

# Just where is the water going?



A handy guide for saving water and money for schools, offices, hotels and more when using water for domestic purposes.

love every drop  
anglianwater  
Wholesale

# Savvy ways to save water

Our region is a beautiful and busy one, and we're proud to supply safe drinking water to:



**4.3 million of you ...**

But our precious water resource is being squeezed from all angles - due to a growing population, ever-increasing demand and the lowest rainfall in the country.

And when something is precious to you, you do everything you can to protect it. That's why we're tirelessly looking for better ways to save water.

## What's inside

Helping you follow every drop



**01.**

Working out how much you really use and tips to use less



**02.**

Building your water saving action plan



**03.**

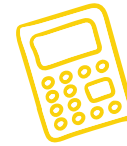
Stopping water going to waste - checking for leaks

We may be the best leak-finders in the business, but we're still investing **£22 million** every single year to stop water going to waste.



And you can do your bit too. There are small changes we can all make that can add up to a big difference for you, your bills and the environment.

If you're worried about the amount of water you're using or simply want to use less, this leaflet has practical tips to save water and a simple step by step guide to check for leaks, helping you make sure both money and water aren't going to waste. Plus, there's all the details you need to get in touch so we can work together to find even more ways to save.



## Working out how much you really use

How much water you use is affected by three things:

01. The number of people using the property
02. What you do and how often you use your appliances
03. The general condition of your pipework and efficiency of appliances and equipment

## Where the water goes in a typical office

Here's where the average office uses most water:

Flushing the toilet	43%
Washing	27%
Urinal flushing	20%
Canteen use	9%
General cleaning	1%



## Swimming Pool?

Other than the water in the pool, water is used elsewhere to operate and maintain a swimming pool too including:

Fresh top up to replace evaporation losses from the pool surface

Backwashing sand filters

Pool and pool deck cleaning

Showers

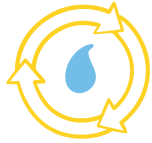
### Quick tip

To minimise losses due to evaporation:

- Keep the air temperature up to 1°C greater than the water temp (up to 30°C)
- Keep the relative humidity at between 50% and 70%
- Use a cover when the pool isn't being used



# Our top tips to use less water



**01.** Check the flush frequency on urinals. Depending on how often it's used, flushing once every hour may be enough to keep it fresh without wasting water.



**04.** If you're using a hose, make sure it's turned off when you're not using it to stop water going to waste or use a trigger hose with an automatic shut off.



**02.** In the kitchen - only boil what you need when putting the kettle on. Think about popping a jug of water in the fridge so you don't need to run the tap for a cool drink.



**05.** A dripping tap may not seem like a lot of water, but it can waste up to 6 litres every day.



**03.** Check for leaky loos, place a piece of toilet paper on the back of pan. (Leave it for 30 minutes and if the paper is wet when you come back the cistern is probably leaking.)



**06.** Check the timer frequency on sensor taps, are they on for longer than they need to be? Include them as part of your general maintenance plan.

## Use less hot water to save even more

All businesses use hot water, whether for domestic use like the hot tap and showers or for business processes. By using less hot water you'll not only save on your water bill, but you'll also save on the energy costs for heating the water too.



To calculate the full cost of hot water, as well as your unit cost for water you'll also need to know:

The amount of energy needed to heat your water

The unit cost of your fuel (pence/kWh)

$$\text{Energy (kWh)} = V \times (T2 - T1) / 860$$



### Where:

- V** Volume of water heated (litres)
- T1** Temperature of water to be heated (if unknown, assume 12°C)
- T2** Required water temperature in the tank or boiler (°C)
- 860** Conversion factor to convert kcal to kWh (860kcal/kWh)

The cost of your heating fuel is often invoiced as pence per kWh (p/kWh).

If oil use is given at p/l or gas as p/m<sup>3</sup>, you will need to use a conversion factor (which should be given on the invoice) to calculate p/kWh.

To calculate the cost of heating your water, multiply the amount of energy required for water heating (from the calc above) by the cost per unit.

To allow for boiler efficiency, a factor has to be applied to this figure to work out the true cost of heating your water.

**Cost of heating water (pence) = Energy required (kWh) x unit cost of fuel (p/kWh) / Boiler efficiency**

**For standard boilers** (efficiency 80%) use a factor of 0.8

**For condensing boilers** (efficiency 90%) use a factor of 0.9

**For electrical heating** e.g. immersion heater use a factor of 1

### Reducing your carbon impact

By using less water, you can reduce your carbon footprint too. While the carbon footprint for supplying and treating water is relatively low, carbon is produced at the treatment works and for pumping the water through the water distribution network.



### Annual Greenhouse Gas values - 2020 per Megalitre

KgCO<sub>2</sub>e per Ml water treated: **224**

KgCO<sub>2</sub>e per Ml recycled water: **432**

KgCO<sub>2</sub>e per Ml recycled water, flow to full treatment: **220**

\*Anglian Water Greenhouse Gas report 2020



## Your water saving action plan

Here's a few simple steps to get on top of how much you're using:



Find your meter and read it.



Track your usage and check your water bill.



Identify where you are using water and how much in each area by creating a water balance.



Calculate the true cost of water once it's been heated/treated.

Your retailer can help you do this or use the guide on the previous page.



Work out which area to target first.



Investigate what devices and practices can help you save water.



Measure the improvements you have made.

## Water balance

A water balance helps quantify where water enters and leaves your business and helps to find leaks, where to focus to maximise water savings and enables you to understand and manage your water use (and effluent) efficiently.



## Want to save bucketloads of water?

Speak to your Retailer who'll be happy to help you find ways to use less water. They may be able to help you find a plumber to fix any problems you find too.

Plus you can find lots of helpful information about how to use less water online at: [wrap.org.uk/content/rippleffect-resources-page](http://wrap.org.uk/content/rippleffect-resources-page)

**Water Technology List:** [wtl.defra.gov.uk](http://wtl.defra.gov.uk)

**Waterwise:** [waterwise.org.uk](http://waterwise.org.uk)

**Environment Agency:** [gov.uk/environment-agency](http://gov.uk/environment-agency)

**Energy Technology List:** [etl.decc.gov.uk](http://etl.decc.gov.uk)

**Energy Saving Trust:** [energysavingtrust.org.uk](http://energysavingtrust.org.uk)

**Carbon Trust:** [carbontrust.co.uk](http://carbontrust.co.uk)

**Market Transformation Programme:** [efficient-products.ghkint.eu](http://efficient-products.ghkint.eu)

**Resource Efficient Scotland:** [resourceefficientscotland.com](http://resourceefficientscotland.com)



# Whose pipe is it anyway?

## And who looks after it?

In most cases Anglian Water Service Ltd are responsible for the pipes from the water mains up to your property boundary and the external stop tap or meter if it's inside your property boundary (blue pipe).

You're responsible for the rest of the pipe that runs from the stop tap to your door and any repairs that need to be made (yellow pipe).

There are a few occasions where your responsibility can extend beyond the boundary of your premises.

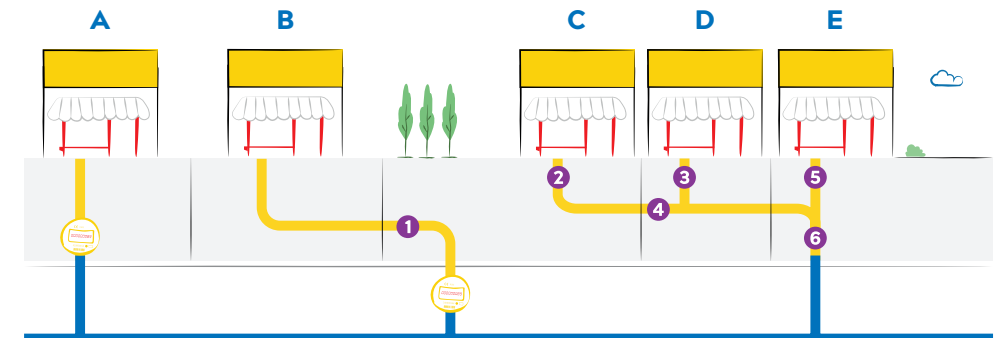
For example where the private supply pipe is within the boundary of another property, you're responsible for that section of pipe.

For a shared supply pipe, responsibility and costs for maintenance or repair are shared between the properties.

If there's a leak on the internal pipework or the pipe that supplies water to your premise, you (or your landlord if you rent) are responsible for fixing it.

Pipe	Responsibility
1	B
2	C
3	D
4	C D
5	E
6	C D E

 Customer responsibility  Anglian Water responsibility

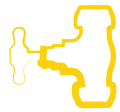




## Checking for leaks:

Before you start any checks, you first need to make sure you're not using any water, this includes things like filling the kettle or flushing the toilet **for at least 10 minutes before carrying out the tests.**

Otherwise the storage tank might still be filling up if you carry them out straight away.



## Step 1: Check your internal stop tap is working

It's important to locate and isolate your internal stop tap or equivalent to allow you to complete the checks on your water supply. To make sure the internal stop tap stops the cold water supply into the premises, turn it to the off position and then turn on the cold tap at a nearby sink.

If the internal stop tap is working, the water flow will stop after a few seconds when you turn on the tap. If it doesn't then you will need to arrange to have it repaired. (Contact your Retailer who may be able to provide you details of an approved plumber near you who can help).



## Step 2: Finding and reading your water meter

### Where to find your water meter

Most water meters are fitted in the footpath or close to the boundary of your property.

This allows readings to be taken without disturbing you. In some cases your meter may be fitted inside your property. Please try and keep access to the meter clear at all times.



### Useful tips

Each water meter has its own unique serial number which is also printed on your water bill.

Please check this number against your bill to make sure you are looking at the right meter.

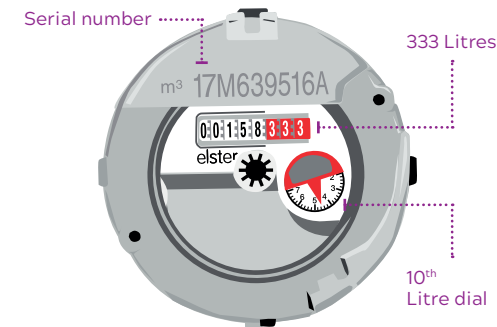
It's important to make sure you put the meter cover back correctly to stop anyone tripping or falling over it.

If you are unable to locate your meter or do not have safe access please contact your Retailer for help.

# How to read your water meter

After finding the water meter chamber, lift the lid of the outer cover (you may need to use a tool like a screwdriver to help you do this) and remove the polystyrene frost cover (if necessary) to see the front of the meter.

## Standard meter

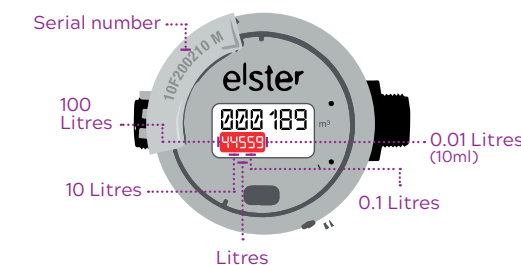


**Example**  
0 0 1 5 8 3 3 3  
158 cubic metres

On the front of the meter, you'll see eight digits. The first five white digits indicate cubic metres (1 cubic metre = 1,000 litres or 220 gallons). The last three red digits are units of 10 litres and will turn quickly when water is being used. Only the cubic metre figures (the white ones) will be used for your bills.

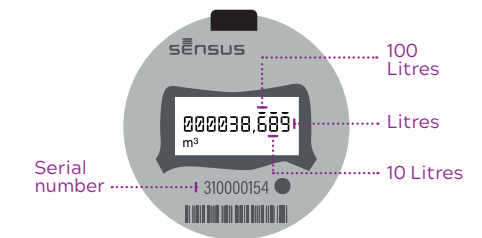
In the example on the left, the meter reading is **158 cubic metres**. You will also see a 10<sup>th</sup> litre dial on the meter face. When water is being used, it will spin around rapidly. This will be helpful when you're doing the tests in **Steps 3 and 4**.

## Digital meter



For **Elster meters** on the LCD screen, you'll see a series of six large digits showing full cubic metres used and a smaller series of numbers in a red box showing litres used.

**Example**  
0 0 0 1 8 9  
189 cubic metres  
4 4 5 5 9  
44559 litres



For newer **Sensus meters**, the numbers on the left show cubic metres used and the last three digits on the right hand side (after the comma) show the number of litres used.

**Example**  
0 0 0 0 3 8  
38 cubic metres  
6 8 9  
689 litres



### Step 3: Check overnight usage (Internal leak test)

Most properties use much less water overnight, possibly none at all. To check this, take a meter reading as described in **Step 2**.

- Ideally the reading should be taken when business closes for the day.
- Make sure that none of your appliances are operating overnight.
- Take a reading again first thing in the morning before any water is used.
- Compare the two readings - if the readings differ by more than 10 litres, then it's possible that you could have a leak or faulty appliance.

To test for a leak, follow **Step 4**.



It's possible that the leak could be at the meter itself, in which case we'll arrange for this to be repaired for you.

**For a more detailed check or any queries, call us on 03457 145 145.**



### Finding leaks Small leaks can be difficult to spot.

The only way to check is to watch the meter for **two minutes**.

If any movement or reading is recorded within that time, we recommend watching the meter for a further **10 minutes** and taking readings to measure it.

Depending on the type of meter you have the easiest way to see if you're using water is using the 10<sup>th</sup> litre dial on your meter.

**See page 8 for an explanation of the water meter face.**



### Step 4: Carrying out an external leak test



**01.**  
Turn off the internal stop tap.



**02.**  
Find your meter and take a reading - make a note of all the numbers.



**03.**  
Wait 30 minutes and take a second reading.



### Is there any change or movement between the two readings?

If **yes** and the two readings are different - **go to Step 4a**

If **no** and the readings are identical - **go to Step 4b**

#### Step 4a:

If the **two readings are different**, this indicates a leak on your supply, and you'll need to arrange for this to be repaired and please advise your Retailer.

It's important that this is carried out as soon as possible. Once repaired, take two meter readings, two weeks apart and let us know if this has fixed the problem.

#### Step 4b:

If the two readings are identical you don't have a leak on your supply pipe.



**Quick tip:** Your water bill should have your Retailer contact details.

# We're here to help

Find out how to reduce the amount of water you use or how to spot and fix leaks.

Visit: [anglianwater.co.uk/checking-for-leaks](http://anglianwater.co.uk/checking-for-leaks)

**Contact your retailer?**

