

Water Efficiency for Small Businesses



Dŵr Cymru
Welsh Water

Water Efficiency Audit for Small Businesses

Most companies and organisations know how much water they use but do not always use this information to help reduce the amount of water consumed. By taking simple inexpensive measures companies can typically reduce consumption by 30%. Also by using less water, companies save money on both water supply and wastewater disposal.

Complete our Water Audit to find how your business could become more efficient

Where does wastage occur?

- Running or dripping taps
- Faulty ball valves / overflowing cisterns
- Constantly flushing urinals
- Underground leaks

How much water do you use?

- Toilets – 6 to 9 litres / flush
- Sinks – 6 to 9 litres / bowl
- Showers – 30 to 90 litres / shower
- Dishwasher – 20 to 40 litres / load
- Laundry – 60 to 100 litres / load
- Vehicle – 100 litres / vehicle using buckets, 900 litres / vehicles using a hose
- Garden hose – 8 to 30 litres / minute (500 to 1,800 litres / hour)
- Employee (full time, no canteen) – 25 litres /day / person
- Employee (full time, with canteen) – 40 litres / day / person

How much water is lost due to leaking taps?

- One drip per second wastes 4 litres per day
- Drips breaking into a stream waste 90 litres per day
- 1.5mm stream wastes 320 litres per day
- 3mm stream wastes 985 litres per day
- 6mm stream wastes 3,500 litres per day

What water saving devices can I install?

- Toilets / Cisterns – dual flush devices / water displacement devices
- Urinals – flow control / waterless urinals
- Sinks – push taps / spray taps
- Hosepipes – trigger outlets

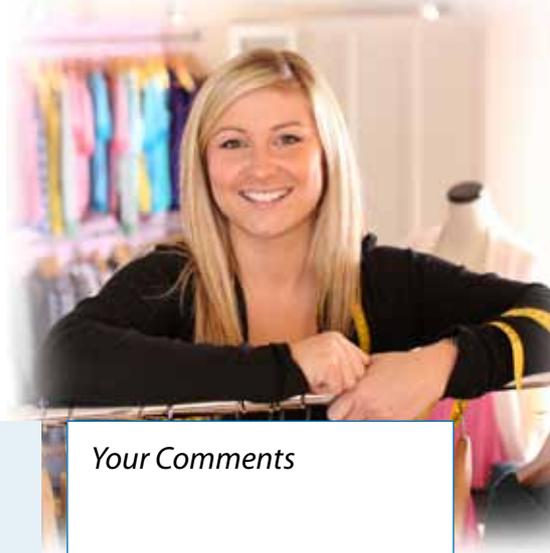


TOP TIP 1

A hot dripping tap or steam leaking wastes energy as well as water. Report and repair as soon as possible.

Water Efficiency Audit

This water efficiency audit guide will help you understand your water use and advise you on practical actions that will reduce the amount of water you waste. This will save you money on both your water supply and wastewater disposal.



1 Identify all water fittings and check for leaks

Are all your taps drip free? Dripping taps waste large amounts of water and therefore money.

Make sure no water is being used internally and check to see if the water meter is turning. If it is you may have a leak.

Check all of your water fittings to see if there are any water saving devices fitted.

Your Comments

2 Check for underground leaks

Locate and shut your internal stop tap to isolate the supply entering the building.

Check to see if the water meter is turning. If it is you may have a leak.

3 Read your water meter

Read the meter, twice daily at the same time over the period of a week.

There needs to be a reading at the start of the working day and at the end of the working day to record all usage during this time.

Recording meter readings on a regular basis (daily, weekly or monthly) will allow you to identify trends in water consumption. Record water consumption in a spreadsheet and generate graphs. This makes it much easier to view the data.

4 Understand your usage

Compare previous bills to check for abnormal consumption.

Identify any activities that use large volumes of water during this period i.e. using hosepipes or filling tanks and record the day and time that they occur.



TOP TIP 2

If you have valve type cisterns (push button operated) or internal overflows then watch out for water running slowly down the back of the pan. This is a leak and staff should be encouraged to report it and arrange a prompt repair.

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5 Analyse the results

Look at the times when the building is unoccupied. Is there any water being used? If so this could be due to continually flushing cisterns or possibly a leak.

Look at the daily trends. Are there any differences in the amount of water being used on different days? If so, try to identify where the water is being used and if this is necessary.

Look at the amounts of water being used for large volume activities and assess if this appears to be a reasonable amount i.e. could buckets be used for certain activities instead of a hosepipe.

Your Comments

6 Develop an action plan

Take regular meter readings and produce graphs to track usage trends.

Regularly check for leaks.

Install water efficiency devices (push taps with spray outlets, water displacement devices in cisterns).

Reduce your water pressure – if your water pressure is over 5 bar, install a pressure reducing device.

Locate your water pipes – draw a plan to map your underground water services, valves and meters. Investigate any damp patches near these services.

Fit sub-meters for better monitoring.

Use water efficient maintenance activities.

Raise staff awareness and encourage staff to report leaks.

Prevent burst pipes in winter by lagging external pipework, tanks and cisterns.



TOP TIP 3

Pressure will vary if you are in a high rise building or on a sloping site and can cause flow problems. Fit pressure regulator(s) to balance pressure across the site.

Meter Reading Record

Meter reading		Reading (m ³)	Water used	Activities using large volumes of water
Monday	Morning			
	Evening			
Tuesday	Morning			
	Evening			
Wednesday	Morning			
	Evening			
Thursday	Morning			
	Evening			
Friday	Morning			
	Evening			
Saturday	Morning			
	Evening			
Sunday	Morning			
	Evening			