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https://committees.parliament.uk/call-for-evidence/148/energy-efficiency-of-existing-homes/

Dear EAC Inquiry Team

EAC Inquiry - Energy Efficiency of Existing Homes

Please find below the Waterwise submission in respect of the EAC Inquiry into Energy Efficiency in Existing Homes.

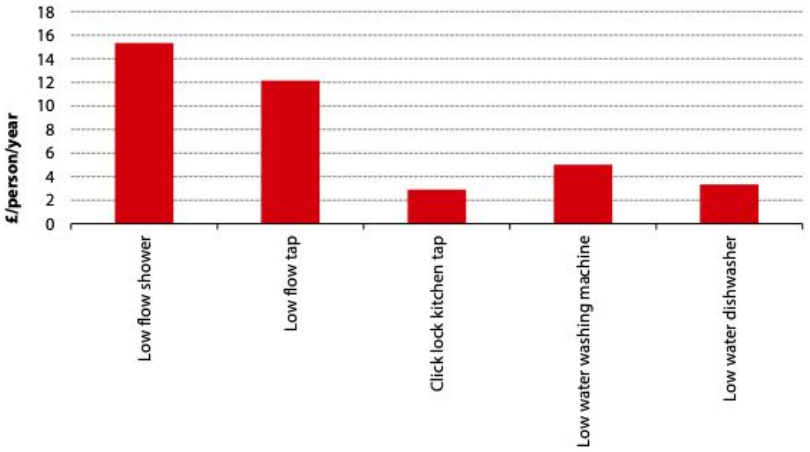
Who is Waterwise
Waterwise was founded in 2005 and is the leading authority on water efficiency in the UK. We are an independent, not-for-profit organisation, receiving funding from supporters across and beyond the water sector and wider sponsorship and research projects. Our vision is that water will be used wisely, every day, everywhere.

Our primary interest in this call for evidence is in relation to the potential contribution to achieving net zero of greater integration of water and energy efficiency in existing residential properties. We urge the committee to recommend joined-up action by the government on water and energy efficiency, including as part of any Covid-19 stimulus strategy.

There is a clear link between energy, carbon and water efficiency in existing homes
Better linking of energy efficiency and water efficiency can deliver significant benefits given the relationship between the two. Of all the CO2 emissions in the UK, around 6% are from water use (Link) with 89% of this coming from heating water in our homes. Around 20% of a typical household gas bill is due to heating water in the home (Link). **Reducing water consumption reduces energy use, carbon emissions and household bills as well as improving resilience to drought**.

The Committee on Climate Change highlighted the link between energy and water efficiency in residential properties in their 2019 report UK Housing: Fit for the Future? including setting out the energy bill saving that water efficiency products in the home can achieve (see figure below)

Figure 2.3. Estimated energy bill savings from reduced water use



Source: Wood Plc et al. for the CCC (2019) *Updating an assessment of the costs and benefits of low-regret climate change adaptation options in the residential buildings sector.*

To achieve these benefits there are two key policy actions that government should take:

1. *Introduce a mandatory product water efficiency label which would help us reach net zero faster and in a cost beneficial way, as well as increasing resilience to drought*

A mandatory water efficiency labelling scheme linked to minimum fittings standards has been in place in Australia since 2005. By 2017 it was already saving over 300 Ml/day of water and has reduced emissions by 11 MtCO2e to date. A similar scheme in the UK would see water savings grow to over 1,600 Ml/d by 2045, reducing household energy and water bills in England by £36 billion and cutting emissions by over 50 MtCO2e (Link). It would deliver savings in existing and new homes and also in commercial buildings. Waterwise submitted this evidence to Defra as part of its 2019 consultation on policy measures to help reduce personal water use (Link) and will submit it to BEIS as part of their new call for evidence on energy efficient products (Link).

Provisions to introduce a water efficiency label linked to minimum standards across the UK are already contained within the resource efficiency clauses of the draft Environment Bill and a mandatory water label could be introduced in time to make a significant difference to reducing water demand and achieving net zero.

A mandatory water label could work alongside the current EPC system. At a household level if a mandatory product water efficiency label were in place it would be easy to specify that only water efficiency products should be used in both retrofit of existing housing and in new build properties. At a property level it would be possible to rate any property according to the efficiency of the water using products fitted within it.

Waterwise has been working with the Westminster Sustainable Business Forum on the concept of a Property Resilience Certificate which would encompass labelling and address energy resilience and water resilience (to flooding and water scarcity).

2. *Require water efficiency to be explicitly considered in future household energy retrofit schemes and vice versa*

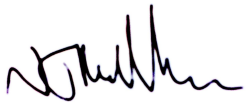
Around 80% of England's housing stock in 2050 has already been built. It is therefore vital that the Government works with water and energy companies, local authorities, housing associations and others to support and promote effective retrofit programmes that both help achieve net zero and address the risks of water scarcity.

Research by the Energy Saving Trust in Wales found that if every social housing property in Wales (around 17% of all properties) had taps, a toilet, and a shower retrofitted for water efficiency then combined energy bills could be reduced by a staggering £3.5 million a year. These savings can be achieved by using simple retrofit devices that can be installed quickly and easily without the need for completely new fittings (the evidence can be found here).

A government backed Covid-19 stimulus strategy around improved energy efficiency of homes is supported must include water efficiency

A post Covid-19 stimulus strategy around improved energy efficiency is supported by Waterwise. However, it must consider water efficiency partly for the reasons set out above, and also because Covid-19 has led to increased water use in homes in the region of 20%. This is in part due to the shift in water from business settings to home settings during lockdown but it is also because people's behaviours may have changed. For example, an increase in showering and washing machine use and an increase in hand washing frequency and duration. These all require hot water and therefore have an energy component as well. Covid has also seen far greater home working and this is likely to persist for the longer term further increasing the need for water efficiency in our homes.

Regards



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