



CASE STUDY:

Sainsbury's 50% Relative Water Reduction

Sainsbury's

Project	20x20 Sustainability Plan – 50% relative water reduction
Location	Nationwide
Classification	Water Strategy
Sector	Retail
Client	J Sainsbury plc
Project savings	Circa 1,000,000m ³ consumption saving per annum

Results

1,000,000m³

Total annual consumption savings versus 05/06 baseline

345,000m³

Leak repair consumption savings over 345,000m³

1,000 tonnes CO₂e

Circa Scope 3 carbon emissions prevented (Water Suppliers)

350+

AMR installs

66

Car wash water reclaim unit installs

550+

Low flow spray tap installs



Project overview

Sainsbury's is a pioneer in environmental thinking and evolved their approach through a 20x20 Sustainability Plan. Sainsbury's engaged water efficiency specialist Waterscan, as part of this progressive strategy to help meet its challenging target to reduce stores water usage by 50% relative to m² sales floor area against their 05/06 baseline.

With key industry peers only targeting up to a 30% reduction at best, Sainsbury's set by far the most stretching target in the sector equating to circa 1,000,000m³ of water, which is the average annual consumption of approximately 230 supermarkets.

'...progressive strategy to help meet its challenging target to reduce stores water usage by 50% relative to m² sales floor area'

The solution

The project was implemented through three key stages. The first challenge was extracting information from the water companies, which is notoriously difficult. Stage one therefore involved establishing Sainsbury's current consumption through the use of AMRs linked to Waterline®, a unique online water management system, and comparing it to the billing data. This provided a systematic way of achieving accurate cost and consumption data with the extensive database of 100,000+ records allowing benchmarking of Sainsbury's stores versus an industry standard.

The second stage focused on identifying opportunities for savings through five key areas; high consumption sites, water audits, water leaks, surface water drainage and AMR. The roll out of over 350 AMRs actively detected leaks by sending regular usage data back to Waterline® with excessive consumption identified through automated alerts. Water audits were carried out by Waterscan's technicians to identify areas of over consumption and the potential for water saving projects. The technicians also located sites where AMR would help detect water leaks, surface water issues and the potential for rainwater harvesting.

The third stage involved implementing solutions to address inefficiencies:

- Installing water efficiency technologies such as waterless urinals, low flow toilets, percussion taps, rainwater harvesting and reclaimed water car washes

- 24 hour leak response team minimised water wastage
- Design specification of rainwater harvesting systems as standard in all new builds to reduce mains water usage

Monitoring & development

Waterscan continued to work with Sainsbury's as they entered the next stage of the project. Since completion of the 50% water reduction target, Sainsbury's and Waterscan have worked together to achieve the first water neutral* retail stores in the UK with their Leicester and Weymouth supermarkets becoming 'self-sufficient' in water.

Sustainability achievements

Sainsbury's became one of the first four companies to gain the Carbon Trust Water Standard, meaning Sainsbury's is the first retailer to obtain independent certification validating the work and their action to measure, manage and reduce water use year on year.

*Water Neutral as defined by The Environment Agency science report SC080033/SR2 - Oct 2009

Media coverage

www.theguardian.com

Recognition

Winner of The Consumer Council Water Champion Award 2014

Water Management

Winner of The Energy Awards 2013

Energy Efficiency through Water Management

Finalist for Sustainability Leaders Awards 2013

Water Management

Shortlisted for 2degrees Champions Awards 2014

Water Management



Quotes

“We have achieved our target of a 50% relative reduction in water use through working with Waterscan to deliver a number of water saving measures that form part of our 20x20 Sustainability Plan. This includes eradicating underground leaks, the installation of the latest water efficient technology, and investing in rainwater harvesting for all new stores as standard.

We continue to improve with our Weymouth and Leicester stores being 'self-sufficient' in water by offsetting potable water demand through sponsored water saving initiatives in the local community.”

Paul Crewe

Head of Sustainability, Engineering, Energy and Environment – J Sainsbury's plc