



Waterwise Response to DECC Consultation on

Extending the Carbon Emissions Reduction Target to December 2012

February 2010

Waterwise

Waterwise is an independent, not-for-profit, non-governmental organisation focused on decreasing water consumption in the UK and building the evidence base for large-scale water efficiency. We are the leading authority on water efficiency in the UK. In England, we sat on the UK Environment Minister's Water Saving Group alongside the water industry and regulators, for which we produced, in October 2008, the Evidence Base for Large-scale Water Efficiency in Homes. The Evidence Base is now being improved and extended, and DECC sit on its Steering Group.

We are now updating and improving the Evidence Base, funded by Defra, CLG, the Environment Agency and Ofwat. This second phase of the project includes the carbon and energy savings, and cost-benefit analysis, associated with particular water efficiency measures, carried out under certain scenarios and in actual projects, which Waterwise has analysed: it is more than a desk study. DECC sits on the Steering Group for the Evidence Base.

Waterwise also has experience, unusually for an NGO, of running retrofitting projects for water and energy – including of 7,500 social housing units, funded by Defra's Greener Living Fund, and of the whole of Swindon (with partners). We advise manufacturers and water companies on the use of CERT to fund hot water efficiency retrofitting. And we have lots of knowledge on water efficient products, including those reducing the use of hot water.

Overall response

Waterwise supports CERT as a useful mechanism to help the UK deliver its carbon emissions reduction targets and stay within carbon budgets. Accordingly we support the proposed extension of CERT to December 2012. However, the potential for addressing carbon emissions from homes through hot water efficiency measures is not being fully realised. CERT is beginning to be used to fund joint water and energy retrofitting projects – to help reduce the 5% of total UK greenhouse gas emissions which is accounted for by heating water in homes, and to help water companies meet their water efficiency targets. But the current CERT model is being mapped directly onto water, failing to take account of behavioural differences between water and energy, and developing at a strategic level without taking the potential savings from water efficiency fully into account. Below, we set out proposals for amending CERT in its extension period, as well as other related proposals, to address these issues.

Water efficiency measures across the board – hot and cold – also have an important role in their own right in the UK's programme to adapt to climate change: some areas of England are already classified by the Environment Agency as seriously water-stressed, and it is known that in coming

years there will be more people and less water, so less water will need to go further, through water efficient homes, buildings, and people. For the purposes of this consultation response we are focussing on hot water efficiency measures which could be delivered through CERT.

Specific proposals for amending CERT

Below, Waterwise sets out three issues relating to the current CERT scheme, which are inhibiting the full realisation of the carbon savings from hot water efficiency measures, followed by proposals to address them.

Issue 1. The current system of CERT accreditation for hot water-using products such as showerheads, shower restrictors and shower regulators has been developed piecemeal and does not account for differences in consumer behaviour between water (and water-using products) and energy. For example, there is some evidence to suggest that a shower regulator may prompt people to spend more time in the shower. The current CERT programme, which seems to accept limited evidence of carbon savings from hot water efficiency measures, is based on a large number of assumptions, is not made public, and does not require follow-up studies to confirm savings. Although Ofgem has now agreed to a standard baseline value for shower length across similar products (which were submitting their own for each product before), it doesn't yet have this established independently from an existing CERT product. The current CERT system skews the market towards products which have been CERT-approved (at the time of writing, only three) and incentivises only these products rather than those which drive water-efficient behaviour. As such it discourages competition.

Issue 2: The CERT scheme does not account for distributional mechanisms or installation rates. One way in which CERT credits can be earned is through large-scale giveaways, such as through a national newspaper or a leisure organisation like GALA bingo. However, although this method can result in mass distribution to householders, there is currently concern at the number of devices such as energy efficient light bulbs which are not actually being installed. First-generation energy-saving light bulbs were initially mass marketed via this route, but were later found not to be of the best quality, and some consumers owned several, but without installing them in their homes. As a result, this method is becoming less frequently used for products which save energy only – but it is still being applied to hot water efficiency products: water companies are in some cases being offered payment by manufacturers to distribute their CERT-approved product without undertaking monitoring on take-up or use.

Issue 3: There is ambiguity over the application of the additionality clause in the case of water companies and energy companies piggybacking on each other's retrofit projects or mailouts. Because CERT credits cannot be claimed for projects which would have been undertaken anyway, water companies cannot claim CERT credits for hot water efficiency measures used in large-scale water efficiency programmes and retrofits where these are being used to meet their regulatory water efficiency targets. This additionality clause therefore acts as a disincentive on water companies to save energy and carbon through water efficiency, and to cost-effective approaches. Joint projects with energy companies are one way through this, but such projects are not yet commonplace.

Proposals to address these issues:

There should be a separate CERT section for hot water to reflect behavioural differences. This should be more strategically developed so that the best products to drive behaviour are taken forward, and could include generic rules around specific types of product. It should be supported by a far more transparent and robust evidence base than currently: some assumptions will be necessary but the

scheme could be adapted to make it easier to certify hot water efficiency products, assuming robust evidence can be presented. Distributional mechanisms and installation rates should be accounted for. The additionality clause in CERT should not apply to joint water and energy-saving projects. This is currently being resolved on a case-by-case basis, but there should be a general presumption of additionality where water and energy are being saved.

It makes sense for the potential carbon savings from all hot water efficiency measures to be included in the CERT scheme. Mixer showers represent about 60% of showers owned in the UK and generally compatible with efficiency retrofits. Two flow regulators and a shower aerator have already been accepted into the CERT scheme, but at the time of writing efficient showerheads - arguably the most effective hot water efficiency device - are not. Where there are taps present with standard metric screw heads, efficient fittings are also possible. The carbon savings from showerheads should be able to be counted under CERT, by either water or energy companies, or both. We believe that Ofwat and Ofgem could work together to develop a standard mechanism for this process to be recorded. This, from the two regulators, would result in significant carbon savings: with incentives for both energy and water companies. Since both industries have demand management targets – for energy and water respectively – there is also a significant financial incentive to carrying out joint retrofits (not least because the biggest cost of a retrofit is the visit to the home itself).

In Scotland, where the Scottish Government made clear in its recent consultation on energy efficiency that it is keen for greater uptake of CERT to reflect value for money for Scottish taxpayers, there is clear potential for this to be linked with the new water efficiency duty for Scottish Water (under the Climate Change (Scotland) Act 2009).

It is essential that, as the regulatory frameworks for water and energy evolve, this happens in tandem, not in isolation: for water, in the context of the Walker Report on Charging for Household Water and Sewerage published in December 2009, and the Cave Report on Competition and Innovation in Water Markets, published in April 2009, this means reflecting the full, long-term value of water, and the incentives landscape for energy efficiency is currently developing up to and beyond 2012. This will help the government meet its mitigation and adaptation goals. To date, the regulatory frameworks have evolved separately. In the context of climate change – mitigation and reduction – there is a clear need for them to be better integrated.

Other proposals

In the mitigation and adaptation context set out above, Waterwise continues to believe that water efficiency (both hot and cold measures) should be included in the retrofitting of every home for energy efficiency, through the Pay-As-You-Save scheme and the imminent Household Energy Management strategy for beyond 2012. Our Evidence Base shows that this is cost-effective: the additional cost of water products and training to install them is minimal (tens of pounds set against thousands of pounds) in comparison with the costs of the energy retrofit, and redesigning of the incentives system for both will make the costs even more favourable – particularly as the main cost of a retrofit for water is the visit itself.

Furthermore, to maximise delivery of the potential carbon savings from water efficiency through the Carbon Reduction Commitment, the water industry should be exempted from the ban on applying the Carbon Reduction Commitment to the supply chain. This would make carbon savings from large-scale retrofitting schemes tradeable. Where water companies undertake retrofitting projects by themselves, they should be able to accrue any carbon savings for measures accredited in the CERT scheme, and then be able to sell these to energy companies to use against their targets, or to use

the carbon savings against their own Carbon Reduction Commitment. This would provide an incentive for water companies to tackle the 5% of UK greenhouse gas emissions which results from heating water in homes for cooking, bathing and cleaning, as well as their own processes which account for 1% of the total.

In the same paragraph as it refers to the water industry's water efficiency targets for England and Wales, and the government's per capita consumption reduction ambition for England, the introduction to the consultation paper refers to the smart energy metering programme for every home in Britain. Only a third of homes in England and a quarter of homes in Wales currently pay for their water by meter – the others are charged a block rate regardless of how much they use, which is a clear disincentive to waste less water. Ofwat's price review sets out plans to move to 50% metering by 2015, and 57% in areas of serious water stress. The Walker Report on Charging for Household Water and Sewerage (December 2009) recommends that legislation be changed so that companies are required to meter where a "widely-based" (wider than currently) cost-benefit analysis is positive, and to systematically meter high discretionary users and on change of occupier, and considers that metering penetration could reach 75-80% of households in England and about 65% in Wales by 2020. The majority of these will be traditional, "dumb" meters. At the same time, the government is committed to a smart energy meter for every home in Great Britain in the next ten years. The smart energy metering programme needs to take account of the landscape for water metering, and joint discussions should take place between the two sectors, and between DECC and Defra, to ensure future compatibility. In Scotland, where the first trial of domestic water metering was approved for funding in the recent price review, there is clear potential for this to be linked with the smart energy meter roll-out.

Finally, the Low Carbon Transition Plan, and other measures and strategies to develop the low-carbon economy in the UK, need to quantify and take forward the potential contribution of water efficiency. Water efficiency has a key role to play in all climate change mitigation and adaptation policies and strategies, and synergies with fiscal and regulatory incentives and barriers across both sectors can deliver on the green economy. However, water efficiency is far from mainstreamed across the economy and government policy in the UK. Opportunities to include it in policies, schemes and incentives such as those relating to the development of the low-carbon economy, and in national energy efficiency retrofitting schemes, have rarely to date been taken up, and it is not included in the government's carbon budgets. Developing the UK manufacturing base for water-efficient products is a significant opportunity for the UK's low carbon economy, as are jobs from joint water and energy retrofitting schemes, but these are not factored into current government strategies. Water efficiency is not even fully factored in to programmes and advice on adapting to climate change (including a 2009 supplement to the Treasury's Green Book).

Conclusion

To deliver the full potential contribution of water efficiency to carbon reduction targets (and to tie in with other government priorities), Waterwise recommends amendments to CERT, as well as other related proposals.

Nicci Russell
Waterwise Policy Director
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www.waterwise.org.uk