Building Regulations Sustainability Review
Consultation Response Form

Section 1: About you

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Responses to consultations are likely to be made public, on the internet or in a report. If you would prefer your response to remain anonymous, please indicate here by putting a cross (X) in the box:	

To help us analyse the responses, please put a cross (X) in the relevant boxes:

Sector you are representing:	Building Control Bodies	
	House Builder	
	Designer / Engineer / Surveyor	
	Builder / Contractor	
	Commercial Developer	
	Individual respondent	
	Water Company	
	Acoustician	
	Police	
	Property Management	
	Manufacturer / supply chain	
	Other (if other, please specify here): Natural Resources/Environment	Y

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Consultation Response Form

Section 2: Your response

Please respond in the space below to the relevant question. You may choose to respond to some or all of the questions.

Question 1

Do you consider that there is a need for greater guidance for Building Control Officers in relation to the testing regime on sites where Pre-Completion Testing is the preferred method of compliance particularly on choice of dwellings to be tested?

Yes	
No	

Comments
No comment

Question 2

In light of the analysis undertaken, do you have any comments relating to the decision not to amend Part E of the Building Regulations?

Yes	
No	

Comments
No comment

Question 3

Do you agree that the proposed maximum limit of 110 litres per person per day is acceptable?

Yes	X
No	

Comments

Yes, we do agree that under proposal 1 (3.2.1.1) – implementation of a water use limit of 110 litres per person per day for 'all' new builds of any size is an acceptable regulatory limit.

This would be an improvement on the current limit under Building Regulations 2010 (125 litres per person per day) and allows for a fixed factor of 5 litres per person per day for external water usage (subject to proposal 3, section 3.2.1.8).

Question 4
Do you consider that Options 1 to 4 are viable?

Yes	Unsure
No	

If NO, which options do you consider are not viable and why?

We can appreciate that there are a wide range of benefits in regulating fitting performance standards to new builds through Building Regulations, and providing an alternative to the water calculator (especially given that this approach exists currently).

We support setting specific water use for each water-using product or device, which would provide a very clear and simple guide for choosing and installing water-efficient devices into homes. Applying a maximum performance level standard enables a degree of flexibility and choice for device procurement, whilst delivering the key objective; to reduce water consumption without reducing quality of experience and performance.

However, we are unable to comment on the viability of each option in turn. We are not experts in this field and are limited in our advice on which options (1 to 4) are viable. We recommend that you consider consulting with the Energy Savings Trust; Waterwise and WRAP, with regards to the viability of the fittings approaches.

Having said this, we acknowledge that within the consultation document, it states that Option 2 is the same performance standard which has been incorporated into the Building Regulation 2010; Approved Document G (2015 Edition) England. This would represent a "Less than 110 litres/person/day fittings approach", which we would support.

Question 5
Do you think that any other alternative maximum performance level standard could be proposed?

Yes	

No	

Comments
We are unable to advise on any other alternatives.

Question 6
Do you agree with the performance standards detailed in tables 3.1, 3.2, 3.3 and 3.4?

Yes	Unsure
No	

Comments
Note: we are not experts in this field and are limited in our advice on which option (1 to 4) are correct in terms of the performance standards details.

Question 7
Do you agree that the component types which have been included for within the fittings approach are appropriate?

Yes	X
No	

Comments
On the whole yes, however within all the options, performance standards for dishwashers and washing machines have been omitted. We would like to understand how these performance standards could be considered. Note these are included in Building Regulations for England 2015. We would also like to understand what external fittings can be used to limit external use to 5 litres per day.

Question 8
Do you consider that the water calculator and fittings approach provide a flexible route to compliance with the building regulations?

Yes	X
No	

Comments
Yes, the calculator has been widely used to date and fittings approach would provide flexible route to compliance.

Question 9
Do you agree that the fixed factor of 5 litres per person per day for external water usage is removed from the water calculator for dwellings incorporating a rainwater storage unit?

Yes	
No	Unsure

Comments
We are entirely supportive of ensuring that where there is outside garden space that developers install rainwater storage units (i.e. water butts). They are a simple water savings device for reducing water consumption in the garden (which is up to 5% of household water consumption). This is particularly important at times of water shortage when a water company may have called for voluntary restraint or imposed a temporary use ban (TuB). However, at this stage, we are unsure that the removal of the fixed factor of 5 litres/person/day for external usage from water calculator for those dwellings with a rainwater storage unit (>100 litre capacity) would lead to that household using less external water than those who have the fixed factor imposed. For example, what assurances are there that the installation of a rainwater storage unit will deter the householder(s) from using water from other device fittings, such as a pressure hose, and not exceeding the fixed factor. In addition, what regulatory compliance checks will be in place to ensure that the household does not remove the rainwater storage unit in the future (as not covered under Water Supply (Water Fittings) Regulations 1999.). We would suggest that Welsh Government consider any current research that can clearly demonstrate that installation of rainwater storage units on the whole leads to the dwelling using less water than the fixed factor of 5 litres per person per day for external usage, before fully implementing proposal 3 (section 3.2.1.8).

Question 10
Do you agree that a minimum 100 litres capacity be required before removal of the fixed factor from the water calculator?

Yes	
No	Unsure

Comments
See question 9 response. Before agreeing a minimum 100 litre capacity, it would be useful to consider research on whether rainwater harvesting storage units are effective in reducing water consumptions during normal years (outside of voluntary constraints or TuBs). In addition, what measures would be in place to ensure they are not removed at a later date.

Question 11
Do you agree with the inclusion of water efficiency regulation for non-domestic buildings?

Yes	X
No	

Comments

We agree with the proposal whereby **Fittings-based performance standards would** be applied to all new non-domestic buildings (including extensions) in Wales. We believe developers should have to demonstrate how they have considered water efficiency and conservation in the design and maintenance of buildings. We support a building performance standard for non-household buildings (across all sectors), both as a regulatory level and a voluntary code above that. Therefore, we welcome performance standards as outlined in Table 3.5 below:

Table 3.5: Proposed performance standard for non-domestic buildings Water-consuming component	**Minimum performance standard**	**Stretch targets**
WC	5 Litre effective flush volume	4.5 Litre effective flush volume
Urinals	6 litres / bowl / flush	3 litres / bowl / flush
Wash hand basin taps	9 litres per minute	5.0 litres per minute
Showers	10 litres per minute	8 litres per minute

Question 12
Do you agree with the fittings approach for non-domestic buildings?

Yes	X
No	

Comments
See Q11 response. We consider this an improvement given that there is currently no provision for non-domestic buildings within the Regulation.

Question 13
Do you agree with the proposed maximum performance standards?

Yes	Unsure
No	

Comments
We are unable to provide expert advice on whether the maximum performance standards are appropriate. However, we consider this an improvement given that there is currently no provision for non-domestic buildings within the Regulation.

Question 14
If no, should these proposed performance standards be increased in line with the stretch targets?

Yes	
No	

Comments
See Question 13 response N/A

Building Regulations Sustainability Review
Consultation Response Form

Question 15
Do you agree with the proposal not to introduce further water efficiency requirements (i.e. further than the existing 125l/p/d requirement) for buildings undergoing a material change of use?

Yes	X
No	

Comments
Yes, this seems a reasonable approach given the concerns over the compatibility of the existing drainage systems with limited flow fittings, thus raising the potential risk of blockages within the system. Although there maybe scope to explore a voluntary code beyond the existing 125 l/p/d for developers whom are willing.

Question 16
Do you agree with the Welsh Government's approach of not regulating water quality and efficiency for replacement fittings?

Yes	See comments
No	

Comments
We appreciate that as part of the original scope of works, the provision of regulatory standards and policy of water efficiency within existing dwellings was reviewed. Following this review, and discussions with the Building Regulations Advisory Committee for Wales, it was deemed that the implementation of regulation for replacement (which are outside of the scope of Approved Document G 2010) water fittings would be difficult. However, we do believe that as incentives and measures to improve efficiency of water fittings drive technological improvements in the marketplace, regular reviews of the Water Supply (Water Fittings) Regulations 1999 will become essential. Reviews are important to ensure that minimum standards are tightened, and a wider range of products is included. We also would like to mention the advice from Energy Savings Trust and NRW (from the former Environment Agency Wales), that has been given to Welsh Government on the 'Wales Housing Quality Standard' for local authorities existing housing stocks. Within this advice we have provided the benefits of implementing water efficiency retrofitting programmes. Please refer to this link for further information: http://www.energysavingtrust.org.uk/organisations/sites/default/files/Guidance%20on%20water%20and%20associated%20energy%20efficiency.pdf . Therefore we

believe there is scope to introducing regulations (or voluntary codes) for water efficiency within existing buildings within local authority control.

Question 17
Do you foresee any additional compliance and performance issues which may arise from the introduction of enhanced water efficiency standards for new dwellings?

Yes	
No	X

Comments
We do not foresee any additional compliance and performance issues at this stage for new dwellings.

Question 18
Do you foresee any additional compliance and performance issues which may arise from the introduction of water efficiency regulation for new non-domestic buildings?

Yes	
No	X

Comments

Question 54

Please set out any additional comments you have below.

Comments:

Water Efficiency Labelling Scheme

At this point though, we would like to raise the increased usage of 'information on the water efficiency of products'. Water efficiency labelling has been mentioned within the consultation but it is has not been considered as part of the regulations. We support labelling schemes that improve consumer choice by making information available on water efficiency of a product when it is bought.

The Bathroom Manufacturers' Association has introduced a voluntary scheme for water efficient bathroom products. International examples show that the most effective schemes are mandatory and part of an overall water efficiency strategy. While an effective labelling scheme would inform consumer choice, there is a growing role for building regulations to set minimum standards, help transform the market and contribute to achieving the Welsh Government's sustainable management of natural resources agenda.

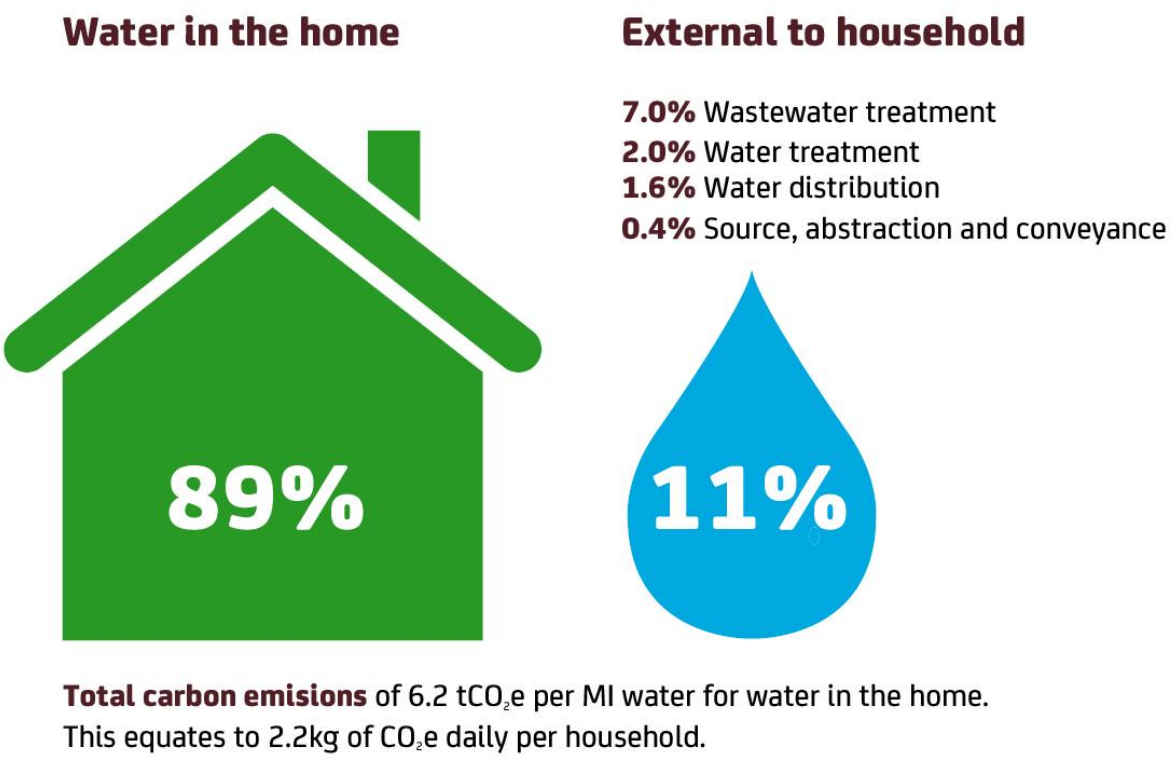
Integrated water and energy efficiency

We would like to understand how integrated water and energy efficiency (hot water systems) has been considered within the reviewed Building Regulations 2015. Below is some background information about why integrated programmes are important:

The average person in Wales uses 150 litres of water per day of which around two-thirds is hot water, costing the average household £200 a year to heat. This hot water cost is separate from and in addition to, hot water used in domestic central heating systems. If we can waste less hot water, we can save water, energy and money and reduce greenhouse gas emissions.

Water-related activities contribute to 6% of the UK's annual carbon emissions. There are energy and greenhouse emissions associated with water treatment and distribution, but the significant proportion of the energy associated with water consumption is a result of heating hot water in the home as shown in figure 1.

Figure 1: Origin of CO_2 emissions associated with domestic water



It shows that 89% of the total CO_2 emissions is associated with water use in the home (by heating water), while 11% is associated with the emissions resulting from abstracting, conveying and treating domestic water outside the home.

Heating water for showers, baths, taps and water-using appliances costs the average UK household £200 a year on their fuel bills and represents approximately 23% of household energy costs.

Installing simple water-saving measures, such as water-efficient taps and showers, will save both water and energy by minimising heated water, which could reduce household bills by up to £120 annually.