Waterwise's Water Efficiency Strategy for the UK 1 Year on - how’s the UK doing?

November 2018

Water resources are under increasing pressure from climate change, population growth and the need to protect the environment. This has been recognised as we are seeing increasing ambition to reduce per capita consumption by government, regulators and water companies. Waterwise’s Water Efficiency Strategy for the UK has helped drive this ambition and provide the evidence to support policy changes.

The Strategy’s vision is a UK in which all people, homes and businesses are water-efficient.

This summary provides highlights from Year 1, priorities for year 2 and a summary infographic for several themes of the Strategy. For more information, please read the full Year 1 report¹.

Highlights from Year 1

During the last year we have seen the impacts of drier weather on the long-term water resources situation as well as resulting in levels of demand for water that haven’t been seen previously. June 2018 was the driest June since 1925, with a rainfall total for England of only 15 mm. In England, United Utilities applied for a hosepipe ban, then called it off. In Northern Ireland a hosepipe ban was implemented for three weeks. In Scotland, the sustained dry weather and heatwave conditions in 2018 resulted in less water availability and an increase in customer demand. Some of the key outcomes from the Strategy in Year 1 include:

- Reviewing per capita consumption (PCC) and water efficiency options in draft Water Resource Management Plans and providing evidence to support a PCC target in England
- Leadership Group on Water Efficiency and Customer Participation driving top-down buy-in to water efficiency in water companies and supporting national research on segmentation along with individual water companies trialling innovative behaviour change approaches
- For Waterwise cities, Strategy Steering Group members have researched design vs actual water use for new homes and provided evidence to government on changes needed in building regulations
- For products and labelling the ‘Independent review of the costs and benefits of water labelling options in the UK’ has been a major evidence project demonstrating the potentially significant impact of effective labelling, building regulations and product standards on PCC

¹ https://www.waterwise.org.uk/what-we-do/water-efficient-strategy/
• Under water company delivery and regulation we have seen successful pilots of customer incentives to reduce water use at the household and community scales as well as delivery of Waterwise training to build capacity across water companies
• We launched a Retailers Leadership Group for Water Efficiency and reviewed water efficiency services being offered by retailers as well as how wholesaler companies are addressing non-household water efficiency
• Steering Group members have been moving forward with integrated water management approaches

Our priorities for Year 2

• We will work to further join up water and energy efficiency across the UK, and work with government and industry on PCC targets
• We will take forward our ‘Waterwise - How and Why?’ programme for sustained, independent communication on water efficiency to underpin company programmes and campaigns
• We will undertake evidence research projects to inform policy development in relation to water efficiency in new households and non-households
• We will continue the work on water efficiency labelling with stakeholders and specifically address the issue of leaky loos
• We will work with retail and wholesale water companies on water efficiency for non-households and addressing barriers to this as well as developing evidence to support verification and incentive schemes
• We will undertake evidence research on the costs and benefits of water reuse at the individual building and development scale to support integrated water management.

Next steps

We have a new Chair of the Strategy Steering Group, Daniel Johns, and plan to build on the momentum we have developed towards more ambitious water efficiency across the UK. This will include scaling up the work within Waterwise to deliver research and evidence to support policy decisions as well as the ongoing work by individual Steering Group members, from water companies to regulators, in delivering the actions of the Strategy.

Our work would not be possible without our Supporters and Affiliates, who continue to fund our thought leadership and policy research in water efficiency, enabling us to drive ambition towards the Strategy’s vision of a UK in which all people, homes and businesses are water-efficient.
A. HOW FAR ARE WE FROM BEST PRACTICE?

PCC targets by the end of 2025: **131** litres/person/day

**6%** CO₂ emissions from water use in the UK

Scottish Water Energy Efficiency Campaign
‘Saving Water in Scotland? Really?’

- **420** Packs delivered during energy efficiency home visits
- **12** Climate Challenge Fund groups involved in delivering water efficiency advice
- **17,000** Packs delivered during wide range of customer engagements with Home Energy Scotland partnership

Results

- **112 MILLION** LITRES/DAY assumed water saved through engagements
- **500 TONNES** CO₂ EMISSIONS saved from reducing hot water use in the home

Scottish Water’s ambition: **for customers to be enabled and proud to use water wisely**

“**Now we shower in just under 5 minutes**”

“**It's got us thinking about water, increased awareness, changed habits**”

“**Knowing that it's helping save water is really good**”

Water Efficiency Strategy for the UK
Leadership Group Driving Change

Using water efficiency to drive a more customer-led sector and improve customer service. Working together, raising ambition, sharing best practice.

**Community incentives**

**Southern Water**
River Itchen Challenge initiative

- **115** Homes visited
- **319** Water-saving products installed
- **13** Leaks repaired
- **8%** Less water used across community

**Affinity Water - #TapChat**
Social media engagement

- **1632** litres total water saved
- **£28.54** average annual saving per person
- **89%** said they are more conscious of their water use in the home

**Household incentives**

**Northumbrian Water**
Using behavioural economics to incentivise participation in water saving programmes

- **£15** incentive resulted in **15%** increase in participation

**Thames Water** and Green Redeem
Non-financial rewards to help households save water on metered bills

- **0.5 - 2%** per household compared to baseline

**Anglian Water**
Working with UEA looking at social norms/nudges

**Simple** low cost strategies to drive behaviour change

**Anglian Water**
Turn the tap off initiative in conjunction with Aquafresh

- **7.57** litres reduction per household
- **60,726** litres overall saving over 3 week period

**Water Efficiency Strategy for the UK**
C. WATERWISE CITIES

Higher efficiency standard for new homes in the Anglian region to reach 110 lpd

- **23%** Fully adopted
- **53%** Planning to be adopted
- **23%** Not yet adopted

CURRENTLY, NEW HOMES BUILT TO: 125 lpd

AIM FOR ALL FUTURE NEW HOMES DESIGNED TO: 110 lpd

Forecast over next 25 years 500,000 homes will be built in the Anglian region. This is equivalent to 144 Ml/d.

FOR HOMES BUILT TO PART G 125LPD

<table>
<thead>
<tr>
<th>Region</th>
<th>Normal Usage as a Percentage of Design Limit (105 lpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWG Average for all areas</td>
<td>113.70</td>
</tr>
<tr>
<td>Northumbria Water</td>
<td>108.75</td>
</tr>
<tr>
<td>Essex &amp; Suffolk Average</td>
<td>121.08</td>
</tr>
<tr>
<td>Essex</td>
<td>124.26</td>
</tr>
<tr>
<td>Suffolk</td>
<td>118.08</td>
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</tbody>
</table>

**ALTERNATIVE WATER - Anglian Water Green Water Initiative:**

Exploring new and sustainable ways to deliver water to customers.

**WHAT IS GREEN WATER?**

- Storm Water
- Rain Water
- Recycled Water

**WHAT CAN IT BE USED FOR?**

- Toilets
- Gardens/Outdoors
- Washing

**THE BENEFITS OF GREEN WATER**

- Reduced consumption of drinking water
- Helping achieve household water efficiency target of 110 lpd or less
- Less impact on existing water resources and infrastructure
- Reducing downstream drainage impact
- Reducing abstraction of water from rivers and the environment
- Diversifying water supply options
- Lowering household water bills

**NORMAL USAGE AS A PERCENTAGE OF DESIGN LIMIT (105 lpd)**

- Percent above/below design limit 105 lpd
- Number of homes in % band

**£9 PER HOME ADDITIONAL COST TO DEVELOPER**

Water Efficiency Strategy for the UK
### D. PRODUCTS & LABELLING

#### International labels which have successfully reduced PCC

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
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#### Recommended UK Government-led mandatory label to reduce PCC in next 25 years

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Water Consumption</th>
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<tbody>
<tr>
<td>0-10 years</td>
<td>6.3 litres/person/day</td>
</tr>
<tr>
<td>20-25 years</td>
<td>31.4 litres/person/day</td>
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</table>

#### Inefficient appliances (Anglian Water smart metering trial)

- **80%** OF INTERNAL LEAKS FROM DUAL FLUSH TOILETS
- **700** litres of water per day lost
- **37%** of people would fix the issue if they knew this fact*

*South East Save Water YouGov poll

#### Smart water future

- **30%** daily water consumption through showers

**COST**

- 7p per shower, 90 litres of 38°C warm water

**£120** could be saved if a family of 4 reduce their shower usage by 2 minutes

#### NEXT GENERATION

**Water-efficient products**

- **HYDRAO SHOWER (FRANCE)**
  - Smart shower head - real time water-saving device monitoring water usage
  - **£150** saving per person/year
  - (£65 water, £85 energy bills)

- **AMPHIRO WATER SAVING SHOWER METER (SPAIN)**
  - Intelligent device allowing real time awareness of water and energy consumption
  - **16%** reduction in water consumption
  - **20.5%** energy savings

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**Water Efficiency Strategy for the UK**
F. WATER EFFICIENCY IN RETAIL COMPETITION

Leadership commitment

“Working together to deliver ambitious water savings for customers – benefiting society, the environment and the economy. Actively seeking out ways to promote, deliver and measure water and energy savings.”

Ofwat review

‘Open for business: reviewing first year of business in the retail water market’

80-88% customers said water efficiency, leakage control, enhanced metering services were important when comparing providers

1,030,324 million litres of water consumed in year 1

270-540 million litres of water saved due to water efficiency measures from switching

Supporting specific challenges

US Environmental Protection Agency H2Otel Challenge

‘WaterSense’ product labelling programme to help hotel industry understand its water footprint

860 hotels signed up

Scottish Water Business Stream – delivering customer benefits

£128.5 million in discount savings

66,054 tonnes carbon reduction

£9.6 million energy efficiency savings

£74.9 million water efficiency savings

38 billion litres water efficiency savings

Thames Water incentive

5p per litre water saved/day (one off payment)

Recommendations for industry

Recommendations from the Retail Leadership Group on Water Efficiency

✓ Joint statement from government and regulators explicitly supporting wholesalers and retailers working together on non-household water efficiency

✓ Identifying a potential change in the market code to support greater water efficiency

✓ Undertaking a research evidence project to develop a common water efficiency verification mechanism that can be linked to incentive schemes

✓ Work with retailers and others for a sector wide communication of the benefits of water efficiency for businesses

Water Efficiency Strategy for the UK