

Water Efficiency in Estates

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Welsh Water



- Overview
- Managing the future demand for water
- Business Customer Service Offering
- Our Experience
- Components of a water management strategy
- Questions

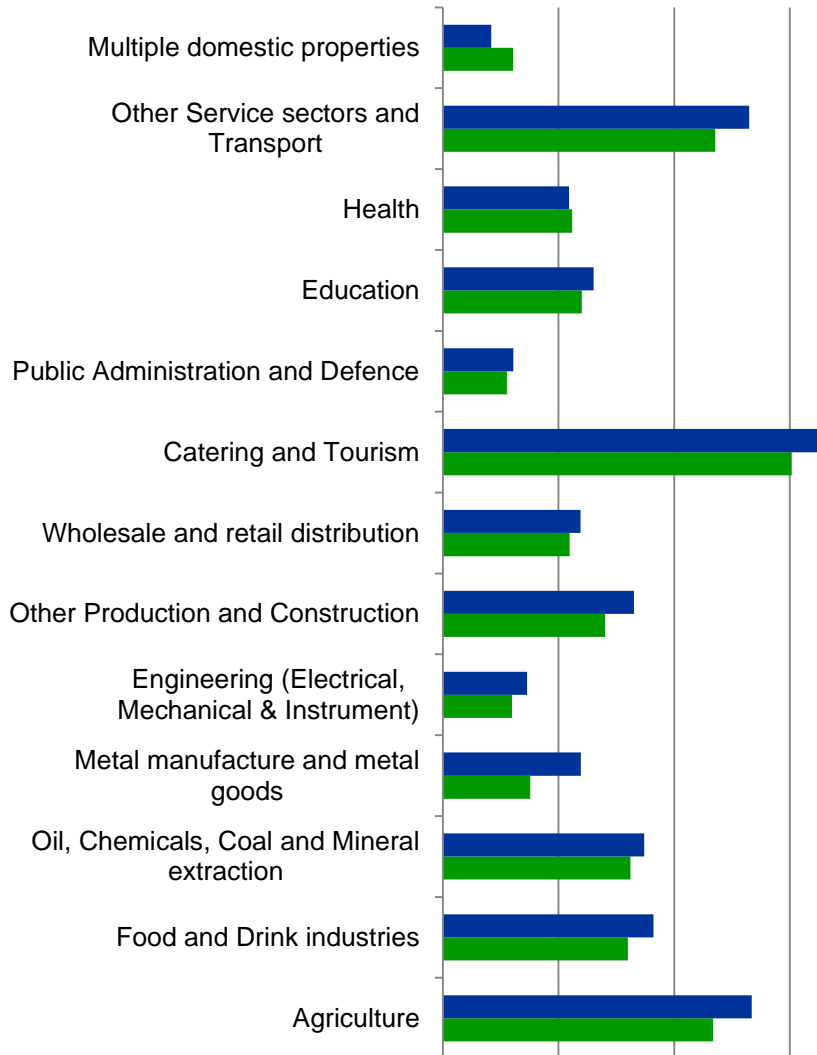
- DCWW
 - Undertaker of Water and Sewerage services in Wales
 - Regulated by Ofwat
 - Planned investment of £2B over the next 6 years, visit our website to contribute to our PR14 consultation.
 - Business Customer Team focused on customer service offering and retention.



Demand for Water in Wales (2006 – 2011)



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- The majority of sectors have demonstrated a reduction in demand over the 5 year period
- Economic Influences
- Improved Efficiencies
- Future environmental challenges mean less water to abstract
- Water in use has significant carbon and energy embedded.

OUR CUSTOMERS



Number of accounts: 148



Number of accounts: 197



Number of accounts: 1,369

- Key account managers offering a single point of contact for all issues and enquiries
- Account reviews to ensure that the customer is on the most cost effective tariff available
- Efficiency advice to reduce costs



BUSINESS CUSTOMERS WATER AUDITS

"This Water Audit enabled us to identify £23,000 of wasted water, just through uncontrolled Urinals."

Water Efficiency at the Millennium Stadium

The Stadium is currently using **59.2 m³/day**.

- ✓ 251 Urinal controllers on site.
- ✓ 132 Urinals need replacing.



The Results

The Audit delivered very significant savings of around **£23,878 per year**. This was through uncontrolled urinals which were wasting 15.4L/min. These are flushing at a constant rate, even when the stadium is empty.



Paybacks (for this 12 months)

Water Reducing Measures	Cost of implementation (£)	Water Savings (L/day)	Annual Savings (£)
Urinal Control	£23,100	154	£23,878

Other Recommendations

- ✓ Upgraded with retro-fit water efficiency products.



BUSINESS CUSTOMERS DATA LOG OF YOU WATER USAGE

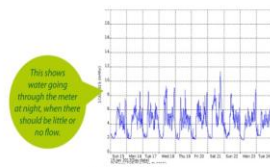
"Meter telemetry highlighted usage at night, this immediately indicated a large leak, costing £25,000 per year."

The Marriott St Pierre Hotel & Country Club...



The site is data logged, and so the data was analysed to look for any problems. A Water Audit had already been done, which didn't show any loss of water through domestic fittings.

Customer Data



Lowest flows after leak repaired 1m³/hour. Saving therefore is (approx) 1m³/hour. This equates to 8,760,000 litres annual saving.

Meter Information

These are the different views possible when a customer logs in to their account.



BUSINESS CUSTOMERS LEAKAGE DETECTION AND REPAIR

"If Welsh Water had not assisted us with the leak detection and repair it would still be costing us £204 per day."



Welsh Country Foods (Vion Foods), Anglesey

The company knew their consumption had been increasing for some time but had no idea if this was leakage and/or inefficient water usage.

Following on from a water efficiency audit, a leak of 3.4m³/hr (or 83.7m³/day) was detected in an on-site valve chamber.



The Results








The leak was costing the company **£204 per day** and as they had no on-site expertise to find or fix the leak they were delighted that we resolved the issue for them.



Components of a Water Management Strategy



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Step	Action	
Establish a baseline	Trends in historic bills/trends against units of output – what has changed?	
Benchmarking sector consumption	How do your unit outputs compare with others in your sector?	
Estimating a water budget	What is a reasonable estimate of usage?	
Managing unaccounted for water	Develop water Balances through metering and sub metering.	
Determine consumption	Differentiating between points of use: The distribution system, process use and domestic use.	
Positive Intervention	Leak repairs, retrofit appliances, more efficient white goods, improved process use, alternative sources.	
Monitoring	Data logging and MI dashboard suites	

- The overall demand for water has reduced over the past five years.
- Water maybe a hidden opportunity in your bottom line through inefficient use that has not been challenged internally by the business.
- Water in use is heavily carbon and energy embedding.
- Simple steps to understanding and managing water use can result in significant efficiencies
- DCWW are able to assist in the development of strategies to improve your business efficiency



For further information on the services available from Welsh Water / Dŵr Cymru, visit

<http://www.dwrcymru.com/en/Business.aspx>