

After a successful pilot run in Sant Ferran, the Formentera Council plans to invest €302,765 for an expanded installation of smart water metres. The new system enables real-time readings and improved client updates and network efficiency.

In early 2017 the Formentera Council launched a pilot programme to allow for remote readings of water metres across Sant Ferran. The effort involved installing 236 “smart” metres which made it possible to track individual water use as well as the water added to the Sant Ferran grid from outside sources.

Reviews of the pilot programme were overwhelmingly positive. Thirty-one incidents were caught in 2017 alone, with an average loss of water per hour of 17 litres. That's the equivalent of 379,400 litres of water —or 38 water trucks— per month. Most of the incidents corresponded to malfunctioning equipment in customers' home setup.

Pioneer system in the Balearics

The Council has decided to partner with Aquàlia to gradually expand the system across the entire island, ultimately foreseeing installation of 2,394 metres. The first of its kind in the Balearics, the new system comes without rate increases of any kind. Plus, it means customers get monthly bills, instead of every four months, as before.

Rollout of the programme will occur in three phases. The first, already nearing completion, involves installing the new devices in Sant Francesc and la Savina. The second —installation of the smart metres in es Pujols— has already started. The final phase will begin in July and concerns ses Bardetes, es Ca Marí, la Mola, es Caló, sa Roqueta and Can Bonet industrial park. Officials expect rollout to be completed by year end 2018.

Advantages of new metres

The system, whose use of telelecturas (*lectura* means “reading”) means that real-time checks of water metres can be done daily without operators travelling to the site in question, makes possible remote, automatic readings which are forwarded directly to the Aqualia office. The

water metres emit a signal every eight seconds. The information on water use travels to a computer at command central, where another programme automatically calculates billing information.

Visits to residential areas or individual homes become unnecessary under the new system. So do estimated readings. Using the “Smart Aqua” app, consumers can now get up-to-the-hour summaries of their water use, even away from home. By pinpointing leaks within homes, the system makes it possible to catch equipment failures and avoid the astronomical bills that water leaks can cause.

When equipment logs unusual behaviour, or stops, hourly updates are forwarded to the local command central, giving a clear picture of leaks in the grid due to technical failures, fraud or outsize use.

Upgrades that benefit consumers

Environment secretary Daisee Aguilera says the system will give officials “a clear picture about water use by neighbourhood”, plus “detailed and objective information to better define future investment into the grid”. As well, noted the secretary, “users are informed of any unusual activity, like spikes in consumption or buggy equipment, reducing the likelihood of outsized bills”.

The changes mean improvements both in tracking and performance. The latter was 89.57% in 2017. Taken together, they promise more sustainable consumption and a closer control of water distribution, which is so necessary on the island.