

## Annex B - Consultation Response Form

### Consultation on the Walker Review of Charging for Household Water and Sewerage Services

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### Affordability

#### Question 1:

Do you agree that the Assembly Government should do more to encourage the development of social tariffs and other measures to promote affordability for water customers?

#### Comments:

Yes. This will help address the affordability and bad debt issues set out in the consultation paper – as well as support WAG commitments to eradicating child poverty and tackling financial exclusion. As Walker points out, of the existing £600m annual transfers within the water sector in England and Wales, 2/3 are going in the wrong direction - between those who do not need help, and from those who do need help. A strategic package which includes a Wales-wide policy framework to drive and support effective social tariffs, a planned move to greater metering, and water efficiency help and advice, will help address the well-documented affordability issues which already exist in the water sector, and are particularly stark in Wales. In this way, a move to greater metering becomes part of the solution to affordability concerns: the situation of ten or twenty years ago, when there was a legitimate concern that increased metering would contribute to the problem of affordability, is no longer relevant or accurate now that the tipping point described above has been reached, with vulnerable groups already subsidising largely middle-class meter optants. In England, Waterwise and WWF have set up the [Fairness on Tap](#) coalition, bringing together environmental and social NGOs to promote a strategic package of a planned move to greater metering, effective social tariffs and water efficiency help and advice.

#### Question 2:

What should be the key focus of any actions to promote affordability and the development of social tariffs in Wales? What risks or problems should the Assembly Government consider in formulating policy and actions in this area?

**Comments:**

Waterwise research shows that customers, once provided with information, consider that metering is the fairest way to pay for water, and are not opposed as some media coverage might suggest. However, our research also reveals a customer view that if they are to help subsidise the water bills of vulnerable groups (either through their water bills or general taxation), this should include the working poor as well as customers living solely on benefits, and it should be made clear that it will be carefully targeted to ensure it reaches customers who really need it, for example through affordability assessment rather than a simple link to benefits.

Social tariffs which encourage the efficient use of water should be favoured over those which do not. Waterwise research shows that customers object to the capping of bills on a move to a meter because this does not encourage the efficient use of water.

**Question 3:**

What role should guidance or regulations from the Assembly government play in setting a clear policy direction for affordability and social tariffs?

**Comments:**

No comment.

**Question 4:**

What should the key features of any guidance under section 44 be?

**Comments:**

No comment.

**Question 5:**

What factors would you wish to see set out in guidance to enable decisions on subsidising different customers? Do you have any comments on the issues highlighted for inclusion at paragraph 2.27?

**Comments:**

No comment.

**Question 6:**

Where should the balance be struck between customers who would have difficulty paying bills and other customers?

**Comments:**

No comment.

**Question 7:**

Should guidance under section 44 be provided to Ofwat or water companies or both in Wales?

**Comments:**

No comment.

**Question 8:**

Do you agree with the Walker Review recommendation that WaterSure should be targeted on those on a metered supply with medical conditions only? If not, who else should be eligible?

**Comments:**

No comment.

**Question 9:**

Should the WaterSure cap for water companies that operate wholly or mainly in Wales be applied at the average bill or the average metered bill? Or is there any alternative cap that should be applied?

**Comments:**

No comment.

**Question 10:**

What are your views on the Walker Review recommendation that medical certificates to prove eligibility for WaterSure should be provided for free and who should pay the bill?

**Comments:**

No comment.

**Question 11:**

What are your views on the options proposed for assistance to low income households in the Walker Review?

**Comments:**

No comment.

**Question 12:**

How best should the Assembly Government reflect its duty to eradicate child poverty in the design of WaterSure or alternative support for low income households?

**Comments:**

No comment.

**Question 13:**

What are your views on the role of Welsh Water Assist or an equivalent for unmetered customers?

**Comments:**

No comment.

**Question 14:**

What more might be done, and by whom, to increase awareness and take-up of social tariffs?

**Comments:**

No comment.

**Question 15:**

How can we build a more effective referral mechanism to enable access to water social tariffs?

**Comments:**

No comment.

**Question 16:**

What can the Assembly Government do to help tackle bad debt?

**Comments:**

It is well documented that the issue of bad debt involves both “can’t-pays” and “won’t-pays”. The issue of “can’t-pays” can be tackled through a strategic package which includes a Wales-wide policy framework to drive and support effective social tariffs, a planned move to greater metering, and water efficiency help and advice. This will help address the affordability issues which already exist in the water sector, and are particularly stark in Wales. In this way, a move to greater metering becomes part of the solution to affordability concerns: the situation of ten or twenty years ago, when there was a legitimate concern that increased metering would contribute to the problem of affordability, is no longer relevant or accurate now that vulnerable groups are already subsidising largely middle-class meter optants.

**Question 17:**

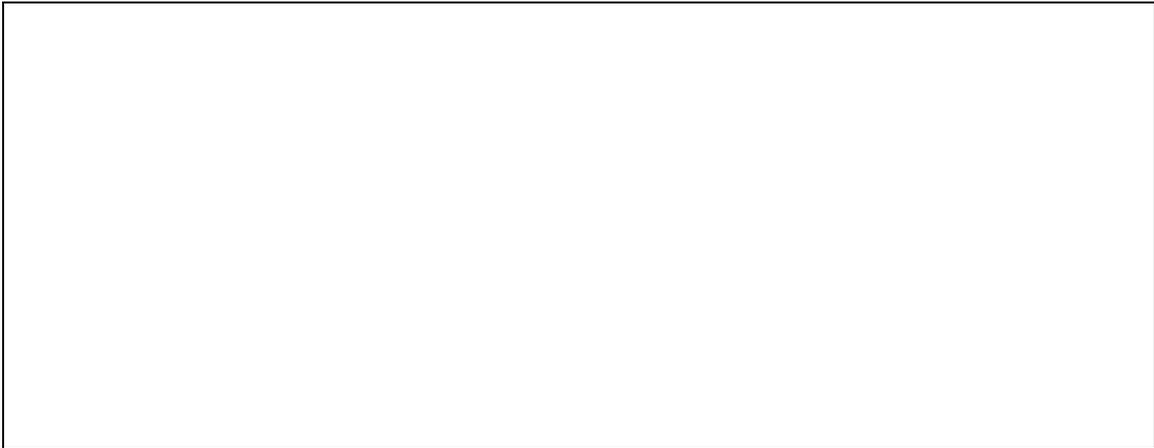
How can companies enhance the delivery of water efficiency, tariff and benefit entitlement support to households?

**Comments:**

Waterwise very much welcomes the inclusion of water efficiency in the new all-Wales Fuel Poverty Scheme, where this will save energy. Heating water in homes accounts for 5% of total UK greenhouse gas emissions, and a basic water efficiency retrofit of showers and taps will deliver in-house carbon and bill savings at low-cost – £50 per home to cover both installation and products (taking only 20 minutes to install), in comparison to some energy efficiency measures such as insulation which can cost several thousand pounds (up to £10,000 in the Green Deal) – paying back on energy bills within three years. If a toilet retrofit were also included (to reduce flush volume – at a cost of approximately £10), funded either by the water company which could claim it against water efficiency targets, or by the FPS itself, homes metered for both energy and water would payback within the first year. In this way a link between the Fuel Poverty Scheme, social tariffs and water metering could deliver two sets of lower household bills – energy and water.

As a matter of course, water companies should offer a water efficiency retrofit and advice package to customers with water affordability concerns, to give them the tools to help manage their (metered) bills. This should be free to the customer – Waterwise’s Evidence Base for Large-scale Water Efficiency has detailed analysis and evidence of the most cost-effective ways to undertake retrofitting and behaviour change for water efficiency, and to maximise uptake (which to date ranges from 6 to 60% depending on project design). Partnerships are one such method, for example with social landlords. Water companies could again claim the measures against their water efficiency targets, and many are already undertaking programmes with energy companies, and partners such as Waterwise, linked with energy efficiency.

Phase Two of the ARBED programme provides similar opportunities.



## **Water efficiency**

### **Question 18:**

With sustainable development as its central organising principle, should the Assembly Government consider setting an objective for reducing water consumption in Wales?

### **Question 19:**

If an objective for reducing water consumption in Wales were set, what form should it take and how could progress be measured?

### **Comments:**

Yes. An overall objective towards which all policies and measures - including water company business plans for the Price Reviews and Water Resource Management Plans - would be required to contribute would reflect the importance of water efficiency and the value of water, as set out in the consultation, and shift the balance on water policy to sustainable development. It would also reflect the key role of water efficiency in tackling and adapting to climate change.

Options for the format and measurement of such an objective include volume of water saved (as with the current Ofwat Water Efficiency Targets on water companies), per capita consumption or a water-into-supply target.

Volume of water saved would be water company-specific, and would be unwieldy at government level. See further detail towards the end of this box on water company-specific targets/objectives.

A national per capita consumption (pcc) target to which all policies, measures and stakeholders contribute would be an important step in reflecting the value of water. This shouldn't just be set on the water companies as there are many contributors to water-efficient behaviour, including for example local DIY store offers and media coverage of hosepipe bans in other areas. But setting a per capita consumption target at government level would help ensure that water company activity mainstreams water efficiency in a way it doesn't currently

(see responses to Questions 23 and 24), including but not only through regulatory changes. It would also impact positively on Welsh Government policies in areas such as energy efficiency, adaptation and social housing, as well as GB-wide policies which cover Wales, such as the Green Deal, and the Carbon Emissions Reduction Target (CERT), and its successor from December 2012, ECO.

A Wales-wide maximum pcc could be supported by regional equivalents. A clear Welsh Government commitment would be far more effective than the 130 pcc “aspiration” set in Future Water by Defra for England, which is not currently being delivered comprehensively through either the Price Review or Water Resource Management Plan processes, because it is not formally linked to them.

Another option for a Wales-wide objective for reducing water consumption in Wales is a water-into-supply obligation for the water companies. This would enable flexibility in the water companies between the particular mix of demand management measures – namely water efficiency measures, metering and leakage.

#### *Water company-specific measures*

Volume of water saved has proved in some cases, under the Water Efficiency Targets set by Ofwat on the water companies, to be a crude measure, and there is a danger that it drives a narrow, targets-based approach. Indeed, there is a question as to whether such a measure can ever be the most effective as it is unable to take into account the most contemporary assumptions and evidence. It is also hard to reflect the value of soft water efficiency measures to drive behaviour change in a process which measures actual savings, for the reasons set out above – soft measures in any sector tend not to lend themselves to quantification in terms of impact.

A more useful approach might be one which enables water companies to choose the mix of measures to meet their targets – Water Efficiency Targets, or whatever they evolve into, including potentially a Water Efficiency Commitment (see responses to questions 23 and 24) – within certain parameters. A per capita consumption target for each water company would enable the choice of a mix of measures between hard and soft water efficiency, and metering, but might fall into some of the pitfalls described above. A water-into-supply target was discussed in the Water Saving Group, and would cover leakage, water efficiency and metering, and reflect regional and company-level differences in each of these. A water-into-supply target would give companies flexibility, and would allow markets to play a greater role around the value of water, particularly if linked to changes in abstraction.

The important thing is to mainstream water efficiency in Wales, both in water company activity and in government policy and programmes, and an overall Welsh Government objective would do this.

#### **Question 20:**

What evidence do we have on the cost – benefit of different water efficiency measures and what should be done to develop that evidence base further?

**Comments:**

Waterwise has a vast amount of evidence and experience on the costs and benefits of water efficiency to underpin the commitment in the consultation that “we need to develop a better and more holistic understanding of the costs and benefits of different measures.”

Waterwise’s Evidence Base for Large-scale Water Efficiency is widely accepted, including by regulators and the water companies, as the most comprehensive and robust source of evidence on the costs and benefits of water efficiency. It is not a desk study, but is an ongoing, data-supported programme of analysis.

Waterwise’s Evidence Base has been running since 2006, when it was an outcome of the English Water Minister’s High-Level Water Saving Group. It is a UK programme, with Welsh Water sitting on the Steering Group, which uses data from actual water company programmes to analyse the costs and benefits, and water, carbon and energy savings, from water efficiency measures on a large scale in homes and, more recently, in schools. The first report was used by water companies and Ofwat in PR09, and Ofwat has regularly commented that it played a role in the awarding of record levels of funding for water efficiency activity by the water companies in that determination.

Phase II of the Evidence Base, funded by Defra, CLG, the Environment Agency and Ofwat, has just concluded: the final report was produced in April 2011 and can be found [here](#). (Waterwise’s policy recommendations drawing on this work can be found [here](#).) The Evidence Base is being used to calculate the payback of the inclusion of water efficiency measures in the GB-wide Green Deal.

Phase III is being co-funded by Defra, the Environment Agency and Ofwat for three years - it will consolidate the evidence on large-scale water efficiency in homes and schools and also look more closely at the impact of customer behaviour, SMEs, metering where linked with water efficiency and rainwater and greywater harvesting.

Waterwise also has particular expertise, again derived from its Evidence Base, in the costs and benefits of water efficiency measures when specifically linked with energy efficiency. The best source of recent data on this is Waterwise’s submission to the DECC Call for Evidence on the costs and benefits of the Green Deal, which can be found [here](#) (the annexes can be found [here](#)).

**Question 21:**

What more could the Assembly Government do to enable people to change their behaviour in relation to water use?

**Comments:**

Waterwise warmly welcomes the analysis and commitment to water efficiency set out in chapter 3 of the consultation.

*Policies to help drive behaviour change*

The Welsh Strategic Policy Position on Water, published in February 2011, sets out commitments which will help mainstream water efficiency, including further work on the value of water, a more positive approach to metering and tariffs, urging water companies to work more with housing associations and local authorities on water efficiency and supply requirement, on new build, and an explicit commitment to demand management being undertaken before transfer of resources in Wales.

The Assembly Government is already including water efficiency measures in schemes such as the Fuel Poverty Scheme and starting to build it into behaviour change schemes relating to climate change. It is also leading in the UK in its inclusion of water efficiency in policies on adaptation to climate change.

Building on this positive context, Waterwise proposes the following explicit policy commitments from the Welsh Government:

- All energy efficiency programmes, on retrofitting and advice, to include water efficiency. This was recommended by Walker and would ensure a cost-effective approach to both climate change mitigation and adaptation. It should include implementation of the Green Deal in Wales, in both the Surveyor and Installer Visit (advice and retrofitting measures): Waterwise has the costs and benefits of doing this, which compare very favourably (around £65 including installation for a retrofit of taps, toilets and showers) with more costly energy efficiency measures such as insulation (up to 10K per home), and meet the Green Deal Golden Rule
- Water efficiency in new homes to follow the trajectory of energy efficiency (not play poor cousin to zero carbon)
- Social housing standards and policy to encourage housing providers to provide showers and other water efficiency measures in upgrading programmes and newly-built homes
- Political support for greater metering – including potentially linking this with the roll-out of smart energy meters to every home in Britain by 2020
- Water companies to be encouraged to work with other sectors such as garden centres in developing a more flexible, customer-friendly approach to water restrictions
- Water efficiency to continue to be included in public sector adaptation and resilience strategies, and guidance on adaptation and good

business practice (including requiring a water efficiency audit and measures)

- Water efficiency to be included in carbon budgets
- New green financial products such as green mortgages and sustainability certification schemes on exchange of ownership to include water efficiency
- Support for building the evidence base for the costs and benefits of water efficiency measures
- Public sector procurement to mandate the most (not average) water-efficient products currently available on the market, and be regularly updated
- Design standards for new schools and policy for ongoing buildings management of schools to include water efficiency – Waterwise’s Evidence Base for Large-scale Water Efficiency shows that significant water and financial savings can be made through retrofitting programmes in conjunction with the water company, particularly in secondary schools
- Water neutrality partnerships in planning to be encouraged, whereby overall water demand does not increase as a result of a new development, because the developer funds water efficiency measures in schools, hospitals, businesses (and homes) in the same area
- Guidance to the health service on new build and ongoing maintenance to include water efficiency – significant water and financial savings can be made which don’t compromise the health and safety of patients (for example in toilets and showers)
- The potential contribution of water efficiency to the low-carbon economy (in terms of goods and services) to be quantified, and reflected in incentives and programmes to deliver it
- A single water efficiency plumbing standard and certification to be developed, working with stakeholders across the public, private and third sectors
- A single, voluntary, cross-sector water efficiency labelling scheme for products to be developed, working with stakeholders across the public, private and third sectors
- A toilet scrappage scheme to be considered – this would not need public sector money but could be government-supported, implemented at local level, involving the third and private sectors, providing incentives for individual householders, landlords and SMEs to trade in their old, water-inefficient toilet (potentially flushing at 13 litres if dating to the 1960s) for a new one (at less than a third of the flush volume). Waterwise research in England shows that 56% of the most inefficient toilets are in owner-occupied properties, and 22% are in local authority housing – piggybacking on existing retrofitting programmes in social housing and linking with the regulatory framework for water companies as well as major retailers could provide a cost-effective way to engage customers in more water-efficient behaviour. The toilet uses the most water in the house (around a third) and does not require behavioural changes such as those required when using shower and taps
- Product standards to be set for taps, showers and urinals, to help

deliver water savings and drive the market in water-efficient products. These to be linked with public sector procurement, a single, voluntary, cross-sectoral water efficiency labelling scheme for products, incentives such as council tax rebates and new green financial products, social housing standards and retrofitting schemes, and potentially a cross-sector water efficiency campaign to help people waste less water

- Policy and regulation across sectors to allow and encourage joint working between water companies, energy companies, social housing providers and others. This to include energy efficiency retrofitting measures and standards for social housing and new and existing housing
- Measures to be taken to address the bias towards capital expenditure within the regulatory framework for water to ensure that demand (and catchment) management schemes with a positive cost-benefit analysis over a longer term do not play second fiddle in investment decisions to supply-side measures; and price reviews should include longer-term investment horizons for large-scale water efficiency activity

The policy commitments set out above would reflect the Welsh Government's sustainable development duty. Taken forward together, they would put Wales in the forefront of measures to reflect the important role of water efficiency in climate change mitigation and adaptation.

Finally, the cost-benefit analysis of water efficiency proposals should take account of wider benefits and the full value of water, as set out by Walker. The current CBA framework acts against demand management measures in favour of supply-side measures. For example, a water company CBA for a new reservoir would not currently include the costs of lawyers for that project - potentially millions of pounds - and at the same time the avoided long-term costs of new supplies would not be included in the CBA for a retrofitting programme of an entire city of, for example, 50,000 people. Waterwise's Evidence Base for Large-scale Water Efficiency already shows a better Average Incremental Cost for some approaches to water efficiency, such as retrofitting in partnership, than the AICs of some supply-side measures signed-off by Ofwat in the PR09 business plans. Reflecting the full value of water, including in terms of time and place, and in the long-term, will provide more equal treatment of demand management measures. There is also a need for the regulatory framework to look beyond short-term issues of water scarcity to the more long-term context of supply and demand (the UK Climate Impact Programme scenarios look decades into the future), as well as over-abstraction.

#### *Specific influencing of behaviour change*

On behaviour change specifically, Waterwise has a vast amount of expertise in how customers respond to water efficiency messages and approaches, based on both focus group work carried out for water companies and our own very large-scale behaviour change and retrofitting programmes covering around 10,000 homes (such as [Tap into Savings](#) and [Save Water Swindon](#)). One of our key findings is that bolting on water efficiency advice and

messaging to energy efficiency models, following the same energy model rather than adapting it to water, is not the most cost-effective approach. Using the opportunity of energy efficiency engagement to also engage on water is certainly important – it has been advocated by Waterwise for many years and is now widely accepted as valid. However, the advice needs to be tailored according to the recipient, and to reflect that customers respond and behave differently with water than with energy – for example, some Waterwise research shows clearly that the main driver for water efficiency is not reductions in bills, unlike with energy efficiency. In the preliminary analysis of one Waterwise-led programme, Tap into Savings (which will be completed by the end of June), the biggest motivation for accepting the offer of a home visit (and retrofit) was a wish to save water (not to reduce bills).

Waterwise looks forward to building this evidence into the Welsh Government's major research project on attitudes to sustainable behaviours.

More widely on behaviour change, Waterwise does not believe that a Government-led marketing campaign on water efficiency would be the best way forward, but does believe there is a need for a cross-stakeholder programme, supported by Government, including the private and third sectors, which underpins other government policies and supports simple but targeted, co-ordinated messages. Building on its field experience of water efficiency messaging (including leading the significant Tap into Savings partnership programme of 7,500 homes as part of Defra's Greener Living Fund), Waterwise would be happy to work with the Welsh Government to both design and evaluate the impact of any such campaign.

Waterwise research to date indicates that such a campaign should not lead on the money-saving message – unlike energy efficiency campaigns. Similarly, any campaign which seeks to encourage customers to save water for the sake of saving water is likely only to work for a small proportion of customers. Rather, Waterwise would propose a different emphasis on the topline of a campaign, supported by longer-term work on a second tier.

The topline of the campaign should lead on ways of making individual water-saving behaviours appealing/attractive, in order to influence quick behaviour change on a large scale. The reasons customers have for taking up water-saving behaviours will differ between customers (a segmented approach is valuable) and between behaviours (reasons for retrofitting a water-efficient showerhead will be very different from reasons for taking a shorter shower). Building on this, and to support sustained behaviour change in the longer term, a campaign could then seek to educate people about the value of water. There is clear evidence to show that changing attitudes (for example about the value of water) does not necessarily lead to behaviour change (namely, wasting less water) which is why this approach works more slowly. It will be a significant challenge to convince customers in Wales that water is valuable in terms of its potential scarcity, beyond its environmental and amenity value. Nevertheless, the second tier of messaging and campaigning is important because at some point it may be necessary to ask people to make tough changes to their behaviour which are not appealing/attractive (beyond the

reach of the first tier described above). To this end, customers will need to understand why these changes are important.

**Question 22:**

How can different organisations with an interest in promoting water efficiency and minimising water use work together better?

**Comments:**

A more strategic relationship between organisations to promote water efficiency and minimise water use would be welcome.

Waterwise sat on the Ministerial-led Water Saving Group which focussed between 2005 and 2008 on households in England, and proved an effective means not only of agreeing policy advances (such as the water-stress map and Waterwise's Evidence Base for Large-scale Water Efficiency) but also in ensuring the key stakeholders were signed up to using broadly similar messages with the public. The Water Saving Group included Defra, CLG, Waterwise, Water UK, Ofwat, the Environment Agency and the Consumer Council for Water.

A slightly different but equally effective model is the Saving Water in Scotland Network which Waterwise set up in 2006 - now co-convened with Waterwatch Scotland - and which brings together a wider group of stakeholders (such as Parliamentarians, retailers, energy companies, green NGOs and manufacturers and housing providers) across the public, third and private sectors. The SWS Network meets regularly and aims to both influence policy and facilitate practical water efficiency partnerships – it has been supported by Ministers throughout and has influenced legislative and policy change on water efficiency, including the links with energy efficiency.

Waterwise would be delighted to help develop a cross-stakeholder group on water efficiency and behaviour change. Such a group could most usefully focus on both policy change and behaviour change, and links with other sectors such as energy and housing will be important.

A Water Efficiency Sub-Group of the Wales Water Group might be one way forward.

**Question 23:**

What more could water companies do to promote water efficiency and how can this be incentivised?

**Question 24:**

Is the current Ofwat water efficiency target effective and are there ways in which Ofwat's regulatory framework might encourage water efficiency more effectively?

**Comments:*****Overview***

Waterwise warmly welcomes the commitment in the consultation to greater water efficiency activity by water companies, and to expecting Ofwat to look at how it can increase incentives for companies to invest in measures to deliver long-term savings. Waterwise sets out below its views on the existing set of incentives and drivers on water companies, including Water Efficiency Targets, and potential models for the future. Waterwise also welcomes the discussion of the capex bias and of Ofwat's Revenue Correction Mechanism: Waterwise's Evidence Base Steering Group played a key role in the development and the analysis of both.

***Analysis of existing incentives on water companies, including Water Efficiency Targets******Incentives in the wrong place***

The regulatory framework enshrined in Ofwat's current duties incentivises the water industry in England and Wales towards supply-side measures. As such, the full long-term value of water, in economic, social and environmental terms – for example its value in different places at different times - is not reflected, as noted by Cave and Walker. There is a strong bias towards capital expenditure because this contributes to the regulatory asset base. This bias acts as a barrier to large-scale water efficiency – this is despite the Revenue Correction Mechanism which Ofwat has introduced, which is welcome, but will only bite every 5 years, so does not drive year-on-year supply-demand investment decisions (water companies have told Waterwise this). The water companies are undertaking excellent work, retrofitting tens of thousands of homes at no extra cost to the customer, including in conjunction with large-scale metering programmes, and encouraging customers, schools and businesses to waste less water. But this is a very small proportion of the amount they spend on supply-side measures. As Severn Trent Water sets out in its Changing Course document in April 2010, "In order to equalise incentives, there needs to be scope for initiatives involving operating expenditure to earn a return". A bias towards capex also acts as a barrier to sustainability in other sectors, such as transport, energy and communications - and in the public sector - where investment in new capital projects is easier to fund than "alterations".

***More barriers***

The current structure of the water industry in Wales and England, as

regulated by Ofwat, raises further barriers to the more efficient use of water. The regulatory framework for water features at the same time an excess of regulation in terms of layer upon layer of requirements (Water Resource Management Plans, the Price Reviews, Strategic Direction Statements, Catchment Management Strategies (CAMS), River Basin Management Plans, Notified Items, Drought Plans....), often with different timescales and “owners”, and significant gaps, for example in terms of making the links with other sectors to drive efficiencies in households, and Water Resource Management Plans not including sewerage. The current five-year cycle for water pricing does not adequately address the long-term challenges – the delay in the UK Climate Impact Programme 09 scenarios by several months meant that water companies were unable to incorporate the scenarios into their final business plans (and therefore investment plans) for the next five years. Innovation does not play a big enough role. International comparisons and learnings are not applied. Competitive new practices are often required to take place outside the regulated business of a water company. Diverse patterns of ownership can mean conflicting priorities where regulatory drivers are unclear. The water industry across the UK is now subject to the Carbon Reduction Commitment but this is not driving sufficiently widespread mitigation effort. This combination of factors makes long-term, sustainable financing of the industry more challenging. More flexible, smarter regulation would address these issues, as well as affordability – and could be undertaken alongside increased competition. It could also drive the delivery of new services by water companies to their consumers, such as rainwater harvesting, plumbing and consumer information linked to new technologies.

### People

There is a question as to whether the regulatory framework enables the industry to be responsive enough to customer demand. Behavioural and attitudinal change is now recognised as essential alongside retrofitting programmes and product development. But current mechanisms struggle with reflecting support for this by the water companies in the investment process – Table 1 of the annual June Returns which water companies provide to Ofwat, for example, attaches volumetric water savings to “soft” measures water companies have taken to influence customer behaviour, although experience across the economy and society, including in retail, indicates that there is such “noise” around behavioural choices that it is difficult to quantify the impact of one particular intervention. It is also important to ensure that frameworks incentivise consumer satisfaction with products (as well as water savings) – so that, when later replacing entire bathroom suites, or being offered other water-efficient appliances, they are more likely to make water-efficient choices. A further example of the need to work closely with people lies in hosepipe bans - the Flood and Water Management Act (2010) updates the regulations but is not supported by a universally understood code of practice, and now includes a potential ban on paddling pools. Engagement with consumers is very important in this context.

### Paying for what we use

Only a quarter of homes in Wales currently pay for their water according to how much they use - an almost unique situation in the EU and in developed

countries across the world. Under the price determinations set out in 2009 metering across Wales and England will move to 50% of homes (and 57% in areas of serious water stress) by 2015 – and two (English) companies will move to universal metering within that period. But it makes no sense that in a world where the climate is changing, and where water efficiency is a key tool in managing the impacts of climate change and tackling it, most customers could leave the taps running all day and still pay a fixed amount. It is inconceivable that such a principle would apply to other goods such as energy and fuel – paying a set price regardless of how much is consumed – and neither of these is essential to life. Metering helps people to manage their water bills and water companies to manage peak demand. Every home in Britain will receive a smart energy meter in the next few years, and this provides an opportunity to link with water metering in Wales

Ofwat is undertaking a fundamental review – “Sustainable Water” – of its own regulatory framework and whether it is fit to address the long-term challenges of climate change and population growth, and is committed to addressing these issues. But there is a wider role for the Welsh Government, and for Defra in its forthcoming White Paper, in providing the leadership and legislative framework, and making the strategic links with other sectors – as set out in the National Infrastructure Plan published in October 2010.

#### Value of water

The regulatory framework for water does not – and should – reflect the full, long-term value of water: as well as its immediate price, its wider value to society, the economy, the environment, wellbeing, health and community cohesion, including scarcity value. Abstraction licensing should be reformed to reflect this, and trading considered, as well as time-limited abstraction licences. The map of water-stressed areas for England does not reflect abstraction pressures – any such map developed for Wales should. Cost-benefit analysis should be wider than the current Average Incremental Social Cost, as recommended by Walker, and should certainly include the longer-term benefits (and avoided costs) of large-scale demand management measures.

#### What should Ofwat look like?

When the water industry was privatised two decades ago, the challenges it faced (such as securing capital for investment, reducing leakage and ensuring security of supply) were specific to the sector. Since then, layer upon layer of regulatory requirements on the industry has developed almost piecemeal, with too much regulation in some areas, not enough in others, and the sequencing of processes, with different owners, highly complex (see for example Price Reviews, Water Resource Management Plans, River Basin Management Plans, Strategic Direction Statements and Drought Plans). Now the challenges are far more long-term, wide-reaching, and common to all sectors – such as climate change, population growth and economic constraints. A streamlined and more responsive and flexible regulatory framework, under Ofwat, which drives greater innovation and water efficiency, is needed to help tackle these challenges. Ofwat recognises this and has its own “Sustainable Water” review process underway, within its existing remit.

David Gray is reviewing the role and remit of Ofwat for the Coalition Government and Waterwise has submitted evidence to that review, the results of which are due shortly.

Interestingly, the previous UK (Labour) Government was committed to basing a reformed Ofwat on the Ofgem model it reframed in government, which included a greater voice for consumers, through a new duty to protect them, as well as the government taking over the allocation of connections in order to favour renewable schemes (an analogy could be abstraction licensing), charging Ofgem with tackling carbon emissions (an analogy could be charging Ofwat with tackling water wastage and carbon emissions) and compelling energy companies to help address affordability. This model would be a helpful one for water, with some differences.

Broadly, the primary issue with the constitution and duties of Ofwat in terms of whether it is fit-for-purpose to address the long-term challenges of climate change and population growth is that to date there has been too much of a reliance on price – spot price, based on what customers “want”, but not reflecting the long-term value of water or what is in the interests of the consumer without them necessarily being aware of this. For example, the complexities of the supply-demand balance in the context of the 2009 UK Climate Impact Programme scenarios, and the balance of risk to ensure taps do not run dry, should not be reduced to the level of whether consumers would be willing to pay higher bills of say £10 or £20 in the next few years.

The role of the consumer in a re-modelled Ofwat will be an important one: namely, how can the views and wishes of consumers be better reflected in a new regulatory framework, without immediate bill impacts skewing the discussion? Waterwise does not believe that amending Ofwat’s duties to protect the consumer would be effective. Rather, reflecting the true, long-term value of water will ensure that water is regulated in the customer’s interest, but not solely as narrowly defined by the customer (see below). Customers would not expect a mechanic to ask how much they would like to pay for car repairs and then stop once they had reached the limit, regardless of the roadworthiness of the vehicle.

The historic over-reliance on capex in the water sector, which was originally identified through Waterwise’s Evidence Base project, is now widely recognised as a barrier to large-scale water efficiency, including by Ofwat. It incentivises water companies to build to support their regulatory asset base, and not for example to undertake major retrofitting programmes in tens of thousands of homes, with no resulting owned assets. This issue forms a central part of discussions on how the full, long-term value of water can be better reflected in the regulatory framework for water. In the energy sector, it has already been to a large extent overcome – energy companies’ CERT programmes contain vast opex programmes, often of equal size to capex programmes. So this shouldn’t be rocket science, and again the Ofgem analogy is a good one.

Certainly a reformed Ofwat should support greater innovation and more balanced risk management, reflecting the wide range of long-term challenges, and their uncertain precise form or impact. For example, the demonstration activity Ofgem currently allows within CERT encourages energy companies to innovate by allowing a broader element of risk. This could usefully be mirrored in a new Ofwat framework. Partnership delivery, of retrofitting, behaviour change and community championing, as well as product development and campaigns, will need to play an increasingly important role in water in the future - spreading cost and risk and increasing uptake and engagement. This will require a flexible and responsive regulatory framework which is able freely to work with other sectors, with regulatory frameworks that at the very least talk to and understand each other, with probably some joint mechanisms. Currently the regulatory frameworks for water, energy and housing exist in splendid isolation – and yet the customers, and many of the issues, are the same. Most domestic consumers of energy and water want warm, comfortable homes, bills as low as possible, and a continued supply of water and energy – so it makes sense for these to be delivered in partnership where relevant. There will be an element of uncertainty in this new approach, but pilots and trials, for example of the shadow price of water in advance of reflection of its full, long-term value, could be tools Ofwat could further develop the use of.

Ofwat's proposed move to a more risk-based approach to regulation, rather than requiring all water companies to report on everything, is welcome, but in moving to this it is important not to lose the data and evidence accumulated only in the last few years on water company activity on water efficiency. It is key that this information is still collected from companies as it is essential in building the evidence base which Ofwat states as a key aim of the Water Efficiency Targets it sets on the water companies.

As recognised in the consultation, behaviour change, and how to encourage the more sustainable use of water, will be important in the near and distant future. Below, Waterwise outlines (in "Sustainable development...." and "Protecting, serving and representing customers") – and also in [Waterwise's White Paper](#) - why this is important and how it might be taken forward. Incentivising both hard and soft water efficiency measures, without seeking to attach inaccurate water savings to the softer ones, will be increasingly important. Certainly this is not a lesson that can be learnt from the energy sector, where the significant market in energy efficiency retrofitting has resulted in measures on a major scale, but not in behavioural changes.

In the context of energy (and the reforms of Ofgem), the previous UK government accepted that bills would have to rise to pay for greater sustainability – a position repeated by Ministers in the Coalition Government – but stated that energy efficiency would delay this. There is a clear analogy here with the value of water, metering and water efficiency – if reflecting the full, long-term value of water in the regulatory framework means an increase in customer bills, then metering and water efficiency are the key to helping customers manage this impact, as well as to tackle affordability (the interim Walker report contained a recommendation for a national water efficiency

scheme targeted at vulnerable customers, for this reason).

Discussion of whether Ofwat should remain a purely economic regulator in some respects misses the crux of the challenge. What is economic, and financially viable, as the Stern Report made clear, is both tackling climate change and adapting to it. In this context, reflecting the true, long-term value of water in the regulatory framework, and moving away from the dominance of price in economics, is the key. Keeping Ofwat as an economic regulator but broadening its focus beyond price, as outlined above, is one option. Replacing its primary remit with one to ensure the sustainability of water resources or use is another, which would underpin a new set of drivers and outcomes, and shift the regulatory and investment horizon back a generation. The role of the markets in a more sustainable abstraction model and a potential Water Efficiency Commitment (see below) could be overseen by Ofwat in either of these models. Overall, the regulatory framework under Ofwat needs to be more flexible, streamlined and responsive.

Finally, Waterwise believes strongly that, as supported by evidence, a market alone, however reformed, will not deliver the necessary water efficiency (and affordability) the Coalition Government is committed to in the water sector. Streamlined regulation will be important, but certainly some regulation will be necessary. In this context, Waterwise sets out below some important steps the Welsh Government could take to incentivise greater water efficiency by the water companies.

***Steps the Welsh Government could take or encourage to incentivise and deliver greater water efficiency by the water companies***

Reform of the water sector to deliver the more sustainable use of water could, if undertaken in the right way, lead to a water industry, across the UK, which is incentivised and structured to reflect the full value of water, and – with partners – to help address national challenges, such as climate change mitigation and adaptation and housing and population growth. Changes to the regulatory framework for water can also drive the low carbon and green economy.

There are various models which could be developed by the Welsh Government, both before or within a refreshed Ofwat remit (depending on the results and response to the review of Ofwat by David Gray), to drive the greater water efficiency the Welsh Government and stakeholders agree is necessary.

In the first instance it is important to develop and implement a far wider cost-benefit analysis framework (as recommended by Walker) and to address the capex bias which exists across the water sector. Both are currently acting against larger-scale water efficiency, because long-term benefits and avoided costs are not given sufficient weighting (the emphasis being on current customers far more than future ones), and because investment decisions on a large-scale are still skewed towards assets which count towards a water company's regulatory asset value, and which tend almost exclusively to be on the supply-side. The carbon and energy savings from large-scale water

efficiency activity and partnerships could be included in the CBA, to reflect the wider societal benefit.

Before moving onto the analysis of wider models, below, there are two further specific steps which could be taken to improve the incentives for larger-scale water efficiency activity by the water companies. Skills and cash resources within water companies to deliver large-scale water efficiency and customer engagement programmes should be enhanced, potentially by corralling these in the third sector – this should be reflected in the regulatory framework allowing water companies to simply reflect partnership costs and benefits. And the approach to Water Efficiency Targets should be modified, whatever results from “Sustainable Water” and the review of Ofwat, so that in addition to driving water companies to be active water efficiency practitioners it incentivises them to maximise the effectiveness of their activities (beyond the low-hanging fruit).

In the longer term it is also important to reflect the full, long-term value of water in the regulatory framework, as recognised in the consultation and by Walker.

One potential model would be a Water Efficiency Commitment (WEC) alongside Water Services Companies (WSCs). This is discussed in detail below, not because Waterwise believes it is the only model, but because it is a useful model to illustrate the elements of any policy change – to increase water efficiency activity by the water companies – which would need to be addressed, and potential ways of doing this, as well as ways in which such policy change could link with other sectors to maximise benefit and impact within and beyond water policy drivers.

Broadly, a WEC would be water efficiency targets set at Government level – tying in with the interest in the consultation on setting an overall objective for reducing water consumption in Wales. It would build on the existing Water Efficiency Targets (WET) in Wales (and England). A national minimum could be supported by regional targets (equivalents). A national per capita consumption (pcc) target to which all policies, measures and stakeholders contribute, including the WEC, would be an important step in reflecting the value of water. The 130 pcc aspiration set in Future Water for England is not currently being delivered comprehensively through either the Price Review or Water Resource Management Plan process, because it is not formally linked to them. A strategic approach should be developed in Wales.

Options for the targets within a WEC include volume of water saved (as with the current Water Efficiency Targets), pcc or a water-into-supply target. A WEC could mandate proportions for particular groups of measures, or could set minimums and allow companies to deliver their own mix of measures – as with the Code for Sustainable Homes. Volume of water saved has proved in some cases under the WET to be a crude measure, and there is a danger that it drives a narrow, targets-based approach. Indeed, there is a question as to whether such a measure can ever be the most effective as it is unable to take into account the most contemporary assumptions and evidence. It is also hard

to reflect the value of soft water efficiency measures to drive behaviour change in a process which measures actual savings, for the reasons set out above – soft measures in any sector tend not to lend themselves to quantification.

A more useful approach might be one which enables water companies to choose the mix of measures to meet their WEC target, within certain parameters. A per capita consumption target for each water company would enable the choice of a mix of measures between hard and soft water efficiency, and metering, but might fall into some of the pitfalls described above. A water-into-supply target was discussed in the Water Saving Group for England. It would cover leakage, water efficiency and metering, and reflect regional and company-level differences in each of these. A water-into-supply target would give companies flexibility, and would allow markets to play a greater role around the value of water, particularly if linked to changes in abstraction.

Whatever the model for regional WEC targets, abstraction levels and water scarcity would also need to be reflected – noting that an area not defined as water-stressed can be defined as over-abstracted, and that this is already the case in some areas. Sub-national targets could be set on a water company, water stress or catchment basis.

A WEC could be administered and regulated by one or two regulatory bodies – Ofwat and the Environment Agency are two potential candidates. The definitions and levels within a WEC could be reviewed every 5 years, reflecting the Price Review process. A WEC could include the ringfencing of a priority group, as in CERT. In the energy sector, the Energy Efficiency Commitments and their successor, CERT, once imposed on the industry, were simply delivered, despite initial a lack of initial enthusiasm in the energy sector, and a significant market developed to support this – the same would be true of the water sector: as with metering, where a political commitment by the Welsh Government to greater metering would be delivered by the water companies, regardless of their own individual views of local economics and other factors.

A WEC should cover both domestic and non-domestic water efficiency measures, and would need to be supported by agreed, evidence-based savings attached to hard measures, and engagement points (as discussed below) for soft measures – Waterwise's Evidence Base for Large-scale Water Efficiency provides an obvious starting place for this. A WEC should certainly be developed to work in tandem with CERT and ECO which will replace it beyond 2012, the Green Deal, the Fuel Poverty Scheme and ARBED in Wales, and social housing standards, leading to joint approaches which increase cost-effectiveness, water, energy, carbon and financial savings and uptake rates. Waterwise is already working with Ofwat and other stakeholders to draw on lessons from the existing Water Efficiency Targets, which began in April 2010, in terms of measurement and both barriers and incentives they currently represent. A WEC could be linked to carbon measures such as the Carbon Reduction Commitment and the successor to CERT – carbon targets

could be developed at water company level and water companies able to trade the carbon they save through water efficiency measures in homes and buildings as well as through their own processes. This would be a potential additional revenue stream.

If the Water White Paper due to be produced in December by Defra sets out a move to greater competition in the water sector, then this move could be used to develop the Water Service Company (WSC) model. Such reform of the water market should incentivise the development of WSCs through retail competition, focussed on providing water efficiency services as well as water supply services, such as rainwater harvesting, greywater recycling and IT linked to consumption information (for example through smart meters, supported by frequent readings and in-home displays). Retailers would compete on the basis of their water efficiency (and other) services as well as their prices. This framework could even include a short-term stimulus of water service companies competing for a share of a regulator-approved budget to drive innovation and water efficiency. It should enable strategic trading between neighbouring companies to address time-specific local shortages, supported by a virtual grid. A WSC would be required to offer water, wastewater and environmental services, rather than solely delivering water and taking wastewater away. In addition to those services listed above, a WSC could sell plumbing and fitting services (similar to British Gas' HomeCare), and maintenance and water efficiency services around hot water (also potentially reducing energy bills). Such a model would need a regulatory steer from the Welsh Government and Defra, rather than relying on the market to deliver it alone.

As well as its clear links with water efficiency targets through a Water Efficiency Commitment, this could potentially be linked to water-into-supply, environmental, carbon or abstraction targets, and supported by abstraction discounts or carbon credits. WSCs could be broadly modelled on Energy Service Companies, which have developed under the Energy Efficiency Commitments and now the Carbon Emissions Reduction Target – energy service companies deliver significant carbon savings through energy efficiency measures, with the opex budget for these huge, and often comparable to the capex budget of the companies (therefore avoiding the capex-opex bias which still exists in the water sector). A considerable market in energy efficiency retrofitting services has developed, with many non-energy company deliverers, such as the Mark Group, working on an enormous scale, nationally. A similar, Water Service Company structure could be developed under a Water Efficiency Commitment: for example, Age UK (formerly Age Concern and Help the Aged) already provides energy services, in conjunction with an energy company, to 400,000 homes, supported by a social tariff and an annual winter fuel payment, and such a model could certainly work for water. It would be in the interest of a WSC to reduce customer consumption as this would reduce their unit costs under a WEC.

There are clear differences between water and energy services, in both price and use patterns – which differ geographically in the water sector. In addition, there are two specific differences between water and energy in terms of the

development of Service Companies. The first is the issue of domestic bad debt in the water sector, which could act as a disincentive to a new WSC, which would undertake the debt. This is being addressed through the move to named bills as a result of the Floods and Water Management Act 2010, and will be further addressed as proposals to improve affordability (including identifying the difference between the can't-pays and the won't-pays) is further developed in response to Walker – not least through this consultation. In Scotland, Business Stream already acts as a WSC for non-domestic consumers, so there is an established UK model. For domestic consumers, wider issues would need to be addressed, as outlined above. The second difference is that it is generally accepted, including by energy companies, that while the EECs and CERT have driven energy efficiency measures in homes, they have not significantly impacted on behaviour change. Because most basic water efficiency retrofitting measures – taps, and showers (and toilets to a lesser extent) – rely heavily on behaviour change as well as technology, to a greater extent than, say, cavity wall insulation, behaviour change will need to be a significant part of the equation. The relationship between retrofitting and behaviour change is being further explored through Waterwise's Evidence Base for Large-scale Water Efficiency.

The longevity of services offered under WSCs would also need looking at – for example, initial provision of a retrofit or a greywater recycling unit could be followed by lower-cost maintenance, or a five-year follow-up and upgrade, and measures could support the move from retrofit to replacement (for example of entire bathroom suites). Plumbing and maintenance services could be ongoing, as could provision of information, including through new media, on current consumption levels and how to make savings. Higher metering levels would further support the potential popularity of services offered by a WSC, but lower metering would not preclude them.

*Potential new models which could support a WEC and WSCs*

- Existing retrofitting companies undertaking energy retrofits could include a water retrofit and sell the savings to the water company for their targets. For example, if Mark Group were retrofitting 1,500 homes for energy in x area, they could work with the water company to train their installers to include a hot and cold water retrofit (taps, toilets, showers), and the water company could then pay for and claim the savings. The water company would need to work with the installer to ensure the water retrofit was undertaken in such a way that it was robust, and also that it could be measured and would contribute to Waterwise's Evidence Base, which is a key aim of the current Water Efficiency Targets, as stated by Ofwat. The retrofit could be linked with metering, but wouldn't necessarily have to be. Waterwise has floated this model with water companies and they have shown interest.
- Pay-as-you-save in the Green Deal could cover the energy savings from hot water efficiency measures (showers and taps). Waterwise has consistently made the policy and economic case for this and DECC (and Defra) Ministers have confirmed that energy savings from water-saving devices could be included in the Green Deal finance

package. This wouldn't necessarily only work for homes metered for water as it could be based on an energy savings model, and Waterwise already has some statistics to back this up. A basic water efficiency retrofit of showers and taps will deliver in-house carbon and bill savings at low-cost – £50 per home to cover both installation and products (taking only 20 minutes to install), in comparison to some energy efficiency measures such as insulation which can cost several thousand pounds (up to £10,000 in the Green Deal) – paying back on energy bills within three years. If a toilet retrofit were also included (to reduce flush volume – at a cost of approximately £10), homes metered for both energy and water would payback within the first year. The cold water (toilet) retrofit could be funded through a WEC - an obligation on the water industry to deliver more water efficiency (similar to CERT). Or it could be funded through increased water efficiency targets within the current framework, potentially linked to new funding frameworks. These could include European Investment Bank (EIB) investment in the water industry – the EIB lends good-rate money to the water industry (vast sums) and requires hard (retrofitting) and soft (behaviour change) water efficiency, in its criteria, but these are not enforced. EIB funding is capex-based so new financial models for water efficiency which related to EIB (or other EU) funding would require addressing the capex bias. New green financial products, such as green mortgages, could be used to help finance water efficiency measures in homes. Water companies could even become Green Deal providers/installers. As with energy under the previous UK Labour government, pilots could be developed to test these funding mechanisms.

- Alternatively, a water-metered-only model could be developed to support the Green Deal: by the end of 2015 50% of homes will be metered, the Green Deal doesn't aim to cover 100% of homes anyway, and even within the aim the uptake is unlikely to be as high as target: water could be an optional add-on, and the Green Deal used as an incentive for water metering, and vice versa.
- The Green Deal, including water, could be linked through partnerships with the third and private sector to social housing retrofitting schemes, and new providers such as Age UK.
- There would be incentives for the retailers involved in delivering the Green Deal, such as B&Q, to include water, to increase footfall and sales of new and existing products and services. For example, for some water-efficient fittings a water-pressure tester is necessary, and rather than a consumer buying these for a one-off use they could be rented at B&Q. There could be voluntary discounts for the products if linked with the Green Deal.
- A link between the Fuel Poverty Scheme, social tariffs and water metering could deliver two sets of lower household bills – energy and water, using the costs and benefits and model set out above (where

either the water company or the FPS itself funded the hot and cold water efficiency measures. A similar model could be used to include water efficiency in Phase Two of ARBED, linked with an obligation on the water companies.

- There is a potential role for multi-utility service companies in all the models discussed in this paper.
- Some WSCs could be mutuals, with the profit motive removed altogether.

### ***Other sectors***

Finally, there is a huge opportunity for the Welsh Government to incentivise and deliver greater water efficiency activity through further developing policy and regulatory links across sectors and policies, beyond water. Some of the practical opportunities are set out above, and a comprehensive list of specific policy recommendations are set out in the response to question 21. The analysis to support these is detailed below.

Waterwise has been arguing for some time that, because the challenges of climate change and population growth are common across sectors, sectors should be working together. This is particularly true in terms of working with customers to help them reduce their resource use, but also more widely in learning the lessons from other sectors and in developing some future joint mechanisms. In particular, there would be dividends from the water sector working more closely with the energy and housing sectors. The new regulatory framework for water should be developed alongside that for energy and housing so that wider national priorities (on climate change and population growth) can be efficiently taken forward. In this context, Waterwise warmly welcomes the inclusion by the Welsh Government of water efficiency in the Fuel Poverty Scheme and by the Coalition Government of it in Green Deal.

Waterwise works closely with Ofwat and the water companies and has also worked with Ofgem and the energy companies to build on the potential links between CERT and Water Efficiency Targets (see below), as well as to drive and support the inclusion of water in the Coalition Government's GB-wide Green Deal energy efficiency retrofitting programme for homes. Waterwise was the first to bring together the two sectors in a meeting, including the two regulators and their respective government departments, to discuss joint working between the two sectors, in spring 2010. Since then relations between regulators have strengthened but these are still, as the National Infrastructure Plan terms it, "only on a limited, informal basis". Sensitivity amongst government departments in Whitehall about Ofwat and Ofgem only working formally with their own sponsor department are only now starting to ease. It is clear to Waterwise that Ofwat now recognises the need to work with other sectors, including particularly Ofgem, but without a clear steer, driver or set of common principles from the Welsh and Coalition Governments this still tends to be piecemeal. It needs to be built into the fabric of how government and regulation works. Waterwise is very supportive of the process set out in

the National Infrastructure Plan to work towards this in terms of sectors which are economically regulated. Waterwise would like to see this go even further so that for example it would be the norm for Ofwat and Ofgem to work with the Homes and Communities Agency which will in future regulate social housing, to ensure that retrofitting, social housing and new build programmes are linked with efficiency measures undertaken by the water and energy sectors.

***Revenue Correction Mechanism***

Paragraph 3.20 in the consultation refers to Ofwat's revenue correction mechanism, which was designed to remove the financial penalties on companies if customers used less water, and states that the Welsh Government expects Ofwat to review its impact on demand management measures. Waterwise welcomes the RCM, but it does not single-handedly address the broader capex bias which counts against demand management. Furthermore, a survey Waterwise conducted of water companies showed that none of them were using the RCM to drive investment, not least because it only bites every five years. One method of making more effective (outside of the broader regulatory reforms outlined in this response) might be for it to bite annually.

**Question 25:**

Is there more the Assembly Government could do to encourage the provision of clear information on the water efficiency of products and to encourage people to purchase more efficient products?

**Comments:**

Walker recommended that the UK and Welsh Governments review the efficacy of current schemes and work with Waterwise, water companies, the Bathroom Manufacturers Association (BMA), other manufacturers, stakeholders and retailers to ensure voluntary schemes are effective (and that a mandatory scheme should also be given consideration). Waterwise is very supportive of the BMA's label which is now comprehensive in bathroom products. Waterwise has brought together the trade bodies covering the three major water-using areas of household behaviour – kitchens and gardens, as well as bathrooms – to discuss the possibility of building on the BMA label, and the Water Technology List for non-domestic consumers of water, to develop a self-funding voluntary label, focussing on water efficiency, for all water-using products for domestic and non-domestic use. Waterwise believes this should be both voluntary and self-funding, and UK-wide – providing a strong evidence base on its impact on customer behaviour in advance of potential mandatory labelling on water efficiency from the EU. These discussions are ongoing and Waterwise looks forward to working with the Welsh Government on them.

Waterwise welcomes the commitment in the consultation to exploring with DECC the links between ECO (the successor to CERT) and water efficiency.

Waterwise has worked with energy companies and others to seek to unblock the issue of “additionality” which has constrained (although not eliminated entirely) joint working between water and energy companies under CERT and the Water Efficiency Targets. This included convening a round table between the two sectors, joint letters to Ministers and a joint submission to the DECC Call for Evidence earlier this year on retaining water-using products (three currently) in CERT. The Evidence, which can be found [here](#), makes the case for why water-using products should be included, in the context of delivering both DECC aims on carbon reduction and wider government aims on climate change adaptation, as well as challenging the additionality barrier. The consultation has closed but DECC has not yet responded. DECC has indicated that the additionality issue does not need to be redesigned into ECO, and Welsh Government representations on the need for the inclusion of water efficiency in ECO will be very welcome.

**Question 26:**

How can voluntary approaches to labelling be best supported?

**Comments:**

One effective role for the Welsh Government in supporting voluntary schemes would be to bring all stakeholders together to develop a single scheme, focussing on water efficiency (not linking it jointly with energy efficiency, which already has its own effective label in the ESTR). Government support for this would help ensure it happened. Government money for voluntary schemes is not the main principle in this area, in the view of Waterwise – rather a self-funding scheme could be developed. However, there is significant scope for existing spend on schemes such as the Water Technology List to be rationalised to support the set-up costs for a single label, which could be undertaken in the third sector.

Secondly, as most retailers and manufacturers operate at UK level, it will be important for UK governments to work together on the development of a single voluntary water efficiency label for water-using products.

Finally, a voluntary label should be linked with public sector procurement, product standards for taps, showers and urinals, incentives such as council tax rebates and new green financial products, social housing standards and retrofitting schemes, regulations for new homes and refurbishment, VAT discounts for sustainability, and water efficiency measures in energy efficiency and fuel poverty programmes. It could also potentially be linked with a cross-sector water efficiency campaign to help people waste less water.

**Question 27:**

What role should regulation – in terms of product design and requirements to install – play?

**Comments:**

Waterwise welcomes the inclusion from April 2010 of water efficiency in Building Regulations for England and Wales, at a level of 125 litres per person per day. It is important that this is retained and regularly reviewed.

Furthermore, the trajectory of energy efficiency policy and requirements should be mirrored by water efficiency, rather than the latter trailing behind – this will be particularly important in the design of new regulation.

On product standards, currently only toilets are subject to these. Tying in with the Walker recommendation, product standards should be set for taps, showers and urinals, to help deliver water savings and drive the market in water-efficient products. These should be linked with public sector procurement, a single, voluntary, cross-sectoral water efficiency labelling scheme for products, incentives such as council tax rebates and new green financial products, social housing standards and retrofitting schemes, and potentially a cross-sector water efficiency campaign to help people waste less water.

Links with the regulatory frameworks for other sectors, in particular energy and housing, are particularly important. For example:

- Social housing standards should include the provision of showers and other water efficiency measures in upgrading programmes and newly-built homes
- New green financial products such as green mortgages and sustainability certification schemes on exchange of ownership should include water efficiency
- Design standards for new schools and policy for ongoing buildings management of schools should include water efficiency – Waterwise's Evidence Base for Large-scale Water Efficiency shows that significant water and financial savings can be made through retrofitting programmes in conjunction with the water company, particularly in secondary schools
- Policy and regulation across sectors should allow and encourage joint working between water companies, energy companies, social housing providers and others. Currently the regulatory frameworks exist in parallel, even though the challenges (climate change and population growth) and, often, the customer base, are the same

**Question 28:**

How can water efficiency be built into the programmes that invest in making improvements to existing homes?

**Comments:**

In the context of the welcome analysis by the Welsh Government in the consultation and more widely of the importance of water efficiency to sustainable development, it is particularly key that water efficiency be included in existing retrofitting programmes. 5% of total UK greenhouse gas emissions comes from heating water in homes, and 1% from water company processes which include the pumping and treating of water and wastewater, so reducing the wastage of both hot and cold water in homes will impact on carbon targets, in addition to aiding resilience and adaptation to climate change. The 5% from hot water in homes and the 1% from the water industry's own processes are, combined, broadly equivalent to the contribution of aviation to total UK greenhouse gas emissions.

The potential for addressing carbon emissions from homes through hot water efficiency measures is not being fully realised. Waterwise sets out below three examples of existing programmes and measures in which it is essential to retain the water efficiency element. In addition, it should be designed into future energy efficiency and fuel poverty retrofitting policies and programmes. Finally, the measures set out in the response to questions 23 and 24 will deliver greater water efficiency in existing homes specifically through the regulatory framework for water.

#### *CERT and ECO*

Waterwise welcomes the commitment in the consultation to exploring with DECC the links between ECO and water efficiency. Waterwise has worked with energy companies and others to seek to unblock the issue of "additionality" which has constrained (although not eliminated entirely) joint working between water and energy companies under CERT and the Water Efficiency Targets. This included convening a round table between the two sectors, joint letters to Ministers and a joint submission to the DECC Call for Evidence earlier this year on retaining water-using products (three currently) in CERT. The Evidence, which can be found [here](#), makes the case for why water-using products should be included, in the context of delivering both DECC aims on carbon reduction and wider government aims on climate change adaptation, as well as challenging the additionality barrier. The consultation has closed but DECC has not yet responded. DECC has indicated that the additionality issue does not need to be redesigned into ECO, and Welsh Government representations on the need for the inclusion of water efficiency in ECO will be very welcome.

#### *Green Deal*

Including a basic water efficiency retrofit of showers and taps in the Green Deal will deliver in-house carbon savings at low-cost - £50 per home to cover both installation and products (taking only 20 minutes to install), in comparison to the up to 10K assumed for other Green Deal measures such as insulation. It meets the Golden Rule as would payback within one to three years. It would also deliver wider government goals such as on adapting to climate change and the sustainability of housing.

The payback periods for water efficiency measures compare favourably with

the payback time for energy efficiency measures in the Green Deal. Table 1 (below) summarises the payback times, and water and energy savings at household level, for including water efficiency measures in the Green Deal:

A link to water metering in homes could be used to increase the financial savings from water efficiency by reducing water bills as well as energy bills – and as such could be used to enhance the attraction of the Green Deal package to the individual householder.

A modular approach could be developed so that Green Deal suppliers can easily slot the water efficiency element into their household offer. Shower and tap retrofit devices offer a very cost-effective way to cut carbon and increase wide-scale public engagement on environmental issues (and have additional water-saving benefits). Shower devices will always save both energy and carbon (as well as water), and not many devices are designed to do this. This makes showers particularly important in delivering DECC goals, which include reducing emissions in the non-traded sector. Water efficiency should be included in both the “Surveyor” and the “Installer” phases of the customer journey under the Green Deal – actual measures as well as advice – in terms not only of the specific costs and benefits on the Green Deal balance sheet but also to help deliver the wider aims of DECC and the Coalition Government, on carbon and water savings.

Once every home in the UK has been insulated, through CERT, the Green Deal, ECO (the proposed successor to CERT) and other measures, there will be remaining carbon emissions from homes in terms of heating water which need to be addressed. Finally, households will save money through wasting less hot water – on energy bills, and on water bills too if metered.

A formal link with the regulatory framework for water in Great Britain, through the Water White Paper, could help fund the cold water efficiency element of the Green Deal - the toilet retrofit to save litres every flush, at an extra £10 to £15, and 10-minute installation (overall £65 including 30-minute installation for retrofitting taps, showers and toilets).

The reference in the National Infrastructure Plan to the Green Deal explicitly refers to driving water efficiency, in the following commitment: *“Meet the water needs of a growing population in a UK where rainfall is likely to be both more intense and less frequent by..... encouraging the efficient use of water in homes and businesses including through delivering joint energy and water savings within the Green Deal”*.

Further details on the costs and benefits of including water efficiency in the Green Deal, drawing on Waterwise’s Evidence Base for Large-scale Water Efficiency, can be found [here](#), in Waterwise’s submission to the DECC Call for Evidence on Green Deal Costs and Benefits, in April 2011 (annexes available [here](#)).

*Table 1*

Measure	Scenario 1 – retrofit of showers and taps	Scenario 2 – retrofit of showers, taps and toilet	
Cost of products per household	£27.50	£37.50	
Installation time per household	20 mins	30 mins	
Installation cost per household	£20	£30	
Cost per scenario per household (products and installation)	£47.50	£67.50	
Energy savings per year	300 kWh	300 kWh	
Water savings per year	7.4m <sup>3</sup>	15m <sup>3</sup>	
Energy bill savings per year	£26	£26	
Water bill savings (metered) per year	£25	£51	
Payback on energy	Within 3 <sup>rd</sup> year	Within 3 <sup>rd</sup> year	
Payback on energy and water	Within 1 year	Within 1 year	

*Fuel Poverty Scheme*

The Welsh Government is already committed to including water efficiency in the new all-Wales Fuel Poverty Scheme. Waterwise can provide the costs and benefits, and methodology, (including drawing on its own work with social housing providers on water efficiency, linked with energy efficiency) of including a basic retrofit of showers, taps and toilets in this programme. This would enhance social comfort for residents as well as reducing bills (energy and also water if metered) and reducing water wastage.

Links between all these schemes and the regulatory framework for water would ensure cost-effective delivery, by enabling water companies to join partnerships.

Finally, Phase Two of the ARBED programme provides an opportunity to include water efficiency.

**Question 29:**

What factors should be considered in designing a methodology to identify areas where less water is available?

**Comments:**

Waterwise warmly welcomes the recognition in the consultation that “the apparent abundance of water in Wales is misleading, particularly in the light of the most recent climate change projections”. In developing a methodology to identify areas where less water is available it is important to consider not only the immediate price of water but also its wider value to society, the economy, the environment, wellbeing, health and community cohesion. Three important factors in this will be scarcity value, abstraction pressures and long-term benefits (and avoided costs) of demand management. Ultimately, the full value of water should be reflected in the cost-benefit analysis used by Ofwat, and the wider investment incentives on water companies.

**Question 30:**

How could the results of such an assessment be used to target water efficiency and demand management activity in Wales, if at all?

**Comments:**

It will still be important to deliver water efficiency and demand management across Wales, as even a full definition of the value of water will be time-sensitive. Six years ago when Waterwise was set up as a UK-wide NGO some stakeholders took the view that water efficiency (and metering) would only ever be necessary in the South East and East of England, and certainly not in the North West of England or in Scotland – in fact the latter two areas were the only two in the UK either to bring into force or nearly bring into force a hosepipe ban during 2010, due to short-term drought issues. To manage the long-term impacts of climate change (and ensure mitigation programmes are as effective as possible), water efficiency and demand management will be important across Wales.

**Metering****Question 31:**

Do you agree with the key principles the Assembly Government has identified at paragraph 4.16 to inform the development of metering policy? Are there other principles that should be included?

**Comments:**

Waterwise warmly endorses the key principles set out in paragraph 4.16.

The emphasis on promoting behavioural change is welcome. Metering is a moment of change which draws customers' attention to their water use. It is important to address behaviour change of two types:

- Everyday behaviours – changing (breaking) habits
- One-off behaviours – installing water-efficient devices

Metering is a prime opportunity to provide measurable benefit to customers in each of these areas, and therefore to influence them.

Waterwise also supports the emphasis on customer engagement, and agrees that this is central to the successful roll-out of metering, and that customers' views should be taken into account when making decisions about the roll-out of metering. (For instance, Southern Water postponed the introduction of a seasonal tariff because customers said it would be a step too far to introduce it at the same time as metering.) However, Waterwise strongly believes that it would be a mistake to be deterred from more widespread metering either because of myths and misconceptions that customers hold about metering, or because of myths and misconceptions that policymakers believe customers hold. Research shows that customers can, to some extent at least, be persuaded that metering is genuinely being introduced as a water-saving measure (rather than as a ruse for water companies to increase their profit).

To deliver the principles set out in paragraph 4.16 it will be important to develop a strategic package including a move to greater metering, a Wales-wide policy framework for social tariffs, and water efficiency advice and measures.

On the specific point of customer engagement, Waterwise research shows that customer buy-in is in part dependent on social tariffs helping the working poor as well as those living solely on benefits.

Finally, there is disparity between water companies (because of differences in charging structures, in particular the volumetric charge) between the potential bill reduction from a move to metering. This should also be addressed.

**Question 32:**

What are your views on the costs, benefits, opportunities and risks of the scenarios outlined for the approach to metering in Wales? Are there other scenarios that we should be considering?

**Comments:**

**Question 33:**

What approach do you think the Assembly Government should take to metering in Wales?

**Comments:**

Waterwise believes the Welsh Government should give political support to a strategic move to greater metering, alongside a Wales-wide political framework for social tariffs and water efficiency advice and measures. This would reflect its sustainable development duty. It should also be linked to other policies and measures, such as the Green Deal and social housing and fuel poverty retrofitting schemes – not mandated, but used as an opportunity for effective implementation of dual programmes, enhancing the customer view of the benefits of metering.

**Question 34:** We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

**Comments:**

Responses to consultations may be made public – on the internet or in a report. If you would prefer your response to be kept confidential, please tick here: