

Why we need a Mandatory Water Label – Summary

Reducing personal water use increases the resilience of our water supplies, leaves more water in the environment, reduces our energy use and carbon emissions and can help with the affordability of both water and energy bills.

However, it is currently very difficult for domestic and business customers to make informed choices about the water efficiency of the water using products they buy.

A mandatory water labelling scheme linked to minimum fittings standards has been in place in Australia since 2005. By 2017 it was already saving over 300 Ml/d of water and has reduced emissions by 11 MtCO₂e to date and household bills by \$1 billion per year¹.

A similar scheme in the UK would see water savings grow to over 1,750 Ml/d by 2045, reducing personal consumption by over 27 litres per person per day. Over 25 years it would reduce UK household utility bills by over £38 billion and cut UK carbon emissions by over 58 MtCO₂e.

Introducing a mandatory water label linked to minimum standards for fittings is the single most cost-effective intervention that government(s) could make to help reduce personal water use.

The water industry's Water Efficiency Collaborative Fund and Waterwise, with support from Defra, commissioned the Energy Savings Trust (EST) in 2018² and 2019³ to assess and evaluate the costs and benefits that a water labelling scheme could have on domestic water and energy consumption. The research drew on evidence from the performance of a successful mandatory water label in place in Australia since 2005 and has been peer reviewed by a number of expert UK and International organisations. It found:

- In all scenarios having a water label on water using products saves water.
- A mandatory water labelling scheme led by government saves at least five times as much water as a voluntary scheme led by government as its use is compulsory with government able to mandate removal of the least efficient products over time. It also saves around 9 times as much water as a voluntary scheme led by industry
- If the mandatory water label is linked with minimum fittings standards for water using products used in new and existing houses it more than doubles the impact of the water label as it helps embed water savings into new build and existing housing stock. The level of savings increases at more ambitious efficiency standards.
- If we had a mandatory water label and used minimum fittings standards the research indicates that we would see water savings grow to more than 1,750 Ml/d over 25 years (1,500 Ml/d in England, 75 Ml/d in Wales⁴ and 127 Ml/d in Scotland) with personal use reduced by over 27 litres per day in England, 22 lpd in Wales and 48 lpd in Scotland.
- UK Householders would see savings of £38bn on their water and energy bills over 25 years (around £40 on average per householder per annum). For every £1 that the mandatory water label scheme would cost to run the benefits through savings would be £68 in England, £29 in Scotland and £49 in Wales.
- The energy savings over 25 years of over 58 MtCo₂e (50 MtCo₂e in England; 2.7 MtCo₂e in Wales and 5.4 MtCo₂e in Scotland) are equivalent to taking over 1 million cars off the road.
- Work by Artesia for Water UK⁵ on pathways to reduced personal water use confirms that a mandatory water label linked to minimum fittings standards is "*the single most cost-effective intervention*" that government(s) could make.

¹ <https://www.waterrating.gov.au/about/review-evaluation/environmental-effects>

² <https://www.waterwise.org.uk/knowledge-base/water-labelling-phase-1-technical-report-2019/>

³ <https://www.waterwise.org.uk/knowledge-base/water-labelling-phase-2-project-technical-report/>

⁴ <https://www.waterwise.org.uk/knowledge-base/est-welsh-government-water-labelling-report-2020/>

⁵ <https://www.water.org.uk/wp-content/uploads/2019/12/Water-UK-Research-on-reducing-water-use.pdf>

Why we need a Mandatory Water Label – Full Briefing

The water industry's Water Efficiency Collaborative Fund and Waterwise, with support from Defra, commissioned the Energy Savings Trust (EST) in 2018⁶ and 2019⁷ to independently assess and evaluate the costs and benefits that a water labelling scheme could have on domestic water and energy consumption in England. The research drew on evidence from the performance of a successful mandatory water label in place in Australia since 2005⁸ and was peer reviewed by a number of expert UK and International organisations. The findings of the assessment have been used to inform this briefing.

Why do we need a water label?

Reducing personal water use will increase the resilience of our water supplies, leave more water in the environment, reduce our energy use and carbon emissions and can help with the affordability of both water and energy used in the home.

However, it is currently very difficult for customers to make informed choices about the water efficiency of water using products they buy. Introducing a mandatory water label linked to minimum fittings standards will address this and is the single most important thing that government could do to help reduce personal water use and realise the benefits this brings (see box 1).

Box 1 - Benefits of a water label

- **Securing future water supplies** in the face of population growth and climate change. As clearly set out in the [NIC 2018 report](#) and in Sir James Bevan's [recent speech](#) greater water efficiency has a crucial role in increasing resilience.
- **Reducing our energy use and carbon footprint.** Nearly 6% of our greenhouse gas emissions come from water company operations (1%) and from how we use water in the home (4-5%) [CIWEM \(2013\)](#)
- **Leaving more water in the environment.** For example, the water saved by reducing consumption to 100 lppd is equivalent to the combined summer flow (Q95) in a third of UK rivers, including our iconic [chalk streams](#)
- **Freeing up water to allow future housing and business growth.** In many areas, particularly in south-east England water availability is an increasingly important constraint to housing and business growth.
- **Reducing costs for the water sector and its customers.** Deferring the need for some large-scale infrastructure schemes.
- **Reducing utility bills for water and energy users,** including vulnerable customers and business.

What sort of water savings could a water label achieve?

The EST research clearly highlights the water saving benefits of a water label. In all scenarios they assessed having a water label on water using products saves water (see Annex 1 Tables 1 & 2). It can be seen that the amount of water saved varies depending on whether the label is mandatory or voluntary; whether it is led by government or industry and whether it is linked to minimum standards or not.

Why a mandatory label not a voluntary one?

A mandatory water labelling scheme led by government (see Scenario 1 in Table 2) was found to save at least five times as much water as a voluntary scheme led by government (see Scenario 4 in Table 2) as its use is compulsory; it can apply to all water using product types not just a sub-set and it is possible to ensure the label is visible to consumers at the point of sale.

⁶ <https://www.waterwise.org.uk/knowledge-base/water-labelling-phase-1-technical-report-2019/>

⁷ <https://www.waterwise.org.uk/knowledge-base/water-labelling-phase-2-project-technical-report/>

⁸ <https://www.waterrating.gov.au/about/review-evaluation/environmental-effects>

Mandatory use of the label also means that it is more straightforward to set impactful minimum standards (see below) without facilitating unfair advantages or disadvantages to those products outside a voluntary scheme. It provides a level playing field in which market forces will drive both manufacturers and products towards greater water efficiency.

A review of international water labelling schemes reported by the International Water Association in 2019⁹ concluded that “*successful schemes are often mandatory, whilst many voluntary schemes fail to implement the label across the market*”.

Why a government led scheme and not industry led?

A government led voluntary label (Scenario 4) is calculated as saving nearly twice as much water as an industry led voluntary scheme (Scenario 6) as it is anticipated it could engage with a wider range of organisations increasing awareness and visibility. However, both save far less than a mandatory scheme led by government (Scenario 1).

Should a mandatory label be linked with minimum product and building standards?

Linking the mandatory water label with minimum standards for water using fittings used in new and existing buildings more than doubles the impact of the mandatory water label as it helps embed water savings into both new build and existing housing stock (see Scenario 2 in Table 2). Additional savings beyond those identified would also be made in commercial buildings. Over time the minimum standard thresholds can be tightened to remove the most inefficient products from the market.

The level of water savings achieved by the mandatory water label increases at more ambitious efficiency standards (see Tables 3a to c). For example, by installing more efficient fittings in new build and existing homes we could save more than 9,500 billion litres of water over a 25 year period. By year 25 we would be seeing water savings of more than 1,750 Ml/d (1,500 Ml/d in England, 75 Ml/d in Wales¹⁰ and 127 Ml/d in Scotland) with personal use reduced by over 27 litres per day in England, 22 lpd in Wales and 48 lpd in Scotland. The fittings to achieve this ambition are already on the market and the savings are equivalent to the water needed to supply over 12 million people based on current consumption levels.

The scale of these savings can be compared with the NIC 2018 recommendation that around 4,000 Ml/d of additional water is needed in England to adequately ensure the resilience of water supplies to future drought.

A mandatory water label with minimum standards could also help address the problem of leaky loos. Around 5-8% of toilets are leaking into the pan particularly dual flush toilets. The volume leaked per day is estimated to be around 400 Mld¹¹. This performance issue could be addressed through minimum standards linked to the label.

What about saving energy and reducing carbon emissions?

If we use more water efficient products such as showers and dishwashers in our homes we not only save water but we also can reduce our energy use, reduce our carbon emissions and reduce our energy bills. It will help us meet the UK's net zero greenhouse gas emissions target. Around 6% of UK carbon emissions

⁹ https://iwa-network.org/wp-content/uploads/2019/02/IWA-EUWM-Labeling-Report_Final-002.pdf

¹⁰ <https://www.waterwise.org.uk/knowledge-base/est-welsh-government-water-labelling-report-2020/>

¹¹ <https://www.waterwise.org.uk/knowledge-base/leaky-loo-position-statement-october-2020/>

arise from how we use water¹². A massive 89% of this comes from heating water in our homes which makes up around 20% of a typical household gas bill¹³.

A mandatory water label linked to minimum standards for fittings could reduce energy use by over 250 GWhr and reduce carbon emissions over 25 years by over 58 MtCO₂e according to the EST analysis (see Tables 3a to c). This huge carbon saving is made up of 50 MtCO₂e in England; 2.7 MtCO₂e in Wales and 5.4 MtCO₂e in Scotland. To put this into context this saving is equivalent to taking over a million cars off the road. Additional energy and emissions savings beyond those stated above would be realised in non-domestic commercial buildings which use 20-25% of the water put into supply.

Is there a strong financial case for a mandatory water label?

A mandatory water label linked to minimum standards for fittings is the most cost-effective intervention government can make to significantly reduce personal water use.

The total financial benefits over 25 years exceed the costs by more than 60 to 1 in England with an average cost per household of around 55p per year delivering household savings in the order of £40 per year (see Table 3a). It is hugely cost beneficial in Wales and Scotland (see Tables 3b and c). Over 25 years the savings for householders on their water and energy bills add up to over £38 billion.

If the additional costs of installing more efficient water saving fittings in new homes are passed onto house-buyers then they are paid back through reduced water and energy savings within at most 15 months reducing to a few weeks once the scheme is more mature.

Artesia in their 2019 work for Water UK looking at alternative pathways to reducing personal water use found that “*the single most cost effective intervention to save water is a mandatory government-led scheme to label water using products, linked to tightening Building Regulations and water supply fittings regulations*” with the cost per megalitre of water orders of magnitude lower than supply side alternatives.

What would a water label look like? How could it work with the existing energy label?

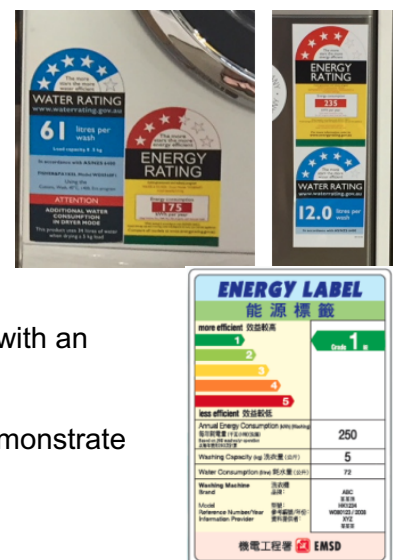
The new water label should be designed to closely match the existing energy label, but be easily distinguishable from it, to maximise acceptance and understanding. This is the approach adopted in Australia with their mandatory water labelling system (see Figure).

For the water label to have similar visual appearance to the EU energy label it will have to share some content elements, primarily:

- An A to G rating system (or similar) displayed as a colour coded scale with an arrow to highlight the specific model’s performance
- A headline water consumption figure, as the largest figure on the label.
- Other additional figures and/or graphics to evaluate performance or demonstrate functionality.

How could it be introduced in the UK?

Implementing a UK wide mandatory water label will require specific legislation in the four UK countries that can also be used to mandate efficiency levels and performance criteria for all products sold (i.e. through



¹² <https://www.energysavingtrust.org.uk/policy-research/home-water>

¹³ <https://www.energysavingtrust.org.uk/home-energy-efficiency/saving-water>

new Water Labelling Regulations). Resource efficiency clauses 47 and 48 in the Environment Bill (2019) provide the enabling primary legislation for secondary regulations to be brought forward on both mandatory water labelling and minimum standards across all four UK countries.

Other relevant regulations such as Building Regulations can then be simplified to link to and stipulate minimum water label product ratings to drive higher standards for new properties. A similar approach can be taken with property refurbishment (domestic and commercial) with the specification linking to the required water efficiency rating for relevant fittings.

Has a mandatory water label been used elsewhere?

A successful mandatory water labelling scheme linked to minimum fittings standards has been in place in Australia since 2005 – The Water Efficiency Labelling Scheme or WELS. It replaced a previous voluntary system. By 2017 it was already saving over 300 Ml/d of water and had reduced carbon emissions by 11 MtCO₂e. It is delivering total annual household bill savings of \$1 billion per year¹⁴ with a projected benefit:cost ratio of 96:1 for the period 2006-2036 so similar to the EST calculations for a UK mandatory labelling scheme. The annual costs to the Commonwealth Government associated with administering, communicating and enforcing the WELS scheme are approximately £1 million per year with 80% of this recovered from registration fees paid by manufacturers.

Market research with customers undertaken in 2014 for the WELS scheme in Australia suggests that customers are actively using the water efficiency information provided by the scheme to inform decisions about what products to purchase. 87% of consumers recognised the label and 93% viewed it as “very” or “quite” credible. Because it is government led they had greater confidence in the information provided. The market research suggested that water efficiency is the highest or second highest consideration for customers in their purchasing decisions for products covered by the label.

The International Water Association undertook a review of water labelling use around the world in 2019¹⁵. The review noted that successful schemes are often mandatory, whilst many voluntary schemes fail to implement the label across the market. Malaysia has been a key example of this failure, as the government now looks towards measures to roll out a mandatory version of the existing project.

Isn't there already a water label in the UK?

There has been a voluntary water label in the UK since 2007. In 2017 the UK voluntary label merged with a number of other schemes in Europe to form the “Unified Water Label” or “European Water Label (EWL)”. The EWL is operated by the bathroom manufacturing trade through the European Bathroom Forum (EBF) and includes over 13,200 registered products from 155 brands across 15 product categories. It does not cover washing machines, dishwashers and water using products used outside the home such as power washers.

The EBF are currently seeking to achieve a Voluntary Agreement (VA) with the European Commission for the EWL that allows continued self-regulation using a voluntary water efficiency label run by the industry, rather than it being mandated by the EC through Ecodesign regulations. To achieve the VA product coverage must reach at least 80% by 2021¹⁶ from around 60-70% currently.

An independent evaluation of the voluntary scheme by Kelly in 2013 recommended that it move from voluntary to mandatory, that improvements were made to label visibility and that monitoring of the effectiveness of the scheme be improved.

¹⁴ <https://www.waterrating.gov.au/about/review-evaluation/environmental-effects>

¹⁵ https://iwa-network.org/wp-content/uploads/2019/02/IWA-EUWM-Labeling-Report_Final-002.pdf

¹⁶ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.329.01.0109.01.ENG&toc=OJ:L:2016:329:TOC

Could we just use the existing voluntary water label?

To realise the significant water and energy savings set out in Annex 1 the water label needs to be:

Used across the relevant water using product ranges

The current voluntary label is run by the bathroom fittings sector and is for bathroom fittings only. It is not used by washing machines, dishwashers or water using products used outside the home. Around 25% of the potential savings identified in the EST review are due to products types not covered at all by the current voluntary label.

Ubiquitous within each product range

For the products that it does cover the voluntary label is used by around two thirds of registered products. This means that around 33% of products are not covered by the voluntary label and are on the market without any labelling information. There is no level playing field and this makes it harder for retailers and consumers to distinguish between the best and worst products on sale.

Visible to customers at the point of sale and supported by public messaging

To be useful to customers the label must be visible at the point of sale. It is not sufficient just to have tested and registered a product with the label. An independent review in 2014 by Phipps and Alkhaddar described the label as “barely visible”.

Linked to minimum product standards for new builds and retrofit

At least half of the water savings projected in Annex A are due to the link between a water label and minimum standards for products used in new build properties and on sale for retrofit or refurbishment. The current voluntary label is not linked to Government set minimum standards in the UK, although it could be. In Portugal it is linked to standards for new build properties.

In summary, the voluntary water efficiency label initiative is a positive one. However, to achieve the water, energy and financial savings projected for the preferred option (i.e. a mandatory label linked to minimum fittings standards) the use of the current voluntary European Water Label would need to be made mandatory on all relevant products sold or fitted in the UK; it would need minimum visibility requirements for the label itself to be set and enforced; it would need to be promoted more widely and crucially it would need to be linked to minimum standards through the Buildings Regulations and for retrofit. It is possible that these challenges with the current voluntary label could be tackled through using Clauses 47 and 48 in the Environment Bill. Government could also work with industry and other stakeholders to promote awareness of the voluntary label and could explore how it can be extended to other product ranges such as dishwashers and washing machines. However, the risk is that UK government and the water sector will be reliant for future water savings and climate resilience on a voluntary, industry led scheme that neither party has significant control or influence over.

What about the emerging ISO?

The proposed ISO standard on water labelling is being developed in response to a proposal put forward in 2017 by the Australian WELS leaders supported by Singapore, Malaysia, China and New Zealand. The proposal was accepted in January 2018 leading to the establishment of an international committee ISO/PC316. The new standard will build on the joint Australian and New Zealand Standard AS/NZS6400 Water Efficient Products – Rating and Labelling that underpins the WELS scheme.

How does Brexit affect the introduction of a mandatory water label?

Whether we are inside or outside the EU there is no existing legislation that either requires or prevents a mandatory water efficiency label being introduced in the UK. That means the UK is free to introduce a label regardless of how long we remain a EU member or after we leave. However, we do recommend any label introduced in the UK is in line with emerging ISO standards.

Would a mandatory label reduce product choice?

A mandatory water label is designed to, over time, move the product ranges available towards more efficient models. Evidence from nearly 15 years of operation of the WELS mandatory water labelling scheme in Australia shows that has happened, without significantly impacting on product availability to customers.

What impact would an energy label which also applied to taps and showers have?

In 2020 the Department for Business, Energy and Industrial Strategy (BEIS) held a Call for Evidence on options for changes to energy labelling and minimum standards in the UK, including introducing efficiency labels for taps and showers.

Additional analysis by EST¹⁷ to inform our response showed that limiting efficiency labelling to just taps and showers would significantly reduce the scale of water and energy savings delivered by around 30-40% and would also reduce the financial savings seen by households by a similar amount. This loss of potential water savings is important bearing in mind the significant water supply deficits highlighted earlier.

Furthermore, any decision to just label taps and showers with an energy label and not with a water label or an energy and water label poses an additional risk with regards to long term water savings. This is because, as household energy supply decarbonises it may well be possible to have increasingly less water efficient taps and showers with the same or lower carbon footprint.

¹⁷ <https://www.waterwise.org.uk/knowledge-base/water-labelling-taps-and-showers-only-comparison-est-2020/>

Annex A

Table 1 Water labelling options reviewed by EST in 2018

	Delivery mechanism	Delivery agency	Association with other schemes	Notes
1	Mandatory	Government-led	No association	Baseline scenario
2	Mandatory	Government-led	Associated with Building Regulations and minimum standards	
3	Mandatory	Government-led	Associated with consumer incentives	
4	Voluntary	Government-led	No association	Baseline scenario
5	Voluntary	Government-led	Associated with Building Regulations	
6	Voluntary	Industry-led	No association	Baseline scenario – also BAU case
7	Voluntary	Industry-led	Associated with intensive marketing	
8	Voluntary	Industry-led	Associated with requirements for funding	

Table 2 Summary of the Headline Results for England from 2018

Results	Units	Scenarios							
		1	2	4	5	6	7	8	
Cost per Million Litres Saved	£/Ml	£236	£133	£261	£138	£352	£385	£232	
Average Incremental Social Cost (AISC)	p/m ³	-2.6	-2.9	-1.7	-2.8	-1.3	-2.2	-2.5	
Water Saved per Person (10 years)	l/capita/day	1.5	6.3	0.5	2.2	0.3	0.6	0.7	
Water Saved per Person (25 years)	l/capita/day	13.0	31.4	2.4	9.3	1.3	2.4	2.9	
Cost: Benefit Ratio	Ratio	1:73	1:103	1:31	1:82	1:18	1:26	1:46	



Table 3a Summary of the Headline Results for England from 2019

Results after 25 years for England

Cost/Benefit		Type	Units	110 LPD	100 LPD	95 LPD	85 LPD
		Building Regulations LPD Equivalent =		110	100	95	85
Costs	Sector	Government	£ Million	£9.2	£9.2	£9.2	£9.2
		Manufacturers	£ Million	£115.5	£115.5	£115.5	£115.5
		Households	£ Million	£325.7	£344.7	£357.7	£405.2
	Total	Total Absolute Cost	£ Million	£325.8	£344.8	£357.8	£405.3
		Average Cost per Household	£ per household	£13.7	£14.5	£15.1	£17.1
		Average Cost per Household	£ per household per year	£0.55	£0.58	£0.60	£0.68
Benefits for Households	Water	Total Cumulative Water Saved	Million Litres (M)	6,684,877	7,718,805	8,082,162	8,987,406
		Water savings in year 25:	Million Litres per day (M/day)	1,313.32	1,531.13	1,603.72	1,843.56
			Litres per capita per day	22.31	25.99	27.23	31.24
			Litres per household per day	45.0	52.4	54.9	62.9
	Energy	Hot Water Energy Savings	MWh	165,861	208,241	221,240	243,743
	Financial	Water Bill Savings	£ Million	£12,468	£15,332	£16,158	£17,390
		Energy Bill Savings	£ Million	£4,751	£6,862	£7,393	£8,835
		Average Saving per Household	£ per household	£725	£935	£992	£1,105
		Average Saving per Household	£ per household per year	£29	£37	£40	£44
		Total net saving per Households	£ per household total	£400	£590	£635	£700
New Build Water Bill Savings		£ Million	£2,326	£3,138	£3,384	£4,241	
New Build Energy Bill Savings	£ Million	£1,083	£2,402	£2,682	£3,546		
Benefits for Water Suppliers	Financial	Marginal Cost Savings	£ Million	£753.1	£869.5	£910.5	£1,012.4
Benefits to CO2 Reduction	Energy Emissions Savings	MtCO2e	31.76	39.95	42.29	46.46	
	Water Emissions Savings	MtCO2e	7.03	8.12	8.50	9.45	
	Total Emission Savings	MtCO2e	38.80	48.07	50.79	55.91	
Cost:Benefit Ratio		Combined	Ratio	1:55	1:67	1:68	1:67

Table 3b Summary of the Headline Results for Wales from 2020

Results after 25 years for Wales

Cost/Benefit		Type	Units	Tightest new build standards in UK currently	10% better than current best standards	Best commercially available domestic technology	Best commercially available technology
		Building Regulations LPD Equivalent =		110	100	95	85
Costs	Sector	Government	£ Million	£1.0	£1.0	£1.0	£1.0
		Manufacturers	£ Million	£11.3	£11.3	£11.3	£11.3
		Households	£ Million	£23.4	£24.5	£25.2	£28.0
	Total	Total Absolute Cost	£ Million	£23.4	£24.5	£25.2	£28.0
		Average Cost per Household	£ per household	£16.6	£17.4	£17.9	£19.9
		Average Cost per Household	£ per household per year	£0.67	£0.70	£0.72	£0.80
Benefits for Households	Water	Total Cumulative Water Saved	Million Litres (Ml)	297,733	362,817	383,351	442,388
		Water savings in year 25:	Million Litres per day (Ml/day)	58	71	75	91
			Litres per capita per day	14.2	17.3	18.3	22.4
			Litres per household per day	32.2	39.3	41.5	50.6
	Energy	Hot Water Energy Savings	MWh	7,811	10,446	11,298	12,818
	Financial	Water Bill Savings	£ Million	£624	£809	£862	£946
		Energy Bill Savings	£ Million	£196	£318	£362	£450
		Average Saving per Household	£ per household total	£584	£801	£870	£993
		Average Saving per Household	£ per household per year	£23	£32	£35	£40
		Total net saving per Households	£ per household total	£567	£784	£852	£973
New Build Water Bill Savings		£ Million	£52	£96	£103	£166	
New Build Energy Bill Savings	£ Million	£18	£89	£109	£166		
Benefits for Water Suppliers	Financial	Marginal Cost Savings	£ Million	£15.8	£19.2	£20.3	£23.4
Benefits to CO2 Reduction	Energy Emissions Savings	MtCO2e	1.74	2.33	2.52	2.85	
	Water Emissions Savings	MtCO2e	0.14	0.17	0.18	0.21	
	Total Emission Savings	MtCO2e	1.88	2.51	2.70	3.07	



Table 3c Summary of the Headline Results for Scotland from 2020

Cost/Benefit		Type	Units	Tightest new build standards in UK currently	10% better than current best standards	Best commercially available domestic technology	Best commercially available technology
		English Building Regulations LPD Equivalent =		110	100	95	85
Costs	Sector	Government	£ Million	£1.8	£1.8	£1.8	£1.8
		Manufacturers	£ Million	£17.4	£17.4	£17.4	£17.4
		Households	£ Million	£33.7	£35.2	£36.2	£39.9
	Total	Total Absolute Cost	£ Million	£33.7	£35.2	£36.2	£39.9
		Average Cost per Household	£ per household	£13.2	£13.8	£14.2	£15.6
Average Cost per Household		£ per household per year	£0.53	£0.55	£0.57	£0.63	
Benefits for Households	Water	Total Cumulative Water Saved	Million Litres (Ml)	1,004,626	1,083,672	1,161,816	1,261,484
		Water savings in year 25:	Million Litres per day (Ml/day)	110.10	118.76	127.32	138.24
			Litres per capita per day	37.21	40.17	43.26	48.08
			Litres per household per day	65.5	70.7	76.1	84.4
	Energy	Hot Water Energy Savings	MWh	19,292	22,505	25,784	28,682
		Energy Bill Savings	£ Million	£660	£859	£985	£1,162
		Average Saving per Household	£ per household	£259	£337	£386	£456
		Average Saving per Household	£ per household per year	£10	£13	£15	£18
Financial	Total net saving per Households	£ per household total	£246	£323	£372	£440	
	New Build Energy Bill Savings	£ Million	£216	£357	£398	£501	
	Marginal Cost Savings	£ Million	£63.2	£68.2	£73.1	£79.3	
Benefits for Water Suppliers	Financial	Energy Emissions Savings	MtCO ₂ e	3.74	4.36	4.98	5.51
		Water Supply Emissions Savings	MtCO ₂ e	0.11	0.12	0.13	0.14
		Wastewater Emissions Savings	MtCO ₂ e	0.23	0.25	0.27	0.29
		Total Emission Savings	MtCO ₂ e	4.08	4.73	5.37	5.94
Cost:Benefit Ratio		Combined	Ratio	1:21	1:26	1:29	1:31