

# Climate Change, The Cost-of-Living Crisis and Water

In the UK water conservation has been almost treated with derision. Excepting the summer of 1976, water restrictions are limited to occasional hose pipe bans. However, the wider impact of excessive water usage is now becoming recognised.

*“Water is the primary medium through which we will feel the effects of climate change.”*

United Nations, Water Facts

The change in weather patterns due to global climate change have resulted erratic rainfall patterns, leading to (mostly) short term supply issues, which can impact on our green spaces and countryside. In addition to these ‘direct impacts’, the process of cleaning, processing, and heating water accounts for 6% of CO<sub>2</sub> emissions in the UK.<sup>2</sup>

The connections between water, the environment and energy costs are being highlighted by organisations as diverse as the United Nations through to local conservation groups.

*“The energy used to heat water for devices and appliances emits an average of 875kg of CO<sub>2</sub> per household per year. This is equivalent to the CO<sub>2</sub> emissions from driving more than 1,700 miles in an average family car.”<sup>3,4</sup>*

Energy Saving Trust

At the 2022 Waterwise conference, Prof Liz Sharp, University of Sheffield, explained that research had shown that the water efficiency message in itself had little impact on behaviour. The relative cost of water is low, so monetary savings in not a good incentive. Conversely, links with wider issues of interest to a particular community could.

To many, the more immediate issue is energy prices, **approximately 17% of energy used in the home is to heat water.**<sup>5</sup> Whilst water efficient appliances, i.e. dishwashers and washing machines, can reduce domestic water and energy usage, much of this hot water used in ‘time critical’ usage e.g. taking a shower or running the tap to rinse dishes.

## Future proof properties

Water Metering is the future. Utility companies have not been slow in recognising the benefits of a ‘Smart Buildings’. The ability to interrogate and manage energy usage at any given time of day or night has been recognised as an effective way for organisations to reduce usage and manage costs.

Gas and electricity meters located on external building walls has enabled easy upgrades and introduction of countrywide ‘Smart Meter’ programme. However, the traditional location of a water meter in a metal-covered

hole in the public highway is not conducive to this new way of thinking. A ‘Smart Water Meter’ located in such a situation is exceedingly poor in transmitting a signal even to a local pick up.

The best location for a ‘Smart Water Meter’ is on an external property wall – co-located with other utility meters. With **Groundbreaker water management system**, properties are future proofed to allow for easy installation of ‘Smart Water Meter’ technology as it is introduced across the UK.

Recent field trials of **Groundbreaker** have proven that the range of such meters can be over 3Km (2 miles). The impact on data collection is massive. The improved data transmission range could allow for single point data capture in towns the size of Norwich or Coventry. This ability to link into ‘Smart’ Building Management systems also allows for organisations to monitor for exceptional usage and potential identify maintenance issues or leaks.

## Design out leak paths:

comply with Water & Construction Industry Guidelines  
comply with “Water Safe” initiatives

Another benefit of the unique location of the **Groundbreaker water management system** is that it allows for an unjointed water supply, minimising the risk of developing future leaks. Installation of **Groundbreaker** meets the best recommendations of Water UK and the Home Builders Federation<sup>6</sup> and in some water company areas, such as Portsmouth Water, are now the standard required for all new properties.

## Bringing Water Supply into the 21<sup>st</sup> century

If you are looking for a way to bring water services into the 21<sup>st</sup> century, **Groundbreaker’s** range of water supply management products can be the way forward for time and cost-efficient installation and replacement of water supply and allow for future site redevelopment with minimal environmental cost.

**Steve Leigh FIWater, Managing Director  
Groundbreaker Systems**

Groundbreaker Systems won the HBF’s ‘Utility of the Year’ in 2018.

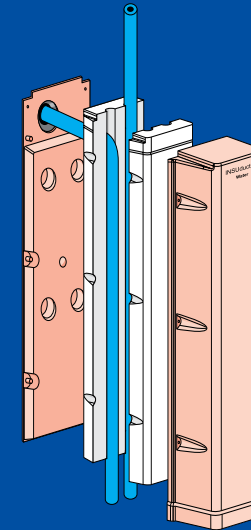
[www.groundbreaker.co.uk](http://www.groundbreaker.co.uk)

- <https://www.unwater.org/water-facts/climate-change/>
- Environment Agency (2008): Greenhouse gas emissions of water supply and demand management options, Science Report – SC070010
- Ref: An average passenger car (any fuel) emits 0.311 kgCO<sub>2</sub> per mile. Source: 2012 Guidelines to Defra/ DECC’s GHG Conversion Factors for Company Reporting.
- <https://www.energysavingtrust.org.uk/sites/default/files/reports/AtHomewithWater%287%29.pdf>
- <https://www.theccc.org.uk/wp-content/uploads/2019/02/UK-housing-Fit-for-the-future-CCC-2019.pdf>
- For further information, check the Home Builders Federation Guidance. <https://phpdonline.co.uk/news/watersafe-partners-with-the-home-builders-federation-to-reduce-water-leaks-in-new-properties/>

Groundbreaker   
THE GREEN CONNECTION

# Helping water achieve net zero!

## INSUduct®



The innovative pipe replacement solution that minimises disturbance, time and cost.

- Replace old, leaking or lead water supply pipes in under 2 hours
- No major excavations
- Minimal disruption

## Groundbreaker®



The surface mounted water control management system, allowing metering where traditional installation would be impractical.

- Can be installed at any point to new or existing building
- Perfect platform for ‘Smart Water Meters’
- Complies with best practice guidelines for jointless installation

## NRv<sup>2</sup> LoFlo®



Reduce ‘time controlled’ waste use by modulating supply rates.

- Low-cost solution to water ‘over supply’
- No customer interaction, mounted between the meter and manifold
- Variable flow rates available to maximise customer satisfaction

All Groundbreaker products are made in accordance with, or to exceed statutory regulation and manufactured using low impact, ‘green’ methods where practical. Our aim is to assist the industry and provide water to the community while minimising the impact to the environment.

**Groundbreaker - helping the water industry towards Net Zero.**

For further information on these highly effective systems and other products go to:

[www.groundbreaker.co.uk/products](http://www.groundbreaker.co.uk/products)

Email: [sales@groundbreaker.co.uk](mailto:sales@groundbreaker.co.uk) Tel: 01379 741993

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