Save Water and Money with the Water Label

What is this training about?

- It’s a guide to communicating to customers about:
  - The Water Label
  - Water saving/water efficiency
  - Water saving bathroom products (showers, taps, toilets and baths)

What is this training about?

- Who is this training for?
  - Retailer and plumbers/trade merchants staff
  - Manufacturers and trade associations
  - Other organisations interested in the Water Label and water efficiency
- It will help retail staff and plumbers/ installers:
  - Understand the new labelling scheme for bathroom products
  - Give customers key information and messages about:
    - the Water Label
    - saving cost through efficient water use at home
    - water saving products

Training overview

1. The Water Label
2. Water efficiency
3. Water efficient products
4. Technical information (for plumbers)
5. Consumer insights
6. Messaging: what to tell customers
7. Further information

Section 1: The Water Label

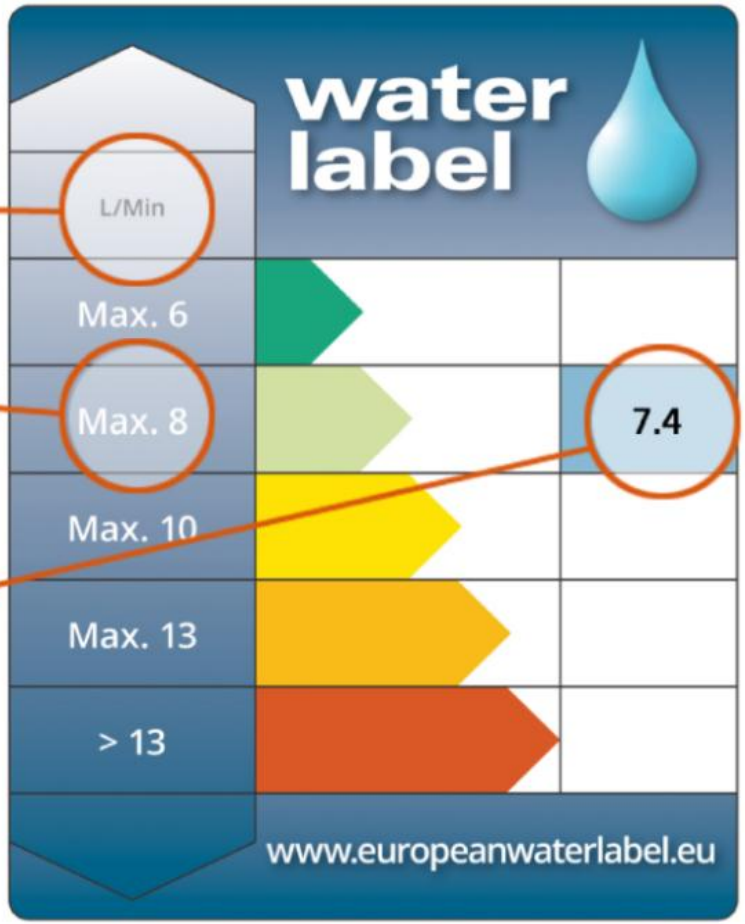
About the Water Label

- The Water Label is a voluntary scheme to help people buy water-efficient products
- It is being introduced to bathroom products across Europe and thousands of products are registered
- It lets you know ‘at-a-glance’ the amount of water a product uses
  - Efficient products use less water and save energy as less water is heated – saving customers money

Research shows that once aware of it, people intuitively understand the Label - because of the similarity with other energy labels

The Water Label explained

- The water label shows the amount of water the product uses
- Products are grouped into colour-coded performance bands depending on how much water they use
- The smaller the arrow, the more water efficient the product - green is the most efficient



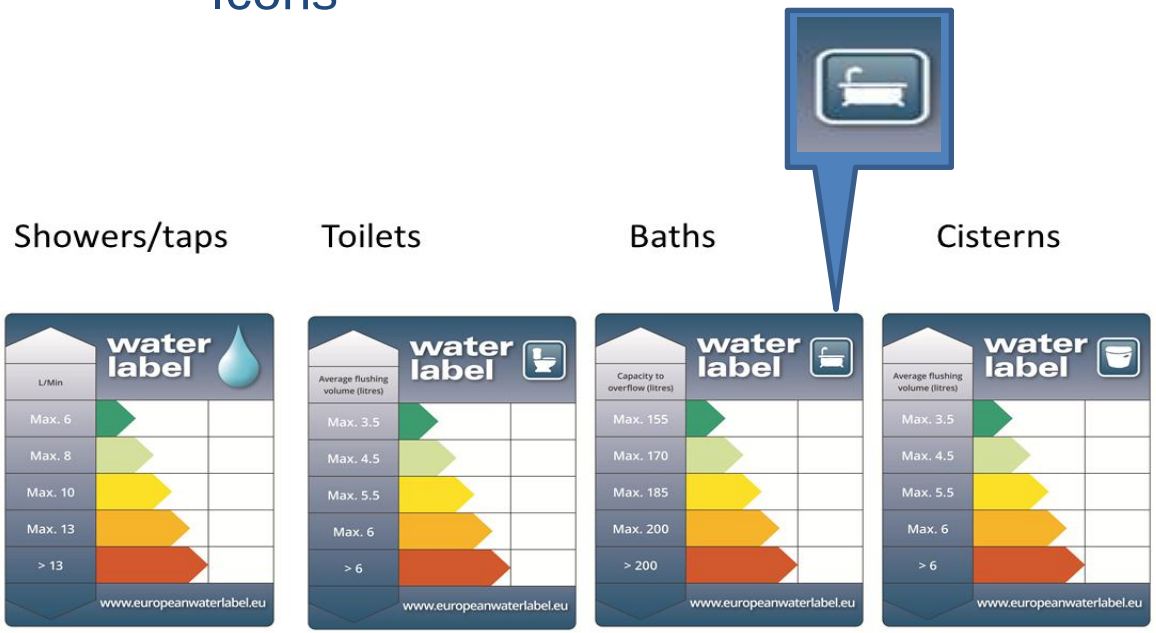
Which products are covered?

- The Water Label covers 12 different product categories
- 4 main products categories (relevant to the bathroom sector) are covered by the current communication materials:
  - Basin taps
  - Showers
  - WC suites (toilets)
  - Baths

82% of people said it would be useful to have information about how water efficient each product is so they could compare them easily

Water Label product icons

- Each product group has different
  - Types of measurement
  - Icons



Water Label: Types of measurement	
Product	Measurement
Baths	Total volume to overflow
Shower handsets	Litres per minute (L/min)
Basin taps	Litres per minute (L/min)
WC suites (toilets)	Litres per effective flush

Who’s involved?

Partners and Supporters

Section 2: Water Efficiency

Saving water is important

- Water is a valuable resource for both people and the environment. Climate change and population growth are increasing pressure on water resources.
- High rainfall in the UK does not stop droughts and hosepipe bans especially in S. England
- 81% of people agree the need to save water will become more important in the UK in the next 5-10 years

How much water do we use?

- People in the UK use an average of 142 litres per day
  - This is 50% more than 25 years ago
- 68% of our water at home is used in the bathroom
- Over 50% of households say they are trying to reduce their water use

Water saving by numbers

80 The typical number of litres of water used taking a bath

13 Older toilets can use up to 13 litres in a single flush

26 A short shower can use as little as 26 litres of water

6 Modern toilets can use just 6 litres or less

25% Up to 25% of your household heating bill is spent heating water.

£165 Is the amount an average family of four could save each year by replacing an inefficient shower head with a water efficient shower head.

Section 3: Water Efficient Products

Water efficient products

- 85% of people said that if price, design and specification were the same, they would prefer to buy a water efficient bathroom product

The Knowledge: Water efficient showers

- Up to 25% of a household’s energy bill is from heating water
- Efficient showers may use half the water compared to normal showers
- Aerators add air to the water to maintain a feeling of force whilst reducing the amount used
- Low flow regulators can help to use less water whilst maintaining a good flow
- Water efficient does not mean weak or poor performance

The Knowledge: Water efficient taps

- A running tap can use over 6 litres of water a minute
- Efficient taps put people in control and will still fill basins quickly when needed
- Aerated/regulated flow taps are suitable for basins
- Click point (dual flow) taps allow for low and high flow and are suitable for kitchen sinks
- Commercial products (timed or sensor taps) reduce wastage by switching themselves off

The Knowledge: Water efficient toilets

- 22% of water used in homes is flushed down toilets
- Old style single flush toilets can use over 13 litres of water per flush
- Modern toilets work just as well and can still clear the pan when needed
  - The pan is redesigned and the cistern reshaped
- Modern dual flush toilets allow a full flush of 6 litres and a reduced flush of 4 litres
  - Now more common are 4 litre full flush and 2.6 litre smaller flush toilets

The Knowledge: Water saving baths

- A bath can use up to 80 litres of water
- Water saving baths with curved sides and raised ends take less water to fill
- Compact designs also use less water
- Water saving baths are still roomy enough to give the same bath experience

Section 4: Technical information

Water pressure and supply systems

- Water pressure can have a major effect on performance and is very important in product selection
- There are two definitions of pressure:
  - **dynamic water pressure** is the pressure on the water supply piping system when one or more products (e.g. taps) are drawing water. The more products that are running, the lower the dynamic water pressure will be.
  - **static water pressure** is the pressure on the water supply piping system when no products are running
- Bathroom products can only use dynamic pressure i.e. the pressure available when water is flowing

Water pressure and supply systems

- Mains water pressure will only directly affect products connected to the mains pressure supply pipe
  - Mains water is usually supplied at a minimum pressure of 1 bar however, many homes have less than 1 bar due to low pressure
- The UK has a range of cold and hot water distribution systems - gravity, pressurised, combined or pumped
  - Water from gravity fed systems (cold water storage tank) will be supplied at a constant pressure, typically less than 0.4 bar at kitchen taps and often 0.2 bar at the shower
  - Higher pressure systems are more normal in newer buildings

Water pressure – impacts on products

- Taps, mixing valves and showers need a dynamic pressure of 0.1 - 3 bar for effective performance
  - Any less and poor performance will be apparent
  - Flow regulators, inline restrictors or aerated showerheads can reduce water use for products where flow rate dictates water use (e.g. in hand washing or showering)
- Aerated showerheads are mainly designed for high pressure (mains supplied) systems

Products suitable for different hot water supply systems

Types of fitting suitable for use on gravity hot water systems:

- Manual Mixing valves
- Venturi mixing valve showers
- Low Pressure & General Purpose Thermostatic mixing valves
- Low Pressure & General Purpose Taps & Mixing valves including Bath and Bath/Shower Mixing valves
- Twin ended pumps
- Integral pump power showers
- Pumped shower panels.
- Low Pressure digital and remote control mixer showers

High performance shower pumps deliver between 10 -20 litres/ minute at pressures of 1 -3 bar. Products for use with pumped supplies include:

- Integral Pump Shower
- High Pressure & General Purpose
- Thermostatic Mixing valves
- Pressure Compensating Mixing valve
- Manual Mixing valve
- High Pressure & General Taps & Mixing valves including Bath and Bath/Shower Mixing valves
- Shower Panels
- Shower Temples & Steam Cabins

Source: Bathroom Academy, 2011

Water supply systems – implications for customers

- Customers (or end-users) may not know what type of water supply system is installed in their property
- This may have consequences for the selection of the right taps, showers or toilets
- Different fittings work better on different types of systems and/or different pressures
- Customers need the correct advice and information (from staff or displays) to ensure they get the right fittings for their system

Impact of water heating systems

The main impact of the type of water heating system on the performance of water efficient products relates to the pressure at which hot water is delivered to a tap or shower

System boiler with a vented storage cylinder

- This combination delivers hot water under gravity at low pressure
  - It is unsuitable for use with any tap or shower requiring a high pressure for correct operation
- These systems can be boosted by the addition of a pump to supply a shower requiring higher pressure for correct operation

Impact of water heating systems

System boiler with an unvented storage cylinder

- This combination will deliver hot water under pressure and is suitable for use with most tap or shower fittings
  - These systems cannot be boosted by the addition of a pump
- Suitable products for use with unvented systems are:
  - Manual Mixing Valves
  - Low and High Pressure and General Purpose Taps and Mixing Valves including Bath & Bath/Shower Mixing Valves
  - High Pressure and General Purpose Thermostatic Mixing Valves
  - Pressure Compensating Mixing Valves
  - Shower Panels
  - Digital and remote control high pressure mixer showers
  - Shower temples and steam cabins

Impact of water heating systems

Combi-boilers

- Water must flow through the boiler (when a tap/shower is turned on) for it to heat the water
- Suitable products for use with combi-boilers include:
  - Low and high pressure and general purpose taps and mixing valves including bath and bath/shower mixing valves
  - High pressure and general purpose thermostatic mixing valves
  - Pressure compensating mixing valves
  - Shower panels
  - Digital and remote control high pressure mixer showers

What do I need to know to give advice on products?

Knowing the following information about a customer's water system is useful to give the correct advice:

General

- The type of water supply system
  - gravity/pressure/ combination of these/ pumped
- Type of hot water system
  - vented (low pressure) or unvented/combi (high pressure)
- Water hardness

Tap

- Water pressure (hot and cold)
- Flow rate at the available or specified dynamic water pressure
- Variations in supply pressure and volume of hot water available
- Length and diameter of 'dead leg'

What do I need to know to give advice on products?

Knowing the following information about a customer's water system is useful to give the correct advice:

Shower

- Water pressure (hot and cold)
- Flow rate (at the available or specified dynamic water pressure)
- Variations in supply pressure and volume of hot water available
- Available hot water temperature

Shower (cont/d…)

- The type of shower fitting currently installed (i.e. is the customer happy with it? Do they want the same performance)
- Type of boiler

Toilets

- Pressure in order to select correct inlet valve restrictor

Common product performance measures

There are a number of ways to measure product performance. The Water Label uses two but there are others:

The Water Label

- Flow (litres per min)
- Volume (litres per flush/bath)

Showers

- Flow (litres per minute)
- Durability
- Leak tightness
- Thermal performance

Taps

- Flow (litres per minute at the outlet)
- Durability
- Leak tightness

Toilets

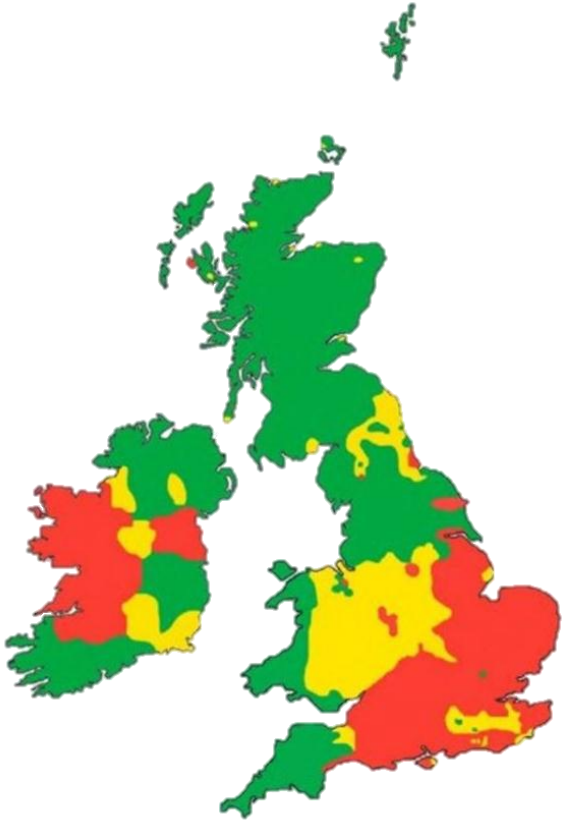
- Flushing volume (litres per flush – full flush and part flush)
- Leak tightness
- Flush performance (clearing)

Water hardness and water efficient bathroom fittings

- Over 60% of homes in the UK have hard water
- Hard water can affect water fittings by depositing limescale which can reduce flow or cause blockages

Customer advice:

- Carry out correct maintenance following the manufacturer's instructions
- Fit a softener/conditioning device



Water Hardness in the British Isles
Red = hard
Yellow = medium
Green = soft (Waterwise, 2006)

Section 5: Consumer insights

Consumer Insights: Water efficiency

- Many consumers already believe they need to save water and that they are doing what they can
- Consumers believe the UK has a lot of rain and trying to say otherwise is not well received
  - Messages linked to population increase, climate change and future security of supply are more positively received
- Messaging needs to focus on specific actions e.g. showering

Consumer Insights: Saving water, saving money

- Consumers want to know more about the money saving potential of saving water
- Most consumers will only benefit financially from saving water by using less hot water and having lower energy bills
  - However, the link between water and energy use is not clearly understood and needs explaining very simply.
- Consumers with water meters will save money on all the water they save
  - Cold (e.g. in toilets) as well as hot (e.g. in baths/showers)

More information on saving energy and water is available from www.energysavingtrust.org.uk and www.waterwise.org.uk

Consumer Insights: Water efficient products

- Consumers are interested in the technology and new products and want to know more
- Price and appearance
  - The most important factors in buying decisions
- Performance, performance, performance
  - Consumers are concerned that “water efficient” means lower performance and this is not the case
- Reassure customers to minimise concerns
  - Water saving products are easy to use
  - The performance is the same

Consumer Insights: The Water Label

- Once people are aware of it, the Water Label is intuitively understood - because of the similarity with energy labelling
  - Keep it simple – too much detail/technical information can confuse people
- To make it clearer and to appeal to people's motivation to save money, the 'bigger savings' flash is used on the Water Label. This tested well with consumers and plumbers

Section 6: Messaging

The key messages for consumers

1. The Water Label tells customers how little or how much water taps, showers, toilets or baths use
2. The more efficient the product is, the less water (and energy needed to heat that water) they will use
3. The less water they use (and heat up) the more energy and money they will save
4. They will notice the difference on their utility bills, but not on performance

Example consumer messages

Water Label:

What is the Water Label?

The Water Label tells you how little or how much water your taps, shower, toilet or bath use.
The more efficient the product is, the less water (and energy needed to heat that water) you'll use.

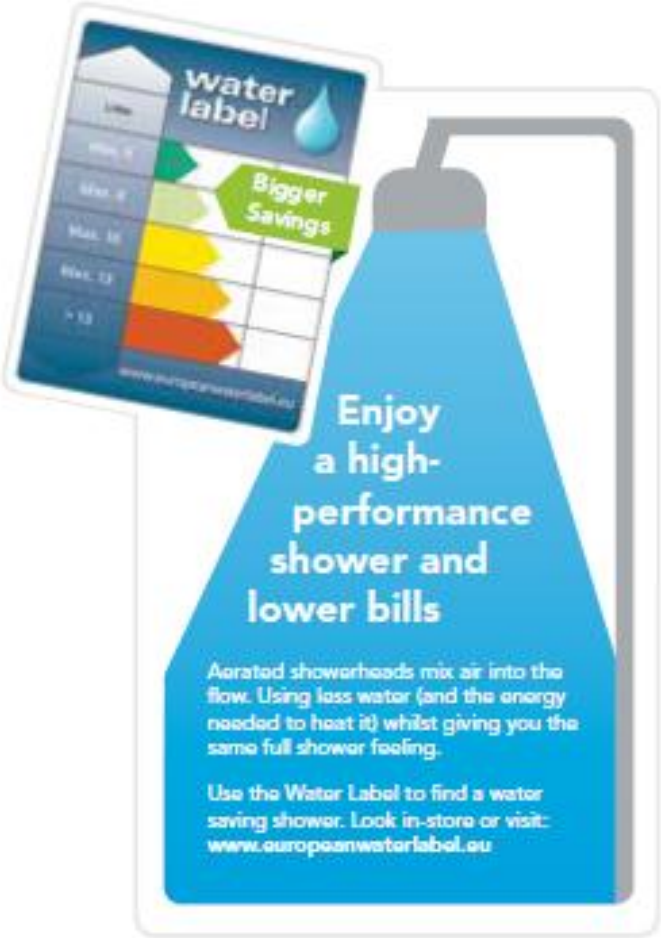
You'll notice the difference on your utility bills, but not on performance.

Look for the Water Label in-store or online:
www.europeanwaterlabel.eu

Example consumer messages

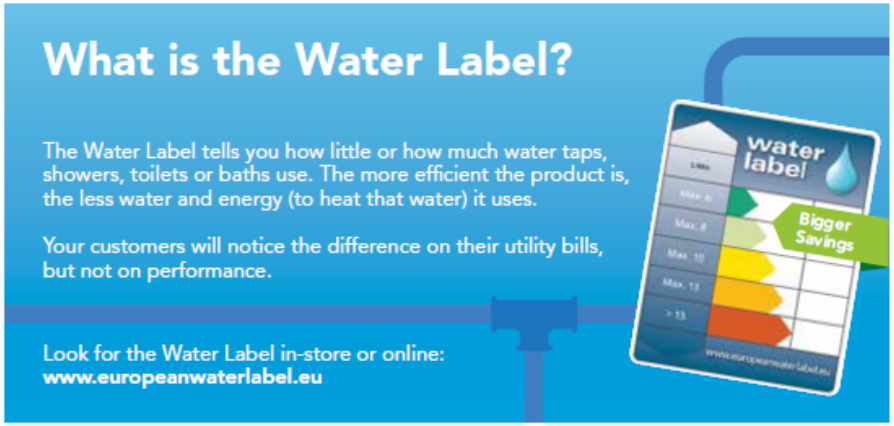
Water efficient products:

- Showers and taps



Example trade messages

Water Label:



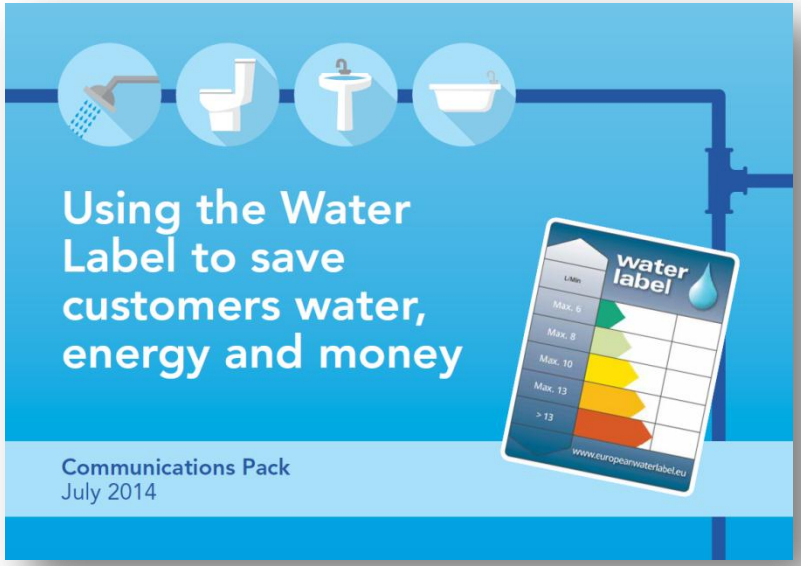
Example trade messages

Water efficient products:

- Toilets and baths

The Communications Pack

- A free communications pack to support the Water Label is available that includes consumer insight, more detailed messages and facts for customers, and ready to use adverts, posters and shelf-talkers
- The communications pack and materials can be accessed on the Water Label website



Contacts and further information

- For further information about the Water Label and a list of water efficient products:

  www.europeanwaterlabel.eu