

East Ayrshire Council uses smart tech to fix leak issue

“East Ayrshire Council has recently invested in increased levels of AMR technology across a large part of its utility estate, on a spend-to-save basis. We have been working closely with water experts, Business Stream, to generate greater water efficiencies. It is great to see the results of the investment being realised in tangible financial savings. In addition to these financial savings, the early detection of water leaks within our estate has a direct benefit in our efforts to reduce our carbon footprint and reduce damage to our buildings during periods of lower occupancy.”

Kenny Nicolson
Corporate Energy and Carbon Manager,
East Ayrshire Council

East Ayrshire Council (EAC) is one of 32 council areas in Scotland. The Council's estate includes leisure centres, office buildings, schools, castles, pavilions and nurseries – all of which require water supply and waste water services to run properly.

The challenge

EAC has been using smart monitoring devices, Automatic Meter Readers (AMRs), for a number of years in order to track water use at some of its sites.

Since the beginning of its current contract with us in April 2020, EAC has continued to invest in and expand its AMR coverage. In 2020, some of the AMR reports for the Council's estate were showing irregularities, suggesting that a larger than expected amount of water was being used.

To investigate this further, we worked with EAC's Energy Team to undertake preliminary inspections to check for any visible plumbing issues. This resulted in some quick fix solutions, including repairing dripping taps and stopping the flow of a running hose. In addition to identifying these smaller issues, the AMR technology also helped to identify suspected larger, external leaks at three separate sites that required further work to be carried out.



Helpful *by nature.*

The solution

We worked in partnership with EAC to undertake detailed investigations at three sites – **Annanhill Nursery, Auchinleck Academy and Dean Castle**. As a result of the work completed, which included several days of excavation work to locate the suspected leaks, the problems were identified and quickly resolved – helping to deliver significant savings to EAC:

- **The fixed leak at Annanhill Nursery delivered an annual water bill saving of £18,397 and saved the nursey from using 11,356m³ of water over the course of a year – the equivalent of four and a half Olympic sized filled swimming pools.** In addition, we helped EAC obtain a Scottish Water leak allowance to offset previous charges caused by the leak.
- **Auchinleck Academy made an annual saving of £15,225 and saved the equivalent of 10,000 m³ of water, as a result of the leak being located and fixed in October 2020.** We also supported EAC to submit and secure a Scottish Water leak allowance, enabling them to recoup some of the money lost due to the leak.
- **Dean Castle saved £8,166 as a result of the work being carried out.** If it had gone unchecked, it would also have resulted in the wastage of 5,000 m³ of water. In addition to the water lost due to this leak, Dean Castle which is an old and listed building, experienced a further internal burst water pipe while the building was unoccupied. Due to the AMR technology, this leak was identified early, located and repaired. This helped to both reduce water waste and limit the amount of internal damage caused by the burst pipe.

Due to these collective savings, EAC has invested further in AMR technology to cover a larger proportion of its estate, providing near real time access to water consumption data. These steps will help EAC increase efficiency and allow for any irregularities to be identified quickly, before they become bigger and more costly issues.

“ We’re really pleased that we were able to help identify and fix these leaks, delivering significant annual savings and reducing water use considerably at each of the sites. The value of AMR technology is really clear to see and it’s no surprise that EAC is investing further in the technology. Being able to monitor water use in near real time is invaluable, and allows any issues to be identified and resolved quickly. ”

Martin Bryce | Senior Account Manager,
Business Stream