

# Reducing water wastage and adding value for your clients

by Adrian Cole, Environwise Programme Manager

## Why should businesses be concerned about water wastage?

Over the last decade the demand for water in the UK has reached unprecedented levels. However, many companies are still wasting large amounts of money each year through poor water management.

UK industry and commerce uses a staggering 1300 million m<sup>3</sup> of water every year, which is three times more than the quantity needed. This wastage is contributing to a 'desert state' in Britain with Environment Agency figures showing there to be less water per head in the South East of England than in countries such as Syria and Sudan.

Even a single dripping tap can waste up to 26 litres of water a day, at a cost of more than £750 a year. And in industrial firms something as seemingly harmless as a hose left running to drain all day can cost a business as much as £46,500 annually.

As members of the IPHE you are ideally placed to provide best practice advice on water conservation to your business clients. Not only does this add value to the service you can offer, but could aid business development through building stronger client relationships.

## What are the business benefits of conserving water?

Reducing the amount of water used can make significant savings to a company's bottom line. When considering the cost associated with water use, firms may only consider the payment required for the water coming onto their site. In fact, this only represents around half of what a firm will be paying because the water company also charges for the disposal of this water as effluent.

Our experience shows that sites which have not previously examined their water consumption can usually achieve around 30 per cent savings on water and effluent bills immediately, by implementing simple water management measures. This could equate to a saving worth over £300million across UK industry and commerce. In some businesses significant savings of up to 80 per cent on water and effluent bills can be achieved.

The true cost of water, however, is higher than the supply and sewerage charges alone. In addition there may be costs for water treatment including purification or softening. The true cost of water should also include the energy taken to heat and deliver the water in a building. These other costs are important additional considerations when thinking about the business benefits of conserving water.

## What steps can the average office take to save water?

There are a number of practical actions that an office can take to reduce water usage in their kitchens, washrooms and toilets. These include:

- Turning off taps fully - a 5 mm stream of water wastes 528, 000 litres (528 m<sup>3</sup>) of water a year. This could cost between £250 and £705 annually.
- Fitting push-button taps can save up to half the water used through conventional taps.
- Fitting a water displacement device such as a cistern bag – these are supplied free by most water companies.
- Fitting an automatic flush controller on urinal systems to ensure that the cistern flushes only during office hours or after use. These can reduce water use and costs by 50 per cent.
- Checking pipes for leaks which can be expensive and can also cause damage to the building.
- Contacting your water services provider which can supply you with a range of water saving tips.

## What action can industrial firms take?

Water use costs UK industry about £1,014 million each year so there is significant scope for substantial cost savings to be made. Many factories, for example, use high volumes of water during the production process and in boiler rooms. Water wastage can also occur in staff canteens and during the washing of delivery vehicles. Envirowise has helped thousands of businesses improve efficiency by reducing water consumption. For instance, a brewery made savings of £36,000 a year after investing just £2,500 on improved water metering. Water metering enables a business to understand and manage water and effluent use efficiently. Similarly, re-using acid and water to clean production equipment is saving a creamery thousands of pounds on effluent costs, chemical costs and water costs.

Industrial businesses can reduce water consumption by:

- Switching off water supplies when they are not needed.
- Avoiding overflows and eliminating leaks.



WTL approved electronic mixer tap 886V - Picture courtesy of Pegler Limited'

- Fitting flow restrictors and automatic shut-off devices.
- Providing training and clear instructions for operators.
- Avoiding unnecessary cleaning.
- Sweeping up slurries rather than using a hose.
- Re-using or recycling wash or rinse waters.
- Using natural convection or forced air cooling instead of water cooling where appropriate.
- Using process wastewater as cooling water.

### What is the Water Technology List and how can it help?

The Water Technology List (WTL), developed and managed by Defra and HM Customs & Revenue in partnership with Envirowise, offers a real incentive for businesses to invest in technologies that promote the efficient use of water by offering tax relief through the Enhanced Capital Allowance (ECA) scheme.

Modelled on the Government's ECA scheme for approved energy saving products, the initiative allows businesses to write off 100 per cent of investments in qualifying water technologies and products against taxable profits in the year of investment. For example, if a company paying 30 per cent corporation tax invested £1,000 in eligible equipment, then their tax relief would be worth £300.

The WTL details the technologies and products that can qualify for ECAs within specific categories, such as efficient toilets and taps, leakage detection equipment and flow controllers.

Businesses often see water as a fixed operating cost and seldom make a link between environmental responsibility and financial gains from water efficiency. But by investing in WTL products and operating a more structured and long-term water sustainability project, savings on water and effluent bills can potentially exceed 50 per cent.

To find out more about purchasing products on the WTL, or to see a full list of qualifying water saving technologies, you can visit [www.eca-water.gov.uk](http://www.eca-water.gov.uk).

### How else can businesses become more resource efficient?

Cutting waste is not just about fixing leaky taps.

Around 87 million tonnes of solid waste goes to landfill each year so the challenge for us is to encourage firms to move away from a culture of waste disposal to one of waste efficiency i.e. so they consider reducing, re-using and recycling their waste. We have helped thousands of businesses do this and they have become more profitable as a result.

Using energy - electricity, gas, etc - efficiently can also reap significant cost savings. This can be achieved relatively simply by using timed switches and movement detectors to prevent lighting or equipment operating out of hours or in little-used areas. Using energy efficient lighting, such as compact fluorescent lamps, can also reduce energy consumption by 70 per cent.

### What is the best way for a business to get started?

As a first step, businesses can log on to:

[www.maximiseprofit.org.uk](http://www.maximiseprofit.org.uk) and use the Envirowise online savings calculator to see how much they could save through improving resource efficiency. Companies are asked to input a few simple details about their resource costs and are often surprised by the level of savings that can be made.

The website also includes a number of useful guides that can be downloaded free by clients wanting more information – simply click on What Next? at the top of the page. These include a guide to the Envirowise Green Efficiency campaign which has successfully helped office-based businesses to use paper, water and energy more efficiently and save money. The guide helps firms quantify current practice and take practical actions to reduce waste.

### What is a FastTrack visit and how can it help?

Businesses can also access free expert advice on how best to reduce waste, increase resource efficiency and boost profits by signing up to a confidential on-site FastTrack visit. An Envirowise specialist will spend up to a day working with the company to produce a tailored waste minimisation plan, including suggested actions and savings targets, including water savings.

IPHE members and their clients can access more information about Envirowise and the FastTrack visits by going to [www.envirowise.gov.uk](http://www.envirowise.gov.uk) or by phoning the confidential Environment and Energy Helpline on 0800 585 794.

If you are training for a career in the plumbing and heating industry and wish to know more about membership of the CIPHE, please phone the Membership Department on 01708 463108 or email [membership@ciphe.org.uk](mailto:membership@ciphe.org.uk).

