WATER EFFICIENCY SELF-ASSESSMENT

PURE UTILITIES

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Water Efficiency Self-Assessment

Customers should work through the following step-by-step guide to assess their water efficiency. When the answer to a question is "No" customers should make a note of any actions required to help achieve maximum water efficiency. Once the Assessment has been completed, look back through the list and address any issues raised.

Your current weekly consumption (units):	

1. Know your water use

The first step towards improving water efficiency should be to understand your current usage.

• Do you check your bills regularly?

ANSWER	Recommended Actions	Notes
Yes	Note any changes in water use.	
No	Check your previous bills to determine consumption trends.	

Your bills will reveal any trends in water consumption. An increase may indicate water is being wasted, possibly through a leak.

• Do you read your meter(s) regularly?

ANSWER	Recommended Actions	Notes
Yes	Note any changes in water use.	
No	If you can access your water meter(s), check it/them regularly.	

Isolating individual production areas by installing sub-meters can determine where and how water is used on a site, helping to identify where efficiency improvements can be made.

• Do you check water use in remote buildings?

ANSWER	Recommended Actions	Notes
Yes	Note any changes in water use.	
No	Regularly check remotely located buildings and pipe-work so leaks or appliances left turned on, don't go unnoticed.	

• Do you log your water consumption?

ANSWER	Recommended Actions	Notes
Yes	Note any changes in water use.	
No	For information on how to get a data logger installed or advice on how to install your own logger, please contact PURE Customer Services.	

PURE can install a data logger on your meter, providing continuous graphical consumption information to enable you to better understand your water usage.

2. Benchmark

• Is your water use similar to other businesses in the same industry?

ANSWER	Recommended Actions	Notes
Yes	Keep looking for opportunities to reduce your water consumption.	
No	Try to understand why your site is using more water. Look through the best practice measures such as Steps 3-15 below. PURE may be able to provide an on-site assessment, see the 'Further Assistance' section below.	

Typical usage for an office or factory (for non-process water) is about 9,000 litres per person per year, but volumes of less than 6,000 litres are regularly achieved. There are several other benchmarks available for different types of business.

• Is water usage similar to your Company's other sites?

ANSWER	Recommended Actions	Notes
Yes	Keep looking for opportunities to reduce your water consumption.	
No	Investigate why a site is using more or less water than another comparable site. As outlined in Steps 3 – 15 below, is it due to best practice measures? PURE may be able to provide an on-site assessment. See the 'Further Assistance' section below.	

If you have multiple sites, compare their water consumption to identify best practice for water use. This can be done on a per employee basis or using another measure such as floor size, turnover or number of products produced. There are a number of organisations offering benchmark figures, see the 'Further Assistance' section below.

3. Check for leaks

• Are you sure no water is leaking from your underground pipe-work or internal plumbing?

ANSWER	Recommended Actions	Notes
Yes	If you suspect you have an underground leak on your pipe-work and PURE is your water supplier contact us via email; **reportaleak@pureutilities.co.uk**	
No		

4. Reduce water use for toilet flushing

• Are the WC cisterns operating efficiently?

ANSWER	Recommended Actions	Notes
Yes	Where dual-flush cisterns are installed, place a clearly visible notice to explain how to operate both flushes to prevent incorrect operation and waste. New toilets may have overflows or leaks that discharge directly into the pan which may not be noticed or reported. Identify toilets with internal overflows and regularly check for faults. The easiest way to detect an overflowing cistern is to pour toilet cleaner around the pan and watch to see if it clears from the back of the bowl.	
No	Reduce the amount of water used for each toilet flush by inserting displacement devices in the cistern. Alternatively, old style single-flush toilets can be replaced with more water-efficient models.	

The largest proportion of water used within an office is for flushing the toilet so there are large potential savings to be made by reducing flush volumes. Older cisterns may use up to 13 litres of water for every flush, compared to flush volumes of 6 litres or less for new models.

5. Reduce water use for urinal flushing

• Are your urinals operating efficiently?

ANSWER	Recommended Actions	Notes
Yes	Urinals can use considerably less water than flushing toilets, so ensure adequate numbers are installed in all male toilet areas.	
No	There are many possible options to reduce water usage, such as infrared controls or simply adjusting the flush frequency.	

Automatic flushing of urinals when they are not being used is a common waste of water. For an office with a 40-hour working week, urinals with automatic flushing will flush 76 per cent of the time when the building is unoccupied.

Example:

Water regulations state urinals should use no more than 10 or 7.5 litres per bowl per hour (for single or multiple bowls), but in practice many urinals use higher rates. A urinal that flushes 9 litres of water, every 15 minutes, 24 hours a day, 365 days of the year, will use 315,000 litres a year. This compares to 66,000 litres a year if it flushes at a rate of 7.5 litres per hour, saving 249,000 litres of water or £6,151 a year in water and waste water treatment costs.

6. Reduce water use from taps

• Are taps always turned off?

ANSWER	Recommended Actions	Notes
Yes	Place suitable notices reminding staff to continue to turn taps off after use.	
No	Fit self-closing push taps and hoses to prevent waste.	

A tap left running can waste over 1,000 litres an hour. Even a small 5mm stream from a single tap will waste 60 litres an hour or 526,000 litres a year at a cost of £1,300.

• Do taps turn off completely?

ANSWER	Recommended Actions	Notes
Yes	Place suitable notices reminding staff to continue to turn taps off after use.	
No	Fix or replace any leaking taps – a tap dripping once a second can waste 10,000 litres a year, costing nearly £25 per year, while a replacement tap washer only costs a few pence.	

• Is the flow of water from taps appropriate?

ANSWER	Recommended Actions	Notes
Yes	Reduce the flow by fitting water-saving aerators or in-line servicing valves with flow restriction, which reduce waste and make maintenance easier. Spray taps can reduce water use by 60 - 70% compared with conventional taps. In the case of hot water taps, reducing water will also result in energy savings.	
No	Adjust the water flow, fix or fit new taps as necessary.	

Taps often run at 10-20 litres per minute flow rate, while 6 litres per minute is adequate.

Example:

A cold tap used 20 times a day for a period of 15 seconds at a flow rate of 12 litres a minute will use 22,000 litres a year. Fitting a tap aerator to reduce flow to 6 litres a minute costs just a few pounds and would save about 11,000 litres *and* reduce water and sewerage charges.

7. Reduce the flow of water from any on-site showers

• Is the flow of water from showers appropriate?

ANSWER	Recommended Actions	Notes
Yes	Where showers are used frequently, push button controls, proximity sensors or time mechanisms help reduce waste.	
No	If the shower fills an 8-litre bucket in less than 40 seconds (i.e. a flow rate of 12 litres per minute or more), you could benefit from replacing the showerhead with a water-efficient model or fitting an in-line aerator.	

8. Make washing more efficient

• Is your washing done efficiently?

ANSWER	Recommended Actions	Notes
Yes	Place suitable notices reminding staff to continue to operate washing machines only when they are full.	
No	Run your clothes washer, dishwasher or glass-washer, only when the machine is full. If you have to do a wash, match the programme to the size of the load. If your dishwasher is new, cut back on rinsing – newer models clean more thoroughly than older ones. If your dishwasher is old, check it doesn't leak.	

9. Make processes more efficient

• Are your industrial processes using water efficiently?

ANSWER	Recommended Actions	Notes
Yes	Perform regular checks and audits to ensure this continues to be the case or consider using a Third Party water efficiency assessment to check your processes.	
No	Consider how water is used throughout your processes. Optimise your cooling systems and water softeners to save both water and chemicals.	

10. Consider re-using process water

• Do you recycle water?

ANSWER	Recommended Actions	Notes
Yes	Great. There are many processes that don't need to use high-quality drinking water, so continue to recycle water where-ever it is safe to do so.	
No	If you use large amounts of water in a commercial process, we may be able to help you to become more efficient and can advise on water reuse. Visit our website for more information or contact PURE Customer Services.	

11. Know where the Stop Tap is located

• Do you know what to do in the event of a leak and where the Stop Tap is located?

ANSWER	Recommended Actions	Notes
Yes	Great, but your colleagues may not. Place suitable notices so other staff can quickly identify where the Stop Tap or Stop Cock is located. This could save water and prevent damage to your premises in the event of a burst pipe.	
No	Locate your Stop Tap and tell your colleagues where it is. It's usually where the service pipe enters the building. You can close the Stop Tap by turning it clockwise.	

12. Reduce watering of gardens and grounds

• Has water use for garden and grounds been minimised?

ANSWER	Recommended Actions	Notes
Yes	Continue to use rain-water caught in water butts or use recycled water, where it is safe to do so.	
No	For landscaped areas choose plants that don't need much watering. Use water saving products such as water retention granules. Learn how to shut off your automatic watering system in case it malfunctions or you get an unexpected rain. Install water butts to catch and store rain-water.	

13. Buy water-efficient equipment

• Is your equipment using a minimum of water?

ANSWER	Recommended Actions	Notes
Yes	Great, but continue to check equipment efficiency and ensure no leaks or faults have developed, which could lead to water loss.	
No	Specify low water consumption for any new appliances, fittings or processes. High-pressure jet spraying equipment can use less water than conventional hoses, as they use pressure to clean, instead of a large volume of water. Some vacuum pumps require water for lubrication and flushing, so consider installing alternative pumps.	

14. Insulate pipes

• Are your pipes sufficiently insulated?

ANSWER	Recommended Actions	Notes
Yes	Fine, but check regularly the insulation is in good condition, there are no gaps or splits and is doing its job properly.	
No	Protect against cold weather-related bursts by insulating pipes. If hot water pipes are insulated, there should be a more immediate delivery of hot water at the tap and produce energy savings.	

15. Create a plan to reduce water usage and review it annually

• Are your staff and colleagues aware of the need to conserve water?

ANSWER	Recommended Actions	Notes
Yes	That's good news for your business and the environment, but no-one should become complacent about water consumption or how much it costs. Review your water usage at least once a year or contact PURE for help to do this.	
No	Educate all staff on water efficiency initiatives and get support from management. Look at how to incorporate initiatives into your wider operational and environmental policies.	

Note your weekly water consumption after implementing the measures above (units):	

Further Assistance

PURE may be able to provide an on-site water efficiency assessment which will include a review of water used by your toilets, taps and other non-process water use. The assessment will identify any opportunities for saving water and will quantify these, where possible, in financial and volumetric terms.

For more advice on water efficiency measures or to request a water efficiency assessment, contact PURE Customer Services in our UK-only call centres.

Useful Contacts

PURE / Pure Utilities

Visit us online at: **www.pureutilities.co.uk**
Call us on: **(TBA)**
Email us at: **enquiries@pureutilities.co.uk**

Approved plumbers

Should you require assistance to repair or replace internal pipes, fittings or appliances there are several online sites that will help you find and contact a suitable company such as:

www.mybuilder.com/plumbers/in/uk

Capital Allowance Scheme

The enhanced capital allowance scheme can help you to choose and fund water efficient devices to upgrade your premises. Look online at;

www.eca-water.gov.uk

Advice and benchmarking

Envirowise offers free, independent support to organisations to help them become more resource efficient and save money. For instance, customers can compare their water use with other businesses in the same industry, using the Envirowise benchmarking tool.

Find them online at;

www.envirowise.gov.uk