regulators on utility decarbonization.
- Raising awareness in global climate action community.
- Providing industry thought leadership.

### We will decarbonise the water sector through the following:

Supply Chain:	Scope 1:	Scope 2:	Scope 3:	Impact of our solutions:	Accelerating new solutions:
<ul style="list-style-type: none"> <li>Increasing visibility of emissions through CDP and Ecovadis.</li> <li>Reporting blended Scope 3, Category 1 emissions to include actuals from CDP reporting and financial model for the first time in 2023.</li> </ul>	<ul style="list-style-type: none"> <li>Committing to transitioning to lower emission fleet options such as EV/Hybrid, as most of our Scope 1 emissions are linked to our fleet.</li> </ul>	<ul style="list-style-type: none"> <li>Continuing to transition towards renewable energy to achieve our 2025 goal of 100% renewable energy at major facilities while also focusing on legacy Evoqua facilities in the coming years.</li> </ul>	<ul style="list-style-type: none"> <li>As more than 95% of our Scope 3 emissions lie in Category 11 (Use of sold products), our reduction relies on:                             <ul style="list-style-type: none"> <li>Evolution of solution mix to greater digital and services revenue.</li> <li>Global "grid greening".</li> <li>Partnership with customers to utilize more renewables.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Continuing to increase visibility in full life cycle (LCA) of products, by piloting first full LCAs in several product lines and producing first product sustainability report.</li> <li>Increasing visibility into end-of-life waste-related emissions.</li> <li>Continuing to measure "use phase" emission abatements for customers.</li> </ul>	<ul style="list-style-type: none"> <li>Partnering with Xylem Innovation Lab to advance decarbonization solutions.</li> <li>Partnering with LORENTZ to provide greater solar options to portfolio.</li> </ul>

### We hold ourselves accountable by setting our own decarbonization targets:

- 2025 Goal to reach 100% renewable energy at major facilities.
- 2025 Goal to enable customers to reduce their GHG footprint by more than 2.8M metric tons.
- Setting science-based targets for Scope 1, 2, and 3 by 2025 and committing to net-zero by 2050\*.
- Tying objectives to compensation and green finance commitments.
- Increasing visibility for our customers with reporting.

\* We are resubmitting our SBTi targets as a combined company, with validation of GHG reduction targets expected by 2025.

# Our products and innovation



## Our approach to sustainability in product innovation is grounded in two concepts:



### 1. Product Handprints

measure the ways we enable customers to reduce their environmental impacts using our technologies.



### 2. Product Footprints

A product's environmental impacts throughout its life cycle, which are reduced through innovation.

These concepts form the foundation of our product sustainability strategy that, in addition to our net-zero ambitions and our 2025 Sustainability Goals, are important for our own sustainability journey and our customers' commitments.

## Handprint: Empowering Customers and Their Communities

By partnering with our customers, we have driven down non-revenue water – a form of both water and energy waste – treated water for reuse, and reduced pollution from combined sewer overflows.

We drive our handprints through Customer Sustainability Goals. The Goals track water treated for reuse, avoidance of water pollution, reducing non-revenue water, and reducing a product's carbon footprint. The goals are achieved through unique product innovations that help customers protect water resources and consume less energy.

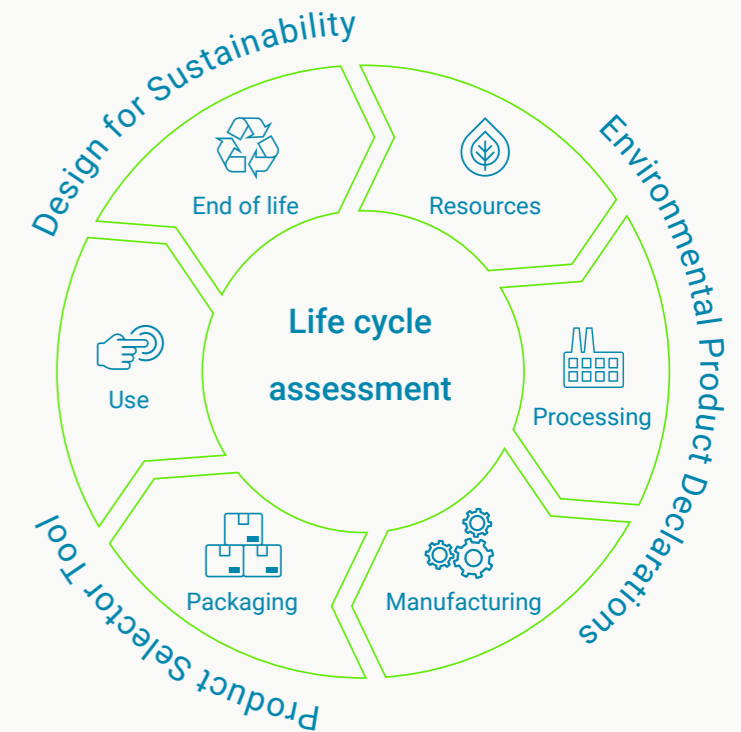
### The handprint of our technology for water reuse is calculated as follows:

$$\begin{aligned}
 &\text{Total flow rate customer Reports in first quarter of use} \\
 &\quad \times \\
 &\quad \text{Hours of operation per year} \\
 &\quad \times \\
 &\quad \text{Expected product life span} \\
 &= \\
 &\quad \text{Lifetime water reuse}
 \end{aligned}$$

Our opportunity to empower water stewards around the world is measured through our 2025 Customer Sustainability Goals. By the end of 2023, we achieved 3 out of 4 of our goals ahead of schedule and are on track to complete our fourth in 2024.

## Footprint: Understanding a product's impacts

Life cycle assessments (LCAs) help us understand the full scope of our products' impacts, from the raw materials used for their development through to their end of life. From LCAs we deliver Product Sustainability Reports (PSRs) with a product's carbon footprint being the one most frequently sought by customers. PSRs can also inform product design teams on targets to reduce future environmental impacts of a product.



## Progress towards our 2025 Customer Sustainability Goals

Treat over 13 billion cubic meters of water for reuse

2023 update:  
+ 3.11B m<sup>3</sup>



Prevent over 7 billion cubic meters of polluted water from flooding communities or entering local waterways

2023 update:  
+ 1.90B m<sup>3</sup>



Reduce water's CO<sub>2</sub>e footprint by over 2.8 million metric tons

2023 update:  
+ 1.15M mt



Reduce over 3.5 billion cubic meters of non-revenue water

2023 update:  
+ 0.80B m<sup>3</sup>



## Innovation through partnership



### Road to Net Zero

In 2023, Xylem announced a partnership with LORENTZ, adding solar power and solar/grid hybrid solutions to our product portfolio. This exciting innovation will yield significant operational emissions reduction during a pump's lifetime, benefitting customers, especially in water-stressed areas where delivery of electricity is a concern.

Solarization significantly reduces a pump's overall footprint, demonstrating the intersection of product sustainability with our net-zero commitment.

As an organization, the majority of Xylem's environmental impacts are through the use of our products, because of the energy those products require. This is our area of focus for reaching Net Zero.

### Xylem Innovation Labs

Xylem's innovation partnership program, Xylem Innovation Labs, cultivates the water innovation ecosystem by fostering collaborations with cutting-edge technology providers to address global water challenges.

Startups in Xylem Innovation Lab's annual Accelerator Program are tackling key sustainability challenges including:

- ▣ Powering pumps and fleets with mobile battery solutions to replace diesel generators
- ▣ Generating fertilizers with carbon-free processes
- ▣ Developing high-precision risk tools to plan for flooding events
- ▣ Manufacturing high-efficiency pumping assets

Learn more about [Xylem Innovation Labs](#) and our [innovation ecosystem](#).

The Xylem Innovation Labs partnerships program is designed to bring the most innovative solutions to market, with three key pillars in mind:



#### Developing innovative programs and unlocking new technologies

Xylem Innovation Labs hosts an annual Accelerator Program to prepare entrepreneurs to sustainably advance and grow their businesses. It supports startups that tackle key sustainability challenges including:

- ▣ Building platforms that help customers map N<sub>2</sub>O emission risks and deploying sensors to measure nitrates/nitrites.
- ▣ Using nanobubbles and algae for advanced wastewater treatment (while reducing the carbon footprint of a plant's operations).



#### Deploying advanced financing mechanisms to catalyze the adoption of innovative water technologies

Commercializing and scaling early-stage innovations is consistently cited as the biggest pain point water startups experience in developing their businesses, resulting in many promising and potentially impactful technologies not advancing beyond the pilot stage. To address this funding challenge, Xylem Innovation Labs has sponsored the Isle Utilities Trial Reservoir, a pooled private revolving loan fund to finance the piloting of technologies that mitigate climate change. Xylem also deploys capital via its corporate venture capital arm.

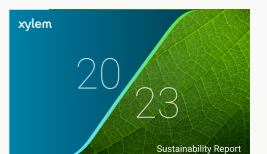


#### Partnering with leading venture capital and accelerator partners

Xylem is a limited partner in The Westly Group and Burnt Island Ventures, working closely with these funds to scout, and deploy capital in, early-stage water-focused companies.

Xylem Innovation Labs also partners with Imagine H2O, a global nonprofit organization that promotes water innovation. Imagine H2O's innovation ecosystem, startup accelerator programs, and pilot funding offerings help entrepreneurs scale solutions faster.

More details on our product innovation and Xylem Innovation Labs can be found in our [2023 Sustainability Report](#).



# Our operations & supply chain



We integrate sustainability into everything we do to effectively reduce our environmental impact, preserve resources, and enhance the welfare of the communities we serve.






We strive to lead the journey to decarbonize the water sector – setting an example by increasing energy efficiency and emissions reduction efforts across our value chain.

## Progress on our 2025 operational goals





As of 2023, 11 of our 22 major facilities have successfully achieved all three major facility goals. An additional five major facilities have accomplished both 100% process water recycling and zero waste to landfill. In 2023, Two more facilities have reached the milestone of 100% renewable energy.

## Xylem’s “Triple Crown” facilities

By the end of 2023, seven major facilities attained what we call internally “Triple Crown” status by achieving all three 2025 Goals:

 <b>Calamba</b> in the Philippines	 <b>Chihuahua</b> in Mexico
 <b>Emmaboda</b> in Sweden	 <b>Herford</b> in Germany
 <b>Lubbock (Texas), Morton Grove (Illinois) Pewaukee (Wisconsin)</b> in the United States	

These are in addition to the major facilities that attained Triple Crown status in 2022:

 <b>Nanjing</b> in China	 <b>Montecchio</b> in Italy
 <b>Dubai</b> in the United Arab Emirates	 <b>Texarkana (Arkansas)</b> in the United States

## Achieving the triple crown of operational sustainability



### Use 100% renewable energy

**Montecchio, Emmaboda, and Herford** seamlessly transitioned to renewable energy sources by making strategic switches in their energy providers.



### Use 100% process water recycling

In 2023, the installation of an in-house closed-loop treatment system at our facility in **Nanjing**, China, led to a reduction in water usage of over 450,000 gallons, equivalent to approximately 1.7 megaliters.



### Achieve zero waste to landfill from processes

**Montecchio** sought to discontinue the disposal of hazardous waste from wastewater treatment processes into landfills. Accordingly, the site conducted a comprehensive review of all chemicals utilized in its treatment procedures and worked to replace them with alternatives that generate no landfill waste.

Furthermore, the site engaged with waste suppliers to prevent any waste from reaching landfills throughout the waste supply chain.



## GHG emissions: Scope 1, 2, and 3

Our operational emissions footprint includes Scope 1 and 2 emissions. In 2023, legacy Xylem reduced its Scope 1 and 2 emissions by approximately 17% compared to the 2022 calendar year. Our Scope 3 reduction targets, which predominantly occur in Category 11, Use of Products Sold, heavily depend on the global transition to renewable energy production.

Details on our GHG emissions data can be found on page 31 of our [2023 Sustainability Report](#).

### Our GHG emission profile in 2023 (in tCO2e)

Scope 1	76,221
Scope 2 (location based)	52,704
Scope 3	63,150,795

**78%**

of electricity came from renewable sources

## Progress towards our 2025 Goals in 2023

Use 100% renewable energy at our major facilities

2023 update:  
Added 2 new facilities

19

Use 100% process water recycling at our major facilities

2023 update:  
Added 5 new facilities

17

Achieve zero waste to landfill at our major facilities

2023 update:  
Added 5 new facilities

17

By the end of 2023, seven major facilities attained “Triple Crown” status

2023 update:  
Added 5 new facilities

11



## Responsible sourcing

### Progress on our 2025 supply chain goals:



## Reducing water and waste

As a company committed to addressing global water challenges with our products and solutions, we recognize the impact our water consumption has on local watersheds.

### Legacy Xylem's water use in 2023

Total water withdrawal (ML)	2,259
Total water recycled and reused (ML)	1,874
Water recycled and reused (%)	83%

Looking ahead to 2030, we've made new commitments that reflect our ambition to align business value creation with positive environmental and social value. [Our new water goal](#) aligns with our strategic pillars of decarbonization, water stewardship, and WASH access and capacity building and connect us to our purpose: to empower our customers and communities to build a more water-secure world.

In 2023, our total diverse spend in the United States grew, accompanied by increasing supplier disclosures through CDP and EcoVadis. We take pride in the participation of our suppliers in the WASH4WORK commitment, as it constitutes a fundamental component of our social impact strategy.

Responsible and ethical business conduct includes those that we do business with across our supply chain. To drive a safe and healthy work environment, fair labor practices, and an increased commitment to sustainability, we continue to expand and develop our partnerships with our more than 12,000 suppliers.

We expect them all to uphold the principles set out in our Business Partner Code of Conduct to conduct our own business ethically and responsibly and to create long-term sustainable value for our customers. Find ways to get involved in our responsible sourcing programs such as [compliance](#), [community engagement](#), and [environmental impact](#) online.

**59%**  
of waste generated was recycled

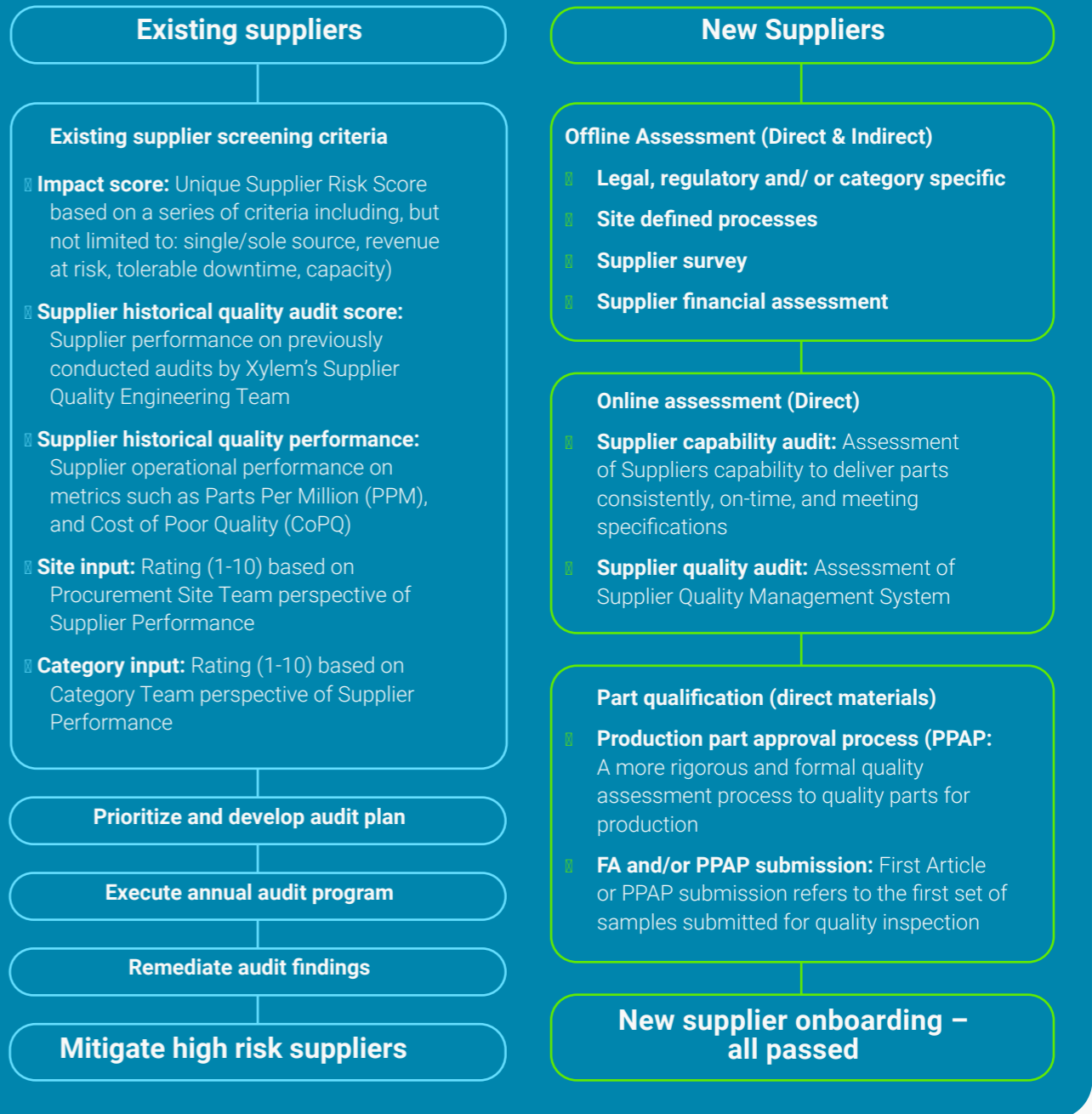
**85%**  
of packaging material comprised reusable, recyclable, or compostable content

**61%**  
of assessed supplier improved their EcoVadis score

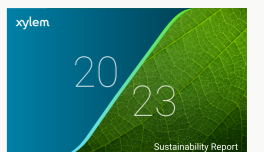
**>43%**  
of legacy Xylem's global supplier base by spend completed EcoVadis assessments

## Our supplier assessment framework

To identify, assess, manage, and mitigate potential risk to our supply chain, we follow our supplier assessment framework:



Learn more about our operations & supply chain sustainability on p. 27 - 35 of our [2023 Sustainability Report](#).



Our success is built on a diverse, global workforce that is driven by purpose and committed to sustainability.

Developing and implementing policies and programs that promote inclusive and diverse hiring, professional development opportunities, comprehensive benefits, and fair compensation is key when aiming to attract, develop, and retain talent.

We attract the next generation of diverse water leaders by developing inclusive and equitable hiring programs targeting future leaders in high school, college, and graduate school, while also attracting talent of all career levels through our Veteran and fair chance hiring programs.

Our new and strengthened programs and policies that span the employee life-cycle are highlighted on page 41 of our 2023 Sustainability Report.



## High-Impact Culture

The strengths and opportunities of our combined organization allowed us to focus on three key behaviors that guide our High-Impact Culture. These behaviors will help us improve employee engagement, speed, and decision-making as they become visible in our daily actions and practices, including the successes we celebrate, the results we reward, and the way we work as a team, to name a few.



### Inspired to Innovate

Gaining experience to create high-impact solutions, sharing information, and leveraging the expertise of others inside and outside Xylem to continuously learn and develop.



### Empowered to Lead

Trusting others and knowing when to step up and lead and when to follow. It's also about actively supporting others to connect and prioritize our actions with our strategy, celebrating individual and team performance, and making decisions based on diverse perspectives.



### Accountable to Deliver

meeting our commitments to our customers, communities, and colleagues and helping them solve their biggest water challenges.



**Rachel Darcangelo**

Vice President, Global Leadership, Talent, and Culture

*“Our high-impact culture will be the cornerstone of our success and instrumental in creating an environment that fosters innovation, leadership, employee development, ownership, and accountability.”*

## Developing a talent pipeline

A broad range of talent development programs support professional growth and leadership development, advance internal talent mobility, and support our succession plans across our business:



### Development of high-potential talent and experienced managers

More than 260 employees participated in the Intentional Leadership Program for frontline leaders focused on the development of foundational leadership skills. Another 45 high-potential colleagues participated in Emerging Leaders cohorts across our Supply Chain Leadership, Innovation and Technology Leadership, and Strategy Fellowship.



### Early career development

About 80 recent college graduates participate in our rotational programs across Finance, Operations, Engineering, and Commercial teams. Over two years in key roles related to Xylem's strategy they build functional knowledge, gain experience across the business, and engage in opportunities for networking and career development.



### Xylem's Innovation Champions Program

Through the Xylem Innovation Champions Program, employees mentor leaders in the Xylem Innovation Labs accelerator.



### Social impact leadership opportunities

Xylem Watermark engages a network of over 500 colleagues leading our social impact endeavors around the world.



## 2025 Sustainability Goals for the Workplace

Following the acquisition of Evoqua, we adjusted our “women in leadership” goal from 35% to 29% women in leadership positions <sup>1</sup> by 2025 and from 50% to 35% by 2030. Similarly, our “minority in leadership” goal now aims for 21% representation in U.S. leadership roles by 2025 compared to the previous 25%, with the target of reaching 25% by 2030.

Challenges in achieving these goals stem from turnover, the availability and attraction of diverse talent in the sector, and lower diversity in legacy Evoqua leadership. These adjustments were informed by McKinsey research <sup>2</sup>, which indicated that Xylem meets or exceeds industry benchmarks for women in leadership.

### Pay Equity

Paying employees fairly for their work reduces feelings of injustice or discrimination, as well as stress or anxiety. It also improves the overall well-being of employees, increasing job satisfaction and improving workplace culture.

In 2023, we conducted a gender pay equity analysis across all countries for 83% of employees, as well as a race and ethnicity pay equity analysis for 87% of employees in the United States.

**83%**  
of global gender pay equity assessments completed

<sup>1</sup> “Leadership positions” are defined by an internal salary band structure that reflects executive and critical leadership positions.

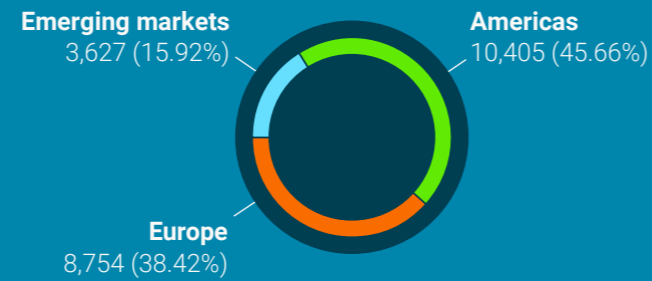
<sup>2</sup> McKinsey Women in the Workplace 2023 report



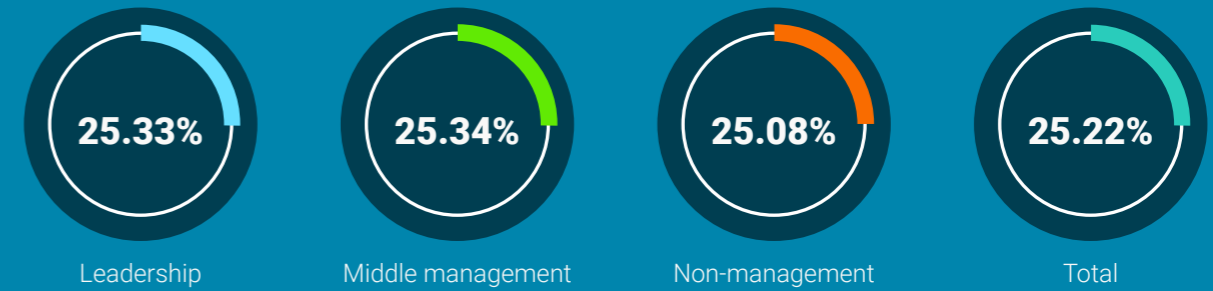
More details can be found on p. 40-50 of our [2023 Sustainability Report](#).

## 2023 DEI key figures

### Employees by geographical area



### Percentage of women representation by management level globally



### U.S. employees by race and ethnic minority group

	African-American	Asian-American	Hispanic	Other race / ethnic minority	Total
Leadership	3.61%	7.22%	6.16%	2.12%	19.11%
Middle management	5.37%	7.40%	6.76%	2.06%	21.59%
Non-management	15.04%	3.50%	14.23%	3.09%	35.86%

### U.S. employees by age

	<30 years	30-50 years	>50 years
Leadership	—	1.17%	1.29%
Middle management	0.34%	7.69%	5.93%
Non-management	12.86%	39.22%	31.51%
Total	13.20%	48.08%	38.73%

Through our global corporate social responsibility program, Xylem Watermark, we work with non-profit partners to provide education and equitable access to clean water and sanitation to support healthy living and build resilient communities.

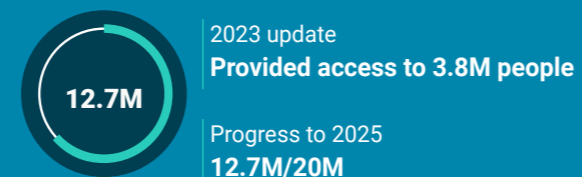
We encourage our employees, customers, supply chain partners, and other business partners to join us in working toward our purpose. In 2023, legacy Xylem employees in 56 countries volunteered more than 184,000 hours, a record 89% participation rate. Colleagues participated in skills-based volunteering initiatives, designed and implemented WASH solutions for underserved communities, and built capacity through training and mentoring.

[Learn more and join us!](#)



## Progress towards our 2025 Community Sustainability Goals in 2023

Provide access to clean water and sanitation solutions for at least 20 million people living at the base of the global economic pyramid



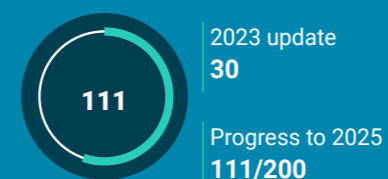
Engage at least 95% of Xylem employees in volunteer activities



Provide 15 million people with water education to improve quality of life and raise awareness of water issues



Deploy humanitarian aid to 200 areas affected by water-related natural disasters



## WASH access

The world is facing water scarcity crises, affecting approximately 1.42 billion people, including 450 million children living in areas with high water vulnerability.

We prioritize climate-resilience initiatives aimed at providing WASH access, thereby mitigating related climate impacts. In 2023 we supported projects in 38 countries that brought improvements to WASH infrastructure in hospitals, schools, and households, especially for vulnerable populations and people who have been displaced by conflict and disasters.

### Driving WASH access:

- With non-profit partner Mercy Corps, we supported a project to rehabilitate and construct WASH facilities at Al Fao District Hospital and Renal Center in Sudan which serves 330,000+ people annually.
- In collaboration with our non-profit partner Americares and the local organization Aqueducks, we delivered clean water from Kramatorsk to several remote villages in Donetsk Oblast, Ukraine, including Siversk and Toretsk, which have been severely affected by the Russian invasion.
- Also in collaboration with our partner Americares, we expanded a program targeting flood-prone areas in low-lying municipalities of Luzon, the main island of the Philippines.

While the need for improved water and sanitation services is most acute in developing regions of the world, it extends beyond these localities. For instance, it is estimated that in the United States alone, 2.2 million people lack access to safe drinking water and sanitation.<sup>1</sup>

- We published our [Solving Water in Rural America](#) report, highlighting the increasing challenges rural communities in the United States face due to limited water access and poor water quality. It presents the full scope of the rural water crisis and the tangible steps individuals, government bodies, and organizations can take to address this crisis.

## Water awareness and education

For any water solution to be effectively implemented and sustained, communities must value clean, safe water and take ownership of the project. Our partnerships educate and empower communities to adopt responsible water, sanitation, and hygiene practices.

In 2023, we reached 3.3 million people with targeted water education initiatives through several key initiatives:

- Investing continually in long-term partnerships with global organizations such as UNICEF.
- Encouraging our employees to volunteer as educators and facilitating opportunities for them to connect with students of all ages.
- Leveraging our long-term partnership with Manchester City Football Club and their influential sportsmen and women, to spread important water-related messages to diverse audiences worldwide.

## Youth engagement

[Xylem Ignite](#), our comprehensive youth-focused program, fosters the growth of young talent through mentorship, skills development, and opportunities for innovation, supports youth-led water initiatives within communities, and elevates youth representation in leadership roles.

One way we're empowering young people: The Xylem Global Student Innovation Challenge attracted over 1,000 students from 78 countries to analyze the water impact of green hydrogen, move from awareness to action on water issues, prevent waterway pollution using data science, and consider the water-energy-emissions nexus in buildings. Winners received a share of a \$20,000 prize and entered Xylem's Ignite Innovation Incubator program, supporting them in scaling their solutions.

**>10,000**  
students engaged in youth programming

<sup>1</sup> [Squarespace](#)

# Our impact around the world

## Humanitarian disaster response

Access to safe WASH resources in the aftermath of a disaster saves lives, as does technology that safely transports water to make affected communities accessible to humanitarian workers. It is also important that resources are directed at making vulnerable communities more resilient in the long term to reduce the risk of future disasters.

With a global network of experienced employees and partners, we use our distinctive expertise and resources to respond quickly to communities in peril, often in regions where our own employees live and work.

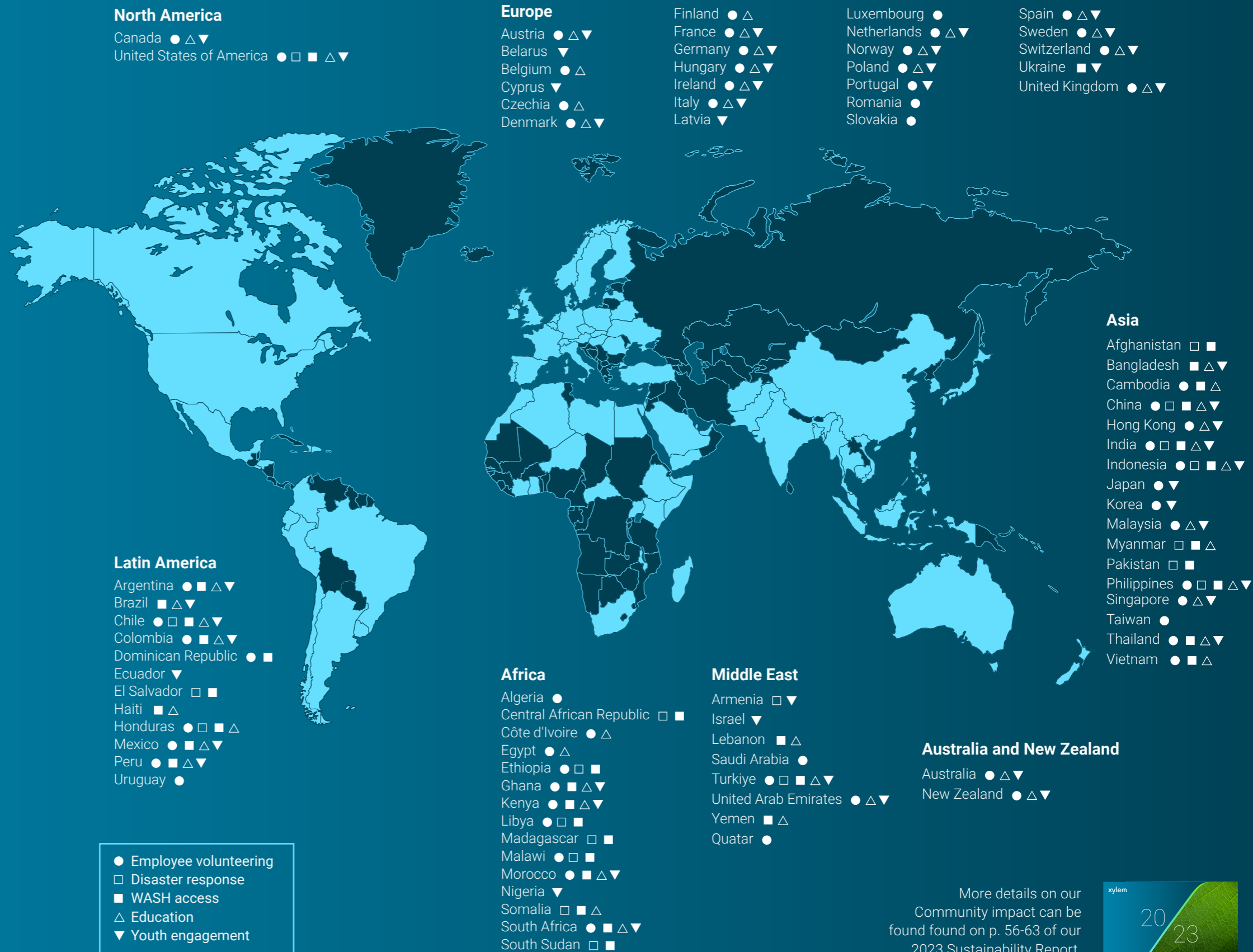
### Our aid and response efforts included:

- ▣ Deploying in-kind technology, such as pumping and treatment solutions that treat contaminated water.
- ▣ Mobilizing community-led volunteer initiatives involving our employees and partners, including the collection and donation of critical supplies, active participation in rebuilding effort, and more.
- ▣ Funding preparedness and resilience efforts in collaboration with non-profit partners like Mercy Corps

Read more about our humanitarian disaster response efforts [here](#)

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disaster areas provided with humanitarian aid in 2023



More details on our Community impact can be found on p. 56-63 of our 2023 Sustainability Report.



As part of its commitment to reaching net-zero emissions by 2040, Scottish Water has partnered with Xylem to upgrade hundreds of pumping stations with sustainable technology. In an initial trial, the Flygt Concertor pumping system reduced unplanned maintenance by 99.8% and cut energy use by up to 60%. The Xylem Avenor digital monitoring service for pump stations has also significantly reduced reactive callouts.

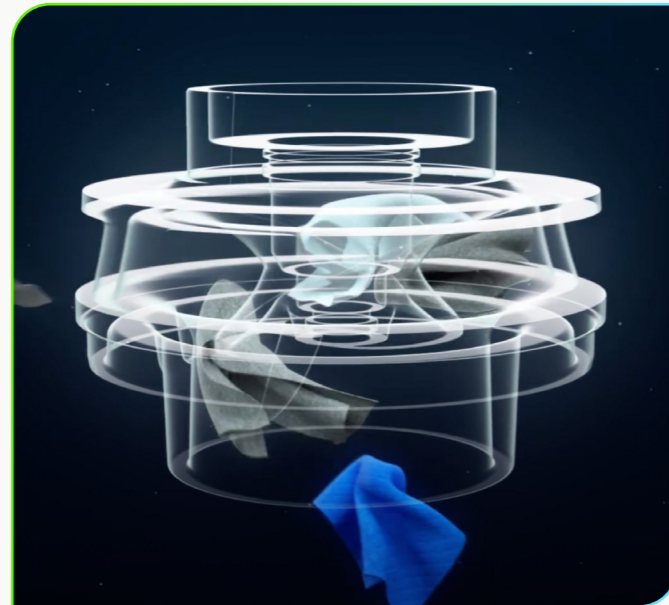
Scottish Water, Scotland's publicly owned water supplier, provides essential water and wastewater services to more than 2.6 million homes and 150,000 business premises. In 2019, Scottish Water committed to net-zero emissions by 2040, a full five years earlier than the Scottish Government's plan to achieve net-zero emissions for the entire nation.

"Scotland takes pride in its environment and outdoor spaces, so at Scottish Water, we set an ambitious plan to reduce the carbon emissions and environmental impact of our operations," says Nathan Wield, Wastewater Operations West Manager for Scottish Water. "Moving and treating wastewater is incredibly energy intensive, so anything we can do will have a big impact on the net-zero goals of both Scottish Water and the country."

Scottish Water's Net Zero Emissions Route Map focuses on renewable energy and heavy investment in innovative, green technology. In 2019, Scottish Water began working with Xylem to trial the Flygt Concertor pumping system in a few pumping stations, with the goal of reducing wastewater energy consumption and reactive callouts.

## Targeting the worst performing pump stations

"As an equipment provider, we've always had a very close working relationship with Scottish Water," says Alan Black, Sales Manager for Xylem in Scotland. "We asked them for a list of their poorest performing pump stations, in terms of wasting time and resource on unplanned callouts. After a couple of installations, their confidence in Concertor grew since the product did exactly what it was supposed to do – reducing 99% of the unplanned maintenance events."



*Flygt Concertor has built-in sump and pipe cleaning, as well as Xylem's Adaptive N-technology to detect and resolve clogging. The pump can also automatically adapt its performance to changing flow rates, and it has a Super Premium IE4 equivalent motor, all of which can reduce energy use by up to 70%.*

"After the successful trial of Concertor, and understanding the energy saving that came with it, this led to more trials and then eventually wider adoption," Wield says. "Today we have about 300 Concertor pumps installed across Scotland, with many more to come."

## Adding remote visibility to pump stations

With the launch of Avenor in 2020, Xylem's digital solution for pump station monitoring, Scottish Water saw an additional opportunity to make its operations more efficient. Avenor collects, analyzes, and transmits pump station data through the cloud, giving operators real-time performance insights. So far Avenor has been installed in about 90 pump stations for Scottish Water, with more being added every month.

"We can check the health of our stations without having to drive around to each one, which saves us a lot of time and reduces emissions. It's a proactive tool that enables us to respond to something at the right time, instead of just hoping to catch it through a routine visit."



*"The visibility that Avenor gives us is brilliant," Wield says. "We use the Avenor app to view a pump stations performance before we go to the site, and if everything is going well, we might not even need to go there at all."*

When implementing new technology, as part of a digital transformation to meet sustainability goals, Wield says that ease of use for operators is critical.

"If the technology is designed right, and it's easy for operators to access and use, then it can be easy for operators to adopt," he says. "It's when we make it complex and cumbersome that you get pushback and rejection. With Avenor, everything makes sense, and even the graphics are easy to understand. At a glance, operators can see the pump performance, the well level, and all the information they need."



## Insights on implementing a net-zero plan

As part of its continuous work to reduce emissions, Scottish Water has a dedicated Energy Efficiency Team responsible for delivering energy-efficient new technology and processes that have a strong return on investment.

"From a wastewater perspective, having this Team is very helpful," he says. "If a new pump or blower is needed, they can flesh out the business case and suggest energy-efficient options. This means that everything doesn't have to rest on the shoulders of team leaders, who are delivering compliance and minimizing downtime. With this group integrated with Wastewater Operations, we can all work together towards the same goals."

While achieving net-zero emissions by 2040 might seem daunting, Wield says it's possible.

*"Wastewater is probably a bit behind the curve in the water sector when it comes to implementing new technologies," he says. "But this also means there are bigger opportunities to make a difference. When we can upgrade our assets, and work more efficiently, that can lead to massive improvements."*

Scottish Water will continue to work with Xylem to upgrade its pumping stations with Flygt Concertor and Avenor technology.

"Now when we need to replace pumps, we'll be considering Concertor as our pump of choice," Wield says. "We're also looking into how we can use Avenor to get insights into some of our bigger pumping stations. Xylem has been very responsive to our needs, and they have made adjustments to their solutions to help us work even more efficiently. We're looking forward to continuing to collaborate with Xylem to meet our net-zero goal."

More details on our product innovation and Xylem Innovation Labs can be found in our [2023 Sustainability Report](#).

