Waterwise Review of the 2017 UK Water Efficiency Strategy (June 2021)

What was covered in the 2017 Water Efficiency Strategy?

The UK Water Efficiency Strategy (2017) was developed by Waterwise with collaborative input from a wide range of organisations including water companies, businesses, regulators and customer groups.

The purpose of the five year Strategy was to raise ambition and delivery on water efficiency in the UK. It included an ambitious Vision of '*a UK in which all people, homes and businesses are water-efficient*'.

The 2017 Strategy included 7 key themes (see Figure 1) with 62 short, medium and longer term actions linked to them.

Figure 1 - 2017 Strategy Themes	
A	How far are we from best practice?
B	Water, people and communities
C	Water wise cities
D	Products and labelling
E	Water company delivery and regulation
F	Water efficiency in retail
G	Integrated water management

How has the 2017 Strategy been implemented? Who has been involved?

To help deliver the Strategy a Steering Group was established comprising wholesale water companies and Water UK, representatives from the UK government and a number of the regulators (EA, Ofwat, NRW), consumer group representatives (CCW). Over time it has expanded to a group of over 40 people although not all attend each meeting.

The Steering Group meets several times each year to review progress, share best practice and to discuss next steps. Waterwise provides the secretariat.

A number of Task and Finish Groups were established in 2020 to help drive progress on a small number of topics that the Steering Group prioritised such as water labelling, leaky loos, water neutrality and the link between energy and water. Membership of the T&F Groups has

been more open than the main Strategy Group with a number of wider stakeholders such as EST and NEA joining relevant T&F Groups.

One of the benefits of the Strategy and the Steering Group is that it has helped identify and promote collaborative research on topics such as Rainwater Harvesting, Water Efficiency Labelling and Water Neutrality. These research projects have helped provide an evidence base for change and have been used to inform advocacy with government and other stakeholders. A number of them benefited from funding from the AMP6 Water Efficiency Collaborative Fund.

During the 5 years of the Strategy we have seen the establishment of a Water Efficiency Group in Wales and another similar group in Scotland. These new groups have focussed on country specific water efficiency needs and action and have been a great success. They have also helped take forward UK level actions at a country level. Waterwise together with several others sit across both the UK Strategy Steering Group and the new country groups to ensure join up.

How much progress has been made delivering the 2017 Strategy?

When surveyed in 2020 the members of the Steering Group overwhelmingly felt that the Strategy had helped positively move the water efficiency agenda forward and had provided a focal point for key players to come together and collaborate. The Steering Group was seen as a very useful forum, essential in helping maintain momentum.

At a more detailed level, Waterwise has tracked progress with each of the actions in the Strategy on at least a bi-annual basis. A simple RAG rating has been used to flag where progress was deemed, in the view of Waterwise, to be on track (green); where further effort was needed (amber) or where little or no progress had been made (red). The RAG assessment from July 2021 is summarised in Figure 2 below and presented in full in Appendix A.

Figure 2 RAG Assessment of Progress with the 2017 Strategy (July 2021)

Strategy Theme		R	A	G
A	How far are we from best practice?	0	1	6
B	Water, people and communities	2	2	7
C	Water wise cities	1	5	6
D	Products and labelling	2	5	5
E	Water company delivery and regulation	1	3	5
F	Water efficiency in retail	0	1	3
G	Integrated water management	2	3	2
	Totals	8	20	34

It is positive to see that good progress has been made delivering actions across all of the themes. The theme where progress has been maybe a little slower is Integrated Water

Management and this is because the actions in this theme relied on a lot of parties for delivery or were outside of the control of organisations sitting on the Steering Group.

When the red scoring actions are looked at in more detail (see Figure 3) it is evident that it is the medium and longer term actions that have proved more difficult rather than the short term ones. This is because the longer term actions in the Strategy tended to have been the most ambitious; have the greatest complexity or rely on the most parties to deliver them.

Figure 3 Timing of the Red Rated Actions

Number of Actions at Red			
Theme	Short Term	Medium Term	Long Term
A	**0**	**0**	**0**
B	**0**	**1**	**1**
C	**0**	**1**	**0**
D	**0**	**1**	**1**
E	**0**	**1**	**0**
F	**0**	**0**	**0**
G	**0**	**0**	**2**
Totals	**0**	**4**	**4**

What has changed since the 2017 Strategy?

The 2017 Strategy had a five year span and so it is inevitable that during its life things will change with new ideas, challenges and opportunities arising. This has certainly been the case for example we have seen:

- increased recognition of the climate emergency and on reaching net zero;
- concern about the ecological emergency and the impacts of abstraction on chalk streams;
- rapid developments in areas such as smart metering
- the UK leaving the EU
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Despite these changes we have not re-written the five year Strategy. Instead we have adapted by agreeing refreshed priorities in the Steering Group meetings and taken steps such as through setting up T&F Groups.

What lessons are there for the new 2022 UK Water Efficiency Strategy?

Although the 2017 Strategy has been a useful tool, it is important we learn lessons from the last 5 years as we look towards the next iteration of the strategy.

Some suggested learnings from the Waterwise team are listed below:

- A five year period for the Strategy is possibly too long. Too much changes over 5 years which is hard to accommodate. A shorter length, such as 3 years, may be preferable.

- The 2017 Strategy was very detailed for a Strategy with its 7 themes and 62 Actions. The 2022 Strategy could be more succinct with fewer initial actions and a clearer mechanism to add in new themes and actions over time.

- The Steering Group has proved very valuable in maintaining momentum and sharing best practice however it is large (over 40 people) and skewed towards water wholesalers. Alternative Steering Group size, structure and composition should be considered for the 2022 Strategy.

- The existing Strategy Group had no Terms of Reference and no agreed mechanism to review and share progress externally to the group. The new Strategy Group should have a ToR and be more transparent in reporting progress.

- The 2017 Strategy benefited greatly from being able to draw on the AMP6 Water Efficiency Collaborative Fund to help progress a number of Actions. Access to a similar fund would be necessary for the new Strategy to ensure it is more than a talking shop.

- During the Strategy period new groups such as the Retailer/Wholesaler Water Efficiency Group and Defra's Senior Water Demand Reduction Group have been set up. It will be important to ensure that the various groups complement each other and where possible avoid too much duplication.

- The Strategy is a UK Strategy and that feature is quite distinct. The development of country specific water efficiency groups in Wales and Scotland and the connectivity between those groups and the UK Strategy has been very valuable and needs to be retained if possible.

APPENDIX A - Waterwise RAG Analysis of Progress with 2017 Strategy Actions (June 2021)

	A - HOW FAR ARE WE FROM BEST PRACTICE?					
Action Number	**Recommendation**	**Action**	**Suggested Organisations**	**Timescale**	**Delivery Status**	**Current Position (Jul 21)**
A1	Include water efficiency measures in energy efficiency and fuel poverty retrofit/advice programmes	Review joint water and energy efficiency programmes in England, Wales and Scotland	Water companies, Energy Saving Trust, CCWater, SaveWater South East, Waterwise	Short	A	New T&F group set up. Session at Waterwise 2021 conference. Fed into Construction Leadership Council National Retrofit Strategy. Several relevant Innovation Fund bids made.
A2		Joint meeting of Water UK Water Efficiency Network, Energy UK Energy Efficiency Network, Ofwat and Ofgem	Water UK, Energy UK, Ofwat, Ofgem, water companies, energy companies, CCWater, Waterwise	Short	G	New T&F group set up. Session at Waterwise conference
A3	The Water UK dashboard and future resilience indicators should reflect best practice water efficiency and include baseline values against which water efficiency and resilience can be measured/compared	Research demand management impacts on resilience. Collate all water company water efficiency programmes' potential, to quantify how big a role water efficiency could potentially play in delivering UK resilience	Waterwise, water companies, Environment Agency	Medium	G	EA National Framework included future needs for resilience with demand management included as a "must do" for the regional plans. Environment Bill has a likely water demand target for England
A4	Develop indicators/targets around per capita consumption and best practice	Review water company 2019 business plans against best practice for water efficiency	Ofwat, Waterwise	Medium	G	Draft WRMPs reviewed with Atkins for EA/OFWAT.
A5		Review best practice/ achievable levels from the Water Efficiency Evidence Base	Waterwise, water companies, consultancy	Medium	G	Delivered through the 2018 Artesia report to OFWAT and 2019 report to Water UK
A6		Review demand management - including water efficiency - targets in the context of Ofwat ODIs for water companies in England and Wales	Waterwise, Ofwat, water companies and consultancies	Medium	G	PCC ODI included by OFWAT. Headline analysis of ambition undertaken by Waterwise and shared with WESSG in early 2019
A7		Water UK and UKWIR work on per capita consumption to consider water efficiency implications	Water UK, UKWIR, water companies	Medium	G	Artesia PCC pathways project for Water UK provides this.

	B - WATER, PEOPLE AND COMMUNITIES					
Action Number	**Recommendation**	**Action**	**Suggested Organisations**	**Timescale**	**Delivery status**	**Current Position (Jul 21)**
B1	Implement a UK Water Sector Leadership Group on Water Efficiency and Customer Participation	Leadership Group - Group to regularly meet building on the commitment to use water efficiency as an enabler of greater customer participation in water management	Water companies, Energy Saving Trust, CCWater, SaveWater South East, Waterwise	Short	G	Group set up by Waterwise but replaced by groups linked to national collaborative campaigns
B2	Develop a water saving culture	Evaluate the regional messaging approach from SaveWater South East (engagement and facilitation for retrofit) Review the #thinkwater campaign and potential for standardised social approaches	SaveWater SouthEast, Water companies, Waterwise	Short	G	Has happened through developing the approach and materials for the Water's Worth Saving campaign in summer 2020
B3	Communication / Engagement	Research to underpin a national water efficiency engagement programme in PR19	Water companies, Waterwise, CCWater, SaveWater South East	Medium	G	Water's Worth Saving national campaign with Water UK in summer 2020 and in 2021.
B4		Based on above research, undertake a national water efficiency engagement programme in PR19	Waterwise, CCWater, Water companies, SaveWater South East	Medium	G	Water's Worth Saving national campaign with Water UK in summer 2020 and in 2021.
B5		Implement targeted water efficiency engagement projects in partnership based on the national platform	Waterwise, Blueprint for Water, SaveWater South East	Medium	G	Forward programme developed. Water Makes it Possible campaign underway. Pledge 2021 launched.
B6	Increase the amount and quality of integrated behaviour change and retrofit / metering programmes in AMP7	Publish a bestpractice guide on multi- channel and long lasting behaviour change	Waterwise, CCWater, Water companies, SaveWater South East	Medium	G	Handbook finalised. Literature review also underway
B7		Develop a consistent approach for reporting results of behaviour change for evaluation.	Waterwise, Water Efficiency Network, Water companies	Medium	A	Not yet happened.

B8		Evidence base review of behaviour change projects	Waterwise, Water Efficiency Network, Water companies	Medium	G	Waterwise 2021 review report to Environment Agency. Research undertaken at UEA.
B9		Agent based modelling of water efficient behaviours	Waterwise, Water Efficiency Network, Water companies	Long	R	Not yet happened.
B10	Combine resources to provide a better water information system for the UK that includes drought and water supply to inform customers and policy makers	Trial communication of water demand (i.e. at the city/ region level) for one company or SaveWater SouthEast in the Discover Water portal	Water companies, Waterwise, SaveWater SouthEast	Medium	R	Not yet happened other than through DiscoverWater; About Drought portal and water company websites. Innovation fund bids have been suibmitted on this topic.
B11		Link Water Situation Reporting into the Discover Water Portal Develop an app similar to the Australia Bureau of Meteorology Water Storage app (for South East at least)	Environment Agency, Water UK, Natural Resources Wales Waterwise, SaveWater SouthEast	Medium	A	The AbouttDrought CEH portal provides some of this and could be linked from DiscoverWater along with the water situation reports. NWL have an innovation fund bid similar to this

	C - WATER WISE CITIES						
Action Number	**Recommendation**	**Action**	**Suggested Organisations**	**Timescale**	**Delivery status**	**Current Position (Jul 21)**	**Plans for Year 4**
C1	Water efficiency should be included in social housing standards. Any retrofit or upgrade should include the installation of showers in homes where there is only a bath. Voluntary guidance and partnerships with water companies should be developed	Review social housing guidance developed for Wales and implementation	Welsh Government, EST Wales, Waterwise	Medium	A	Action still needed. Wales Low Carbon Action Plan launched in March 19 includes steps for social housing but has little on water efficiency.	Included as a potential AMP7 collaborative project
C2		Build on the SaveWater SouthEast toolkit and promote this across England	SaveWater SouthEast, water companies, Waterwise, National Housing Federation (England)	Medum	A	Water company led programmes with social housing flagged in YR1 Report	Action still needed
C3		Review social housing standards and guidance in Scotland	Scottish Water, Scottish Government, Waterwise	Medium	A	Water company led programmes with social housing flagged in YR1 Report	Action still needed. Included as a potential AMP7 collaborative project
C4		Review social housing standards and guidance in Northern Ireland	Northern Ireland Water, Northern Ireland Government, Waterwise	Medium	R	Action still needed	Action still needed. Included as a potential AMP7 collaborative project
C5	Implement variable infrastructure development charges for new developments to encourage water efficiency measures	Compile a list of infrastructure incentive approaches being developed by water companies	Waterwise, water companies, Ofwat, developers, CCWater	Short	G	Action partly covered through EST labelling extension project which looked at developer incentives as did the rainwater harvesting project. Responded to 2021 Ofwat consultation on developer incentives	Potential collaborative project to pull together data

C6		Assess impacts of incentives with projected vs actual consumption	Waterwise, water companies	Medium	A	Anecdotal evidence only. Mixed success of incentives	Potential collaborative project to pull together data
C7	Increase water efficiency in new homes	Identify how many local authorities have included the 110 l/p/d Per capita consumption requirement in local planning	Defra, Environment Agency, water companies, DCLG, local authorities	Short	G	EA are tracking this and have shared latest data	EA are tracking this and have shared latest data
C8		Review evidence on actual water efficiency and impacts on behaviours at lower levels of per capita consumption, specifically in new build housing	Water companies, Waterwise	Short	G	Research by Thames and NWL referenced in YR1 report. Briefing on water efficient homes provided to Defra	Extension project provides evidence on costs and benefits of varying levels of water efficiency in new builds and existing housing stock but doesnt cover behaviours
C9	Take forward water neutrality partnerships in new planning frameworks with an increased role for local communities. Require water efficiency in local planning policies via local agreements. Link water efficiency standards to water labelling and incentives	Develop guidance for water efficiency in neighbourhood planning and for local groups responding to planning consultations	Waterwise, DCLG, local authorities	Medium	G	Anglian Water/EA have developed appropriate guidance and clauses	Promote the Anglian Water/EA guidance
C10		Introduce water neutrality concepts for large developments	Water companies, Waterwise	Medium	G	Anglian commissioned piece of work: Thames have an offsetting fund	Collaborative research project underway.
C11		Update the Waterwise/ BMA Water Calculator (used for finding labelled products for new developments) in light of changes to building regulations	Waterwise, BMA, water companies	Medium	A	BMA looking to do this but did they?	No further work proposed on this as we are working for a fittings based approach
C12	Provide guidance to local councils on how they should interpret their water efficiency duties (Water Act 2003)	Include a commitment to developing guidance for local authorities in the Defra 25 year Environment Plan	Defra, DCLG, Water UK	Long	G	Other WE info included	See C9

	D - PRODUCTS AND LABELLING					
Action Number	**Recommendation**	**Action**	**Suggested Organisations**	**Timescale**	**Delivery status**	**Current Position (Jul 21)**
D1	Undertake an independent review of the effectiveness of the water label	Research the European Water Label and other labels in the UK (e.g. energy labels) to set out the business case for improving effectiveness	Water companies, Waterwise, Energy Saving Trus	Short	G	EST and IWA reports provide a review of EU Label and other worldwide labelling schemes. Submitted reviews to Defra evidence gathering
D2	Work with government to develop a mandatory labelling scheme for England and Wales	Support the current voluntary labelling standards whilst moving towards mandatory labelling and water efficiency standards	Water companies, Waterwise, European Water Label, BMA, BITC	Medium	G	EST report provides evidence for mandatory label. Govt announcement of intentions awaited.
D3	Incentivise the use of water effiiciency devices and fittings through water company rebates similar to those used in the USA and linking eligibility to the European Water Label	Undertake a water efficiency rebate trial linked to the water label	Scottish Water, Waterwise, European Water Label, BMA, SaveWater South East	Medium	A	Action still needed although focus has been on the EST review and recommendations for a mandatory label. Responded to Ofwat 2021 consultaion of developer incentives for water saving fittings
D4	Consult on mandatory water efficiency standards (Northern Ireland)	Ensure action in the Northern Ireland Water Strategy is delivered	Waterwise, NI Government	Medium	R	Action still needed but no NI government so on hold
D5	Link public sector water standards to the water label to encourage manufacturers to use the label and produce more efficient products	Review water standards in public procurement and link to the water label	Waterwise	Medium	A	Have raised procurement expectations with Defra. Waterwise responded to Cabinet Office 2020 consultation on Social Value
D7	Retain zero VAT rating post Brexit for water efficient devices listed in the HMT/Defra Water Technology List	Develop evidence for policy, including cost benefit analysis - zero VAT	HMRC, Waterwise, Defra	Long	A	Government has ended the ECA tax rebate for the Water Technology List and is looking to remove the WTL
D8	Undertake further research into the costs and benefits of rainwater harvesting and greywater reuse	Review latest modelling for PR19 and recent case studies. Share outputs between water companies	Industry, Academia, water companies	Long	G	Completed
D9	Assess accreditation and training standards for installation of rainwater harvesting and greywater reuse	Review and report against implementation of the BSi standards	BSi, Waterwise, Rainwater management association, WATEF network	Long	R	Action not progressed
D11	Use the Waterwise Water Efficiency Awards to promote and stimulate research and innovation	Publish a water efficiency innovation compendium of awarded products Review; 2017 awards and hold again	Waterwise	Medium	G	Water Efficiency category included in the Water Industry Awards with a water efficiency project winning the 2021 overall award

D12	Raise awareness for the need for WRAS compliant products among retailers and suppliers, plumbers and customers.	Deliver a coordinated programme of training and advice on product compliance (especially toilets). Deliver training online based on industry standards	Water companies, Waterwise, BMA, WaterSafe WRAS, Housebuilding bodies, plumbers, developers, SaveWater South East	Medium	A	Action still needed although we have made progress on dual flush button issue with WRAS and spoken with Defra about the need for a review of the Water Fittings Regs
D13	Regulate to prevent the sale and use of leaky loos in the UK	Develop approaches to ban installation of leaky toilets	Water companies, Waterwise, BMA	Medium	G	WESSG and BMA commitment statement 2021+ WESSG Leaky Loo position statement launched at 2019 conference and in WSW.
D14		Review the water fittings and fixture regulations	Defra, Water UK, water companies, Waterwise, BMA, DWI, WRAS	Medium	A	Meeting held with Defra in Sept 2020 to discuss review of Water Fittings Regs. Defra committed to looking at it again in the Waterwise conference 2021

	E - WATER COMPANY DELIVERY AND REGULATION					
Action Number	**Recommendation**	**Action**	**Suggested Organisations**	**Timescale**	**Delivery status**	**Current Position (Jul 21)**
E1	Ensure OFWAT reflects its high ambition on water efficiency in it operational work for PR19	Allow innovation to develop, allow no regret approaches with multiple benefits, require and include quantified water efficiency incentives, ensure OFWAT undertakes an exercise to be able to judge the level of company ambition and innovation in water efficiency	Ofwat, Waterwise, water companies	Short	G	Engaged with OFWAT through PR19. PCC included as a common metric with financial rewards and penalties. Engaged with Blueprint in their assesment.
E2	Allow water companies to introduce full metering for benefits beyond water stressed status	Explore opportunities for revising the water stress designationn linked to metering and wider benefits such as customer engagement	Environment Agency, Defra, Water Companies, Waterwise, Ofwat, CCWater	Medium	G	The NIC 2018 report made this recommendation although it wasnt adopted by government. Promoted (smart) metering in the Defra consultation response. Artesia PCC pathways report strongly supports this.
E3	Fit water meters in the majority of homes in England and Wales by 2030 supported by tariffs to proterct vulnerable customers. Increase the proportion of smart meters	Research wider costs and benefits of customer participation and water efficiency linked to greater data availability from smart metering	Water companies, Waterwise, Ofwat, CCWater	Long	A	Significant uptick in smart meter installations and requirements to consider included in updated WRMP guidance. However, roll out still slow in some areas and limited by Water Stress Classification requirement
E4	Initiate a new round of incentive / tariff (household or community) trials linked to smart metering	Hold a workshop to collate evidence on incentives and share knowledge in sector	Waterwise, water companies, Ofwat, Waterwise, Anglian Water, Thames Water, Southern Water	Short	A	Non price incentives have been trialled by several companies including Southern Water (Itchen/Eastleigh) and by Thames (Green Redeem)
E5		Add information from recent incentive trials to the evidence base and disseminate results	Waterwise, water companies, Ofwat, Waterwise, Anglian Water, Thames Water, Southern Water	Short	A	
E6	Continue to raise capacity and skills in delivering water efficiency through training and accreditation programmes	Review skills and capacity for delivering aspirations on water efficiency across a range of sectors and scales	Waterwise, water companies	Medium	G	Delivered through Waterwise training

E7	Provide a database of companies that have trained staff or used trained contractors to provide assurance to OFWAT and the public about the efficiency and reliability of delivery in water efficiency programmes	Develop database of Waterwise- accredited professionals	Waterwise, Water Safe	Medium	R	No action to date
E8	Update the water efficiency evidence database	Update and review the evidence base to support WRMPs and PR business plans	Waterwise, water companies, CCWater	Medium	G	Ongoing action
E9	Ensure that business plans, price determinations and water resource plans are water neutral resulting in no net new abstraction or normalised increase in supply	Review WRMPs for water efficiency activities	Waterwise, Blueprint for Water	Short	G	Delivered for draft plans through the EA/OFWAT project

	F - WATER EFFICIENCY IN RETAIL					
Action Number		**Action**	**Suggested Organisations**	**Timescale**	**Delivery status**	**Current Position (Jul 21)**
F1	Work with non-hh retailers in delivering water efficiency, identify capacity gaps and provide an independent assessment against the framework to inform customer choices	Monitor water efficiency services and progress in non-household retail water companies. Develop the evidence base to support any decision on household retail water competition	Waterwise, retailers	Short	G	Waterwise working through the Retailer Wholesaler Group to deliver an Action Plan to improve water efficiency in NHH market. Includes actions on scale of ambition, data, water resource planning, regulation, campaigns.
F2		Develop communications/water efficiency messages targeted at micro-businesses and SMEs	Waterwise, CCWater, retailers	Medium	A	Checkmark for offices launched although cost may deter SMEs. MOSL and others highlighting challenges of delivery of core and additional services to SMEs
F4	Clarify market codes and operations in relation to water efficiency and water resources planning	Work with wholesalers, regulators and retailers to clarify positions on delivering large scale non-domestic water efficiency programmes for water resources planning	Waterwise, water companies, Ofwat	Short	G	Waterwise working through the Retailer Wholesaler Group to deliver an Action Plan to improve water efficiency in NHH market. Includes actions on scale of ambition, data, water resource planning, regulation, campaigns.
F5	Ensure that as the sector fragments all parties in the water sector deliver water efficiency including non regulated elements in the sector (TPIs)	Develop a scoring system for water efficiency services offered by retailers	Waterwise, CCWater, retailers	Long	G	Working with MOSL on consumption data for retail market and how it can provide insights by water users and across retailers. RWG Action Plan also has an action around benchmarking consumption

	G - INTEGRATED WATER MANAGEMENT AND RESILIENT INFRASTRUCTURE AND SERVICES					
Action Number	**Recommendation**	**Action**	**Suggested Organisations**	**Timescale**	**Delivery status**	**Current Position (Jul 21)**
G1	Include water efficiency in retrofit sustainable drainage (SUDS) and Water Sensitive Urban Design projects	Develop advice on joint programme delivery. Review costs and benefits of Thames Water/Groundwork approaches, Severn Trent Water's urban demonstrator, and Dwr Cymru Welsh Water's Greener Grangetown	Water companies, local authorities, Defra, Environment Agency, Welsh Government, Natural Resources Wales, Scottish Water, SEPA	Medium	G	Rainwater harvesting collaborative project provides some sueful evidence on costs and benefits and link between SUDS and water use. Water neutrality research reports are also relevant.
G2	Identify opportunities for water efficiency within distributed infrastructure systems to provide nested semi-autonomous areas within cities and improve resilience	Review opportunities and barriers for third pipe schemes on water reuse and rainwater harvesting linked to developer incentives	Water UK, water companies, Waterwise, Anglian Water	Medium	G	Rainwater harvesting collaborative project provides some sueful evidence on costs and benefits and link between SUDS and water use. Water neutrality research reports are also relevant.
G3		Support the dialogue around provision of market information for third party demand management solutions in PR19	Waterwise, Ofwat	Long	R	Ofwat are promoting this and have raised concerns over lack of progress
G4	Support innovation and widescale adoption of big data analysis and the internet of things to support greater understanding of demand and behaviour change in water efficiency programmes	Work with Innovate UK to develop a water programme within wider smart cities work	Innovate UK, Waterwise, Future Cities Catapult	Medium	A	Focus has shifted to the Ofwat innovation fund
		Review security and cyber terrorism related issues in terms of water efficiency and the 'internet of things'	Waterwise, Defra, Ofwat, Water UK	Long	R	Action not progressed
G5	Review the data needs of the sector assessing what data is needed and how it should be collected and used	Build on the DAIAD project, other ICT4Water projects, and existing work in government and water companies	Defra (Open Data), Water UK, Ofwat, Waterwise	Medium	A	UKWIR water consumption data analysis project. Sharing smart meter data insights
G6	Increase availability of Open Water Data including anonymised information on water demand and outputs from water efficiency pilot projects	Review open data opportunities from the Discover Water Portal	Water UK, CCWater, Ofwat, Waterwise, water companies	Long	A	UKWIR water consumption data analysis project. Sharing smart meter data insights a requirement of Green Recovery funding