



When the Scottish Government announced a plan to become carbon neutral by 2045, Scottish Water joined the race to zero, pledging to make its network as efficient, resilient and cost effective as possible.





POLLUTION







UCING KAGE

REDUCING WATER USE

The solution

Scottish Water is responsible for an area of more than 30,400 miles of water pipes and a population of 5.4 million people. As part of the company's asset resilience strategy, it trialled Xylem Concertor, the first wastewater pumping solution with integrated intelligence, at two of its Ayrshire pumping stations: Maple Grove and Cross Dene.

## The process

Xylem worked with Scottish Water's delivery team to agree the pilot sites. They then replaced one pump at each station with a single Xylem Flygt Concertor N6020 intelligent submersible pump, a Xylem Control panel fitted with an XPC (Extended Performance Control) system and a level pressure transducer. A Flygt float switch for high level alarm and backup control was also installed at both sites.

This approach was selected as it enables **trouble-free pumping** and **efficient asset management**, contributing to the customer's sustainability plan.

During the trial, we provided clear data on the solution's performance in comparison to existing assets, demonstrating the technology's significant impact on operational cost, carbon reduction and long-term sustainability.

## The outcome

The trial led to pronounced cost savings and improved asset reliability, resulting in fewer call outs and less disruption for customers.

- Increased resilience: 56 hours of cleaning and monitoring were reduced to just two monthly checks.
- Energy savings: Maple Grove pumping station now uses 40% fewer kilowatts a year and Cross Dene uses 30% fewer.
- Cost savings: OPEX savings have exceeded £42,000 per annum.
- Time savings: Scottish Water has recorded a 99.8% reduction in attendance visits and a significant reduction in journey time.

The Xylem solution has since been expanded to other Scottish Water pumping stations.

"The Concertor trial resulted in zero cleaning requirements in 14 months since installation. We used to spend 56 hours a month cleaning and monitoring these sites and now we simply check each pumping system twice a month - it's really convenient and resilient". 99.8% reduction in attendance visits

Up to 40% reduction in energy



Only
2
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