

Village Critical Infrastructure Replacement



Context

Sodexo delivers integrated facilities management services for one of its largest clients' assets in Australia's Pilbara Region of Western Australia. It comprises operational sites, accommodation, commercial buildings, and residential properties across 32 villages, 5 towns, and 5 aerodromes.

Challenge

The Pilbara is a remote arid region in northwest Western Australia. This harsh and remote environment imposes significant challenges in maintaining the serviceability and availability of water networks across the region.

A 2020 leak detection survey of a single site uncovered 17 significant leaks. Water loss in such a remote and arid environment can significantly impact the wellbeing of village residents, with the potential to halt operations if left unresolved.

Saving Water and Reducing Waste with IoT Technology

Sodexo Solution

Working with its client, Sodexo introduced a remote water monitoring and management system comprising sensors, loggers, instrumentation, and data transmission equipment – commonly referred to as Internet of Things (IoT) technology.

We have replaced 60 km of water pipes in 4 villages, and similar works are planned for 4 more villages over the coming years.

Works were completed on fully operational sites, with construction closely managed through proper planning, scheduling, and stakeholder management to minimise service interruptions and adverse impacts on village residents. Horizontal drilling technology and articulated potholing are also minimising construction time.



Impact

Achieved Together

IoT wireless technology allows real-time remote monitoring of potable and wastewater treatment plants to detect anomalies such as burst water pipes. This reduces water waste, service interruptions, and unplanned demand on the facility maintenance teams.

This initiative saves natural resources while reducing waste in keeping with Sodexo and its client's Corporate Responsibility commitments.

To date, this project has saved **6 million litres** of water daily - equivalent to two Olympic pools or enough to supply the daily recommended intake of water to Western Australia's entire population.



Case Study produced in March 2024
For more information, visit [sodexo.com.au](https://www.sodexo.com.au).



It all starts with the everyday

OVER 12 MONTHS, THE SODEXO PROJECTS TEAM ACHIEVED:

