

June 2023

Environmental incentives to support sustainable new homes

About this document

We are consulting on changes to our charging rules in the form of a common framework for water companies to offer stronger and more standardised environmental incentives to developers to encourage them to build new homes that are more water efficient and with sustainable drainage.

Our consultation relates primarily to English water companies, for which we regulate developer charges through our new connection charging rules. Developer services for Welsh water companies are subject to a different regulatory regime. However, we think some of the proposals are transferable and welcome views on this as part of this consultation.

Executive summary

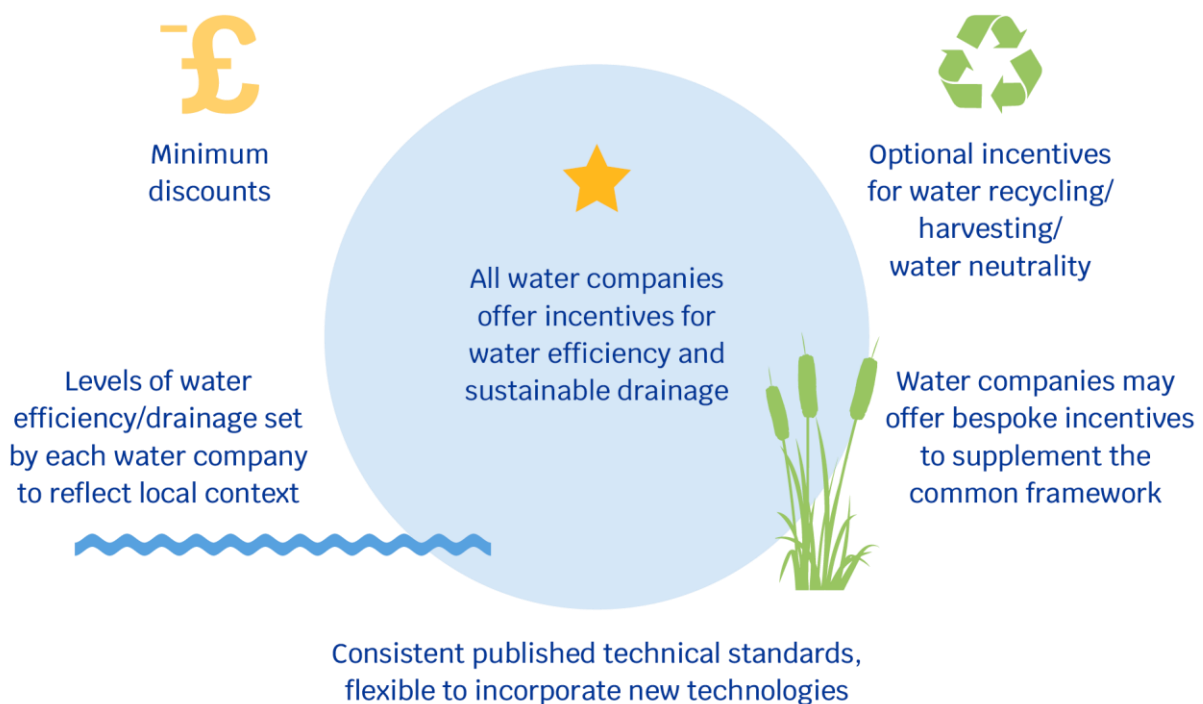
Many water companies currently offer developers discounts on their new connection charges for meeting certain standards of water efficiency or sustainable drainage. We call these environmental incentives.

We are consulting on establishing a common framework for environmental incentives, through changes to our charging rules, with the aim that they result in greater water efficiency and / or more sustainable drainage across all types of new development. We think that for environmental incentives to be effective, they should: be transparent; be stable and fair; support innovation; be accessible to all; complement wider policy; and build trust and confidence. We want the common framework to be consistent with and supportive of such characteristics.

Our proposals for the common framework are set out in Figure 1.

Figure 1: Our proposed common framework for environmental incentives

Environmental incentives are published discounts or credits offered by the water company to those developers, new appointees and other customers that deliver more sustainable new developments



The construction of sustainable homes brings benefits to many stakeholders, including: the environment; homeowners; developers; water companies; society; and manufacturers. A common framework for all water companies could influence developer behaviour more effectively, particularly with developers operating on a regional or national basis. They would

be able to see the benefits of building more sustainable homes more easily and be able to adopt a standard approach to home building irrespective of which company's area they operate in, potentially improving their own efficiency and reducing costs.

The common framework would also establish a basis and approach for new appointees to be compensated, for example, for investment and ongoing maintenance of development-level water recycling arrangements.

Developer services in Wales are subject to a different regulatory regime compared with developer services in England. However, we still think many of the proposals are transferable to Wales and welcome views on this as part of this consultation.

The next steps following this consultation are as follows:

- In a separate consultation during 2023 we will be proposing other changes to our new connection charging rules for English companies,¹ including some revisions to arrangements for infrastructure charges and charges to fund environmental incentives. The focus of the consultation, arising from our 2024 price review (**PR24**), is to ensure that, where competition for developer services remains weak, developers are sufficiently protected.
- To implement the common framework for environmental incentives, and other potential changes, we would undertake a statutory consultation on changes to our new connection charging rules for English companies. We would expect to undertake this in early 2024-25.

Responding to this consultation

We welcome comments on this document, and in particular responses to the consultation questions set out in Table 1. **The closing date for this consultation is 1 August 2023.** Please email us at charging@ofwat.gov.uk with your response, or if you wish to discuss any aspect of this consultation, or to arrange a conversation on the issues we have raised.

We may publish responses to this consultation on our website at www.ofwat.gov.uk, unless you indicate that you would like your response to remain unpublished. Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (**FoIA**), the General Data Protection Regulation 2016, the Data Protection Act 2018, and the Environmental Information Regulations 2004. For further information on how we process personal data please see our [privacy policy](#).

If you would like the information that you provide to be treated as confidential, please be aware that under the FoIA there is a statutory [Code of practice](#) which deals, among other

¹ Companies whose appointed areas are wholly or mainly in England.

things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

Table 1: Consultation questions

| Number | Question |
|--------|---|
| Q1 | Do you agree with our proposed aim for environmental incentives? |
| Q2 | Do you have any comments on the characteristics of good environmental incentives? |
| Q3 | Do you have any comments on the extent to which any environmental incentives could or should be adapted for implementation in Wales? |
| Q4 | Do you have any comments on the case studies outlined? |
| Q5 | Do you have any comments on our proposed standardised incentive tiers? |
| Q6 | Do you have any comments on our proposal for a common methodology / technical standards to assess water efficiency? |
| Q7 | Do you have any comments on the details of our proposal for companies to offer bespoke incentives? |
| Q8 | Do you have any comments on the potential for reputational incentives? |
| Q9 | We seek views on how the process for agreeing and paying environmental incentives might best be organised in practice, and whether this is consistent with existing developer services processes. |
| Q10 | Do you have any comments on how high levels of compliance with the incentive technical standards might best be achieved? |
| Q11 | Do you have views on whether environmental incentives are best funded as an environmental component of the infrastructure charge or as a separate charge? |
| Q12 | Do you have any comments on our proposal for guidance issued under the charging rules and how they are developed and maintained? |
| Q13 | Do you have any comments on our approach for managing interactions with the regulatory framework? |

Contents

| | |
|---|----|
| Executive summary | 2 |
| 1. Introduction..... | 7 |
| 2. Motivation and background..... | 8 |
| 2.1 Why we need homes to be more sustainable | 9 |
| 2.2 Designing effective environmental incentives | 10 |
| 2.3 Applying incentives in Wales | 11 |
| 2.4 Our wider policies on charges for developer services | 12 |
| 3. Progress on household water efficiency and industry intelligence | 14 |
| 3.1 Defra roadmap to water efficiency | 14 |
| 3.2 Mandatory sustainable drainage systems..... | 15 |
| 3.3 Current building regulations for water efficiency | 16 |
| 3.4 Code for adoption agreements | 17 |
| 3.5 Current company environmental incentives | 18 |
| 3.6 Environmental incentives industry working group..... | 20 |
| 3.7 Ofwat funds and performance commitments..... | 21 |
| 3.8 Other stakeholders' views | 22 |
| 3.9 Enforcement of compliance with incentive criteria | 24 |
| 3.10 Comments on case studies..... | 25 |
| 4. Common framework for environmental incentives..... | 27 |
| 4.1 A common framework for environmental incentives..... | 27 |
| 4.2 Standardised incentives | 28 |

| | | |
|-----|--|----|
| 4.3 | Methodology for assessing water efficiency..... | 29 |
| 4.4 | Bespoke incentives..... | 30 |
| 4.5 | Reputational incentives | 31 |
| 4.6 | Process for agreeing and paying environmental incentives..... | 32 |
| 4.7 | Compliance with environmental incentive criteria | 32 |
| 5. | Incentives and our regulatory framework | 34 |
| 5.1 | Funding environmental incentives – principles | 34 |
| 5.2 | Funding environmental incentives – simple model | 36 |
| 5.3 | Guidance in charging rules | 37 |
| 5.4 | Transparency and stability | 38 |
| 5.5 | Supporting new appointees and developer services markets | 38 |
| 5.6 | D-MeX..... | 39 |
| | Appendix 1 | 40 |

1. Introduction

We are consulting on introducing a common framework for environmental incentives which we would implement through our new connection charging rules from April 2025. This builds on work of water companies developing environmental incentives, as set out in our September 2022 review,² where we noted that while progress has been made in the offering of environmental incentives for developers to build water efficient homes, there is still more that can be done; and work by an industry group to standardised aspects of the incentives.

In this document:

- 1) We explore in more depth the wider framework in which environmental incentives sit, including the provision of sustainable housing, enforcement of building regulations and the effectiveness of the incentives offered by companies.
- 2) We consult on proposals for a strengthened and standardised approach to environmental incentives to promote more sustainable new developments.
- 3) We discuss the implications and interactions these proposals have with our regulatory framework.

The rest of this document is structured as follows.

- Chapter 2 details our motivation for incentivising sustainable homes, the role of incentives in water demand management and what makes an incentive effective.
- Chapter 3 explores recent progress made on household water efficiency and industry intelligence to date.
- Chapter 4 presents our proposals on what a standardised and strengthened incentive offering across companies could look like.
- Chapter 5 presents our thoughts on the interaction between our proposed framework for environmental incentives and the wider regulatory framework.
- Appendix 1 compares companies' environmental incentives for 2023-24 and 2022-23.

² Ofwat, September 2022, [Water companies' environmental incentives to support more water efficient new homes](#).

2. Motivation and background

Q1) Do you agree with our proposed aim for environmental incentives?

Q2) Do you have comments on the characteristics of good environmental incentives?

Q3) Do you have any comments on the extent to which any environmental incentives could or should be adapted for implementation in Wales?

In this chapter, we set out why everyone needs homes to be more sustainable and how companies might design effective environmental incentives. We also consider how environmental incentives might apply in Wales and summarise our wider work on developer services.

Population growth, economic development and climate change collectively put significant pressure on water resources in England and Wales. Every day, water companies provide 14 billion litres of clean water for public water supply. However, the National Infrastructure Commission has recommended, due to the increasing pressures, around 4 billion litres of additional water a day will be needed in England by 2050. Half of this deficit will need to be met through increasing the supply of water.³ The remainder will need to be met through measures including improving water efficiency, reducing demand and cutting wasted water.

Climate change is also responsible for increases in the frequency and intensity of rainstorms which can increase the strain on sewers, which increases the likelihood of Combined Sewer Overflows (**CSOs**) activation and river pollution, as well as localised flooding.

Tackling these issues aligns with our statutory duties and the obligations set out in Defra's and Welsh Ministers' Strategic Priority Statements^{4, 5} (**SPS**) for Ofwat. This includes expectations in Defra's SPS that we will:

- Hold companies to account for their contribution towards reducing personal water consumption to 110 litres of water per head per day (l/h/d) by 2050.
- Recognise the need for investment in supply and demand solutions as set out in the water resources management plans.
- Challenge and incentivise companies to meet the aims of strategic drainage and wastewater management planning in a way that represents best value for money over the long-term for customers, the environment and wider society.

³ Defra (2023). [Plan for Water: our integrated plan for delivering clean and plentiful water - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/114444/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water.pdf).

⁴ Defra (2022). [February 2022: The government's strategic priorities for Ofwat - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/114444/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water.pdf).

⁵ Welsh Government (2022). [Written Statement: Strategic Priorities and Objectives Statement for Ofwat \(SPS\) \(6 July 2022\) | GOV.WALES](https://www.gov.wales/government/written-statement-strategic-priorities-and-objectives-statement-for-ofwat-sps-6-july-2022).

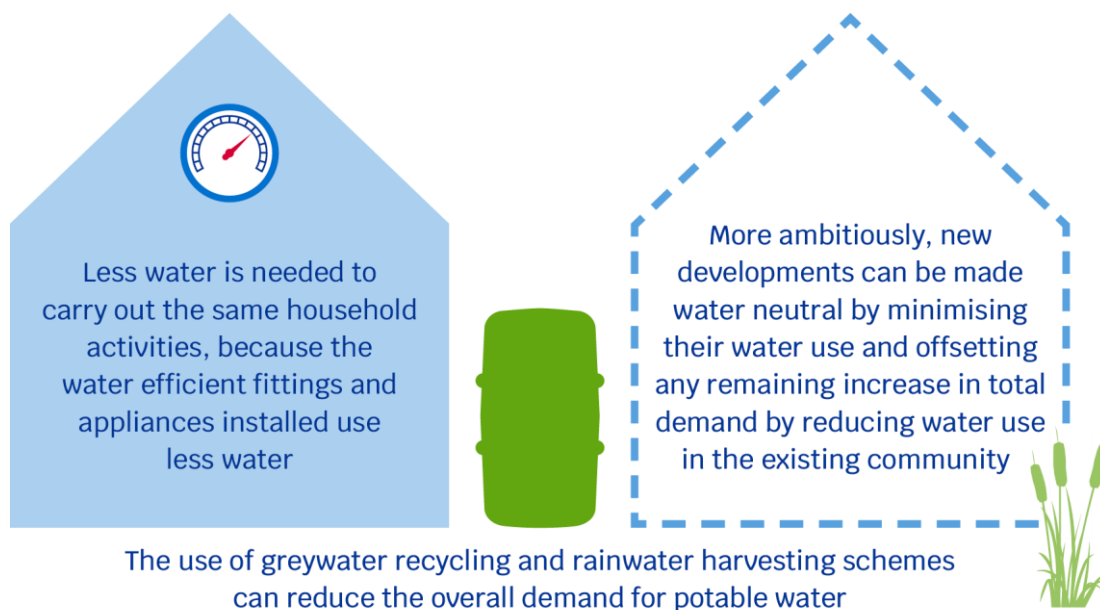
It also includes expectations in the Welsh Ministers' SPS that:

- We will encourage and incentivise the sustainable and efficient use of water resources, including by encouraging companies to reduce leakage and customer consumption.
- Companies should when supported by customers/stakeholders and where it represents good value for money, (...) exceed legislative requirements and deliver wider environmental and social benefits while carrying out their functions.
- We will encourage the use of catchment wide, nature-based solutions and sustainable drainage schemes, where appropriate.

2.1 Why we need homes to be more sustainable

Building sustainable new homes is one tool within a wider range of tools and interventions needed to address the dual challenges of increased scarcity of water and stress on existing wastewater networks.

Water efficient homes help combat water scarcity



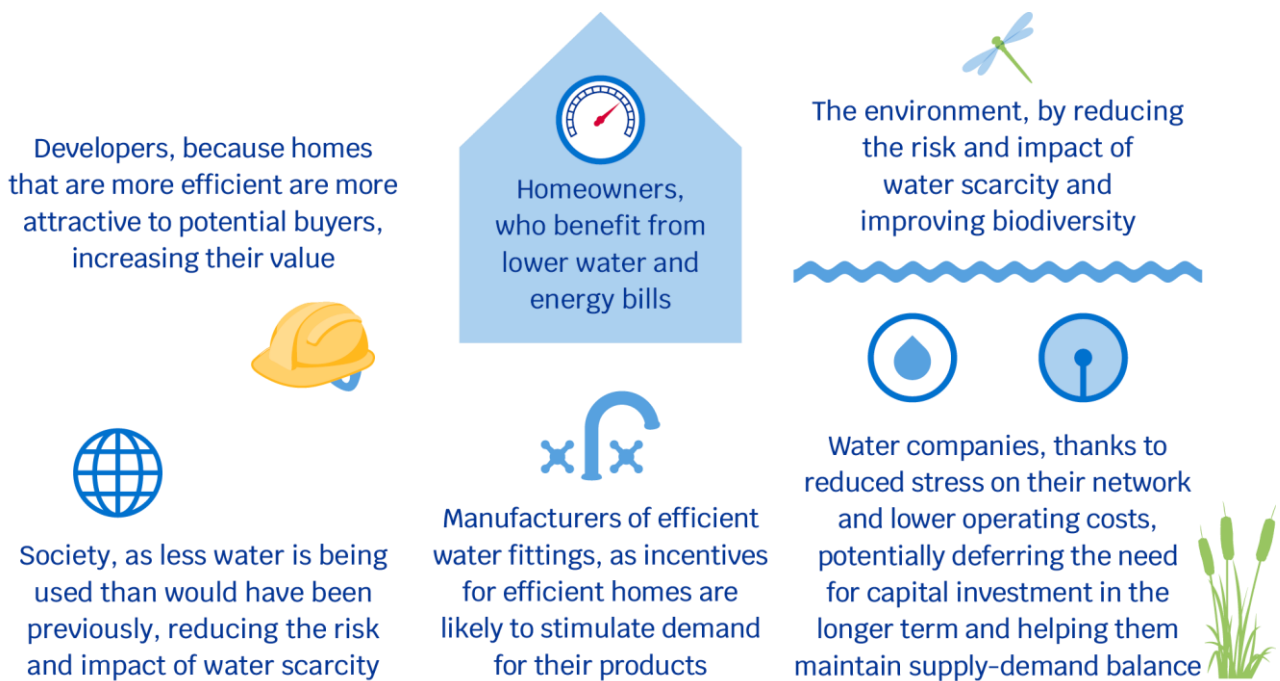
Sustainable new homes can reduce the stress on the existing wastewater network, through the installation of Sustainable Drainage Systems (**SuDS**) for individual households or at community level. These can take various forms, including:

- Soakaways, green roofs and permeable driveways, which allow surface run-off to drain into the ground slowly and reduce the volume and flow of water entering the public sewer.
- Slow-drain water butts (sometimes with added 'smart' features) and rain gardens that slow the flow of surface water into sewers, helping avoid activation of CSOs.

- Retention ponds, raingardens, wetlands and bioretention strips which can be installed on developments, to store water and attenuate the flow of run-off.

Improving water efficiency in areas which are not currently water scarce is sometimes viewed as less of a priority. However, using water wisely and encouraging improvements in efficiency has wider benefits. For example, it helps affordability, through reduced water and energy bills, and can help companies reduce their own operational expenditure. And increasingly options for addressing water resource needs are taking the form of transfers of water between regions. Examples of these transfers are found in the RAPID projects⁶ and the Havant Thicket reservoir being developed by Portsmouth Water, which will allow for additional transfers to Southern Water.

Sustainable homes and developments bring benefits to:



Building homes that are more water efficient also plays an important role in achieving net zero, as homes that use less water tend to have lower emissions and because of the emissions involved in water supply and wastewater treatment.

2.2 Designing effective environmental incentives

Our proposed aim for environmental incentives is that they result in **greater water efficiency and / or more sustainable drainage across all types of new development.**

⁶ See [The RAPID gated process and the proposed water resource solutions - Ofwat.](#)

For environmental incentives to be effective, we think that they should satisfy several characteristics which we set out in Figure 2. We discuss these characteristics further in this consultation and set out proposals aimed at achieving them.

Figure 2: Characteristics of good environmental incentives



Q1) Do you agree with our proposed aim for environmental incentives?

Q2) Do you have comments on the characteristics of good environmental incentives?

2.3 Applying incentives in Wales

Developer services in Wales are subject to a different regulatory regime compared with developer services in England, where Ofwat has the power to set rules about specific charges which relate to almost all developer services activities (our new connections charging rules). In relation to Welsh companies,⁷ this power has not yet been brought into effect, meaning that those charges are still regulated by provisions set out in primary legislation.

Infrastructure charges are levied on developers by companies in England and Wales under the general charging power at s142 of the Act, and for English companies are subject to our Charges Scheme Rules.⁸ Because of the interaction with the wider developer services charging landscape, Ofwat has not set charging rules in relation to infrastructure charges for

⁷ Companies whose appointed areas are wholly or mainly in Wales.

⁸ Although for clarity and convenience we publish our rules relating to infrastructure charges alongside the English New Connection Rules, rather than with our Charges Scheme Rules.

Welsh companies; instead we regulate these charges by a cap imposed by condition C of Welsh companies' licences. We say more about this in chapter 5.

There are other differences in the regulatory framework, most notably the fact that in Wales SuDS have been mandatory for all qualifying new developments⁹ since January 2019, whereas this is not yet the case in England. And our Codes for Adoption apply to English companies but not to Welsh companies.

Q3) Do you have any comments on the extent to which any environmental incentives could or should be adapted for implementation in Wales?

2.4 Our wider policies on charges for developer services

This consultation builds on previous documents and our wider work.

In October 2021, we concluded our consultation on the [scope and balance of developer charges and incentives](#), where we confirmed we would:

- Undertake and publish **a review of water companies' approaches** to setting, communicating and engaging on **environmental incentives** for 2022-23, highlighting good and poor practice, to strengthen their use and effectiveness; this will also inform how environmental incentives should be regulated from April 2025.
- From April 2025, disallow English companies to offer **income offset**; we concluded that there is no convincing justification for income offset, and that any discount or surcharge reflecting environmental or social issues should have a clear rationale.
- From April 2025, **remove the balance of charges rule**; this forms part of our work to make new connection charges more cost-reflective, so that end customers do not fund companies' costs that are incurred because of new developments.

In April 2022 we published a document¹⁰ setting out the common terms and definitions agreed between water companies and stakeholders for use by water companies in their Charging Arrangements. It also details the information requirements in a standard format that each water company, except new appointees, as a minimum must follow when presenting their Charging Arrangements, including worked examples for six typical new development scenarios. This document was developed by industry, agreed collectively by companies, in consultation with stakeholders, during 2021.

In September 2022 we published our [review of water companies' environmental incentives to support more water efficient homes](#). In it we drew attention to water companies' approaches to setting, communicating and engaging on environmental incentives in 2022-23. We highlighted good practice and where ambition had been shown. We also noted that more

⁹ All new developments of more than 1 dwelling or where the construction area is 100 square meters or more.

¹⁰ Ofwat (2022). [Common Terms And Worked Examples Effective April 2022.pdf \(ofwat.gov.uk\)](#).

could be done, with some companies either not communicating their incentives clearly or not offering them altogether. We concluded that further engagement was required on both the environmental incentives offered by companies and how we regulate environmental incentives for developer services from April 2025.

In December 2022, we published our [PR24 Final Methodology](#), including [Appendix 3 which concerned developer services](#). We concluded that

- for English companies at PR24, water site-specific developer services will be removed from the water network plus price control, but they will still be subject to our charging rules. We will consult on potential changes to our charging rules ahead of the 2025–26 charging year to make sure that developer services customers with limited choice in the market are sufficiently protected.
- for English and Welsh companies at PR24, we will remove wastewater site-specific developer services from the wastewater network plus price control. We will consider ahead of the 2025–26 charging year whether any changes to charging rules are needed to protect new connection customers that must use the incumbent company to provide these services because of site access issues.
- any discount or surcharge included in charges for developer services reflecting environmental or social issues should have a clear rationale and should not be funded by general customers. Instead, any discount will be funded by other developer services customers (so they are revenue-neutral within developer services). Revenue associated with environmental incentives will be included in the network plus price controls.

3. Progress on household water efficiency and industry intelligence

Q4) Do you have any comments on the case studies outlined?

In this chapter we explore relevant context for our proposals, including Defra's roadmap to water efficiency and mandatory sustainable drainage as well as current building regulations and the code for adoption agreements. We also set out companies' current environmental incentives, including case studies from three companies, and the proposals from the industry working group to enhance incentive offerings. We summarise what other stakeholders have told us about environmental incentives and set out thoughts on enforcement of compliance with incentive criteria, including a case study on current compliance with building regulations.

3.1 Defra roadmap to water efficiency

In January 2023, Defra published its Environmental Improvement Plan (**EIP**) 2023, the first revision of the 25 Year Environment Plan published five years earlier which had outlined its vision for '**a quarter-of-a-century of action to help the natural world regain and retain good health**'.

The EIP includes key updates on Defra's direction of travel for water demand management, as well as a roadmap to water efficiency in new developments and retrofits,¹¹ including ten actions for the next decade. Many of these are relevant to the work we are carrying out in reviewing the incentives for developers to make their homes more water efficient. In particular:

- **Action 2** focuses on reviewing the Water Supply (Water Fittings) Regulations 1999,¹² the Water Supply (Water Quality) Regulations 2016 and other relevant legislation to address wasteful product issues with toilets and enable new water efficient technologies.
- **Action 7** says "[Defra] will consider a new standard [for building regulation] for new homes in England of 105 litres per person per day (l/p/d) and 100 l/p/d where there is a clear local need, such as in areas of water stress." The current standards are 125 l/p/d and 110 l/p/d in some circumstances.

¹¹ Defra (2023) Environmental Improvement Plan (publishing.service.gov.uk) [Page 117-118 Water efficiency in new developments and retrofits](#).

¹² [The Water Supply \(Water Fittings\) Regulations 1999 \(legislation.gov.uk\)](#).

- **Action 8** concerns the delivery of the mandatory water efficiency labelling scheme. We support this proposal, which both helps customers make informed choices around the appliances they install and stimulates innovation within the bathroom and water appliance industry by incentivising manufacturers to ensure their products are efficient.

We support Defra's plan for improving water efficiency across the next decade and see the incentives that water companies offer developers as an important enabler of many of the actions in the plan in the short term.

3.2 Mandatory sustainable drainage systems

The UK Government has announced it will make Sustainable Drainage Systems (**SuDS**)¹³ mandatory for new developments in England, as they already are in Wales, with implementation expected in 2024. Schedule 3 of the Flood and Water Management Act 2010 provides the framework for the approval and adoption of these drainage systems and the establishment of a SuDS Approval Body (**SAB**). The recommendation of Defra's review is that unitary authorities or county councils would be the SAB and hence have responsibility for enforcing compliance with mandatory SuDS and also maintaining the SuDS once delivered. The review also outlines the likely circumstances in which SuDS would not be mandated, specifically for permitted developments under 100 square metres, single buildings under 100 square metres and construction work carried out by an internal drainage board in exercise of its functions under the Land Drainage Act 1991. This is different to current planning policy where SuDS are mandatory only for all new major developments (developments over 10 homes).¹⁴ The proposed cut-off for development size is subject to final decisions on scope, threshold and process following consultation later this year.

The technical standards SuDS will need to adhere to will be based on the non-statutory technical standards for SuDS developed by Defra for England¹⁵ and in line with the SuDS manual.¹⁶ These standards will also build on a number of existing guidance, regulatory and policy documents, including part H of the Building Regulations,¹⁷ concerning drainage and waste disposal, and the 'good practice' guidance document produced by the Local Authority SuDS Office Organisation (LASOO).¹⁸

¹³ Defra (2023) [The review for implementation of Schedule 3 to The Flood and Water Management Act 2010 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1184447/1184447.pdf).

¹⁴ Legislation (2010) [Flood and Water Management Act 2010 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2010/23/schedule/3).

¹⁵ Defra (2015) [Sustainable Drainage Systems: Non-statutory technical standards for sustainable drainage systems \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/444444/SuDS_Manual.pdf).

¹⁶ Construction Industry Research and Information Association (2015) [SuDS manual available for free download \(ciria.org\)](https://www.ciria.org/resources/suds-manual).

¹⁷ Legislation (2010) [The Building Regulations 2010 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2010/23/part/h).

¹⁸ LASOO (2016) [Non-statutory technical standards for sustainable drainage - practice guidance.](https://www.lasoo.org.uk/guidance)

3.3 Current building regulations for water efficiency

Regulation 4 and paragraph G2 of Schedule 1 of the Building Regulations 2010 (**Part G2**) sets out a requirement for water efficiency standards for new households. The maximum potable consumption is 125 l/p/d standard or 110 l/p/d where this applies, for example in areas of significant water stress. An Approved Document issued by UK Government specifies two methodologies for testing whether a new home is compliant: the **calculations approach**¹⁹ or the **fittings approach**. The fittings approach is outlined in Figure 3, where the water consumption of fittings installed into a building must not exceed the values in Table 2.1 (125l/p/d) or Table 2.2 (110l/p/d) of Part G2.

Figure 3: Fittings approach to meeting Building Regulations Part G2 for 125 l/p/d (table 2.1) and 110 l/p/d (table 2.2)

| Table 2.1 Maximum fittings consumption | | Table 2.2 Maximum fittings consumption optional requirement level | |
|--|---|---|-------------------------|
| Water fitting | Maximum consumption | Water fitting | Maximum consumption |
| WC | 6/4 litres dual flush or 4.5 litres single flush | WC | 4/2.6 litres dual flush |
| Shower | 10 l/min | Shower | 8 l/min |
| Bath | 185 litres | Bath | 170 litres |
| Basin taps | 6 l/min | Basin taps | 5 l/min |
| Sink taps | 8 l/min | Sink taps | 6 l/min |
| Dishwasher | 1.25 l/place setting | Dishwasher | 1.25 l/place setting |
| Washing machine | 8.17 l/kilogram | Washing machine | 8.17 l/kilogram |

While both the approaches to calculating water consumption are currently available to developers to check whether a new dwelling is compliant, there is a view that the industry should move towards using the fittings approach. Action 7 of Defra's ten actions for water efficiency in new developments and retrofits in the next decade,²⁰ which concerns reviewing the building regulations, states an intent to '**encourage the use of a fittings-based approach linked to the water efficiency label**'. The fittings-based approach ensures that water efficiency products are installed and reduces the uncertainty around occupancy impacting demand for water.

The building regulations can play a crucial role in influencing the water efficiency of households in the future. Defra's review of these regulations will be important for influencing

¹⁹ Table A1, Appendix A, Part G of Schedule 1 of the Approved Document issued under Building Regulations 2010.

²⁰ Defra (2023) [Environmental Improvement Plan \(publishing.service.gov.uk\)](https://www.gov.uk/government/publications/environmental-improvement-plan), pages 117-118.

how they can be strengthened and aligned with other interventions, for example mandatory water efficiency labelling.

For the purpose of designing environmental incentives, methodologies that are complementary to and consistent with building regulations – and, we anticipate, mandatory water efficiency labelling arrangements – are much more likely to be successful because they are widely understood and fittings are designed to meet their standards.

In some parts of the country, water neutrality orders are being introduced which put more stringent water efficiency requirements in place compared with those required by the building regulations. For example, in the Sussex North Water Supply Zone (in Southern Water's area), new developments must not increase water demand in the area, in order to ensure no adverse effect on the integrity of the Arun Valley Special Conservation and Special Protection areas.²¹

3.4 Code for adoption agreements

The code for adoption agreements (**the Code**), issued and enforceable by Ofwat under the WIA91, ensures a more consistent approach to new infrastructure adoption in the water and sewerage sectors for English companies. We think that the purpose of the Code may also be applicable to aspects of environmental incentive schemes. The purpose of the Code is to:

- enable the timely provision and adoption of new water and sewerage infrastructure required to enable housing growth;
- enable the customer focused delivery of the services Customers require when entering into adoption agreements;
- facilitate customers entering into Water Adoption Agreements and Sewerage Adoption Agreements;
- drive efficiency and effectiveness of processes, reducing the time and costs incurred by all parties entering into adoption agreements;
- protect end-user customers by preventing the adoption of sub-standard infrastructure; and
- enable effective competition in the provision of new connections.

Relating to the above, we want the processes for agreeing environmental incentives to be efficient and effective and protect end users, by ensuring environmental benefits are delivered.

²¹ Natural England (2021): [natural-england-s-position-statement-for-applications-within-the-sussex-north-water-supply-zone.pdf](https://www.naturalengland.org.uk/Images/natural-england-s-position-statement-for-applications-within-the-sussex-north-water-supply-zone.pdf) ([southernwater.co.uk](https://www.southernwater.co.uk)).

3.5 Current company environmental incentives

In our [September 2022 review of companies' environmental incentives](#), we provided a summary of the discounts offered by companies to improve water efficiency. We have updated these tables and included last year's incentives to compare, in Appendix 1. We welcome that most companies are offering a discount where there is no surface water connection to the existing public sewer and would encourage the remaining companies to consider doing the same.

Since we confirmed in October 2021 that we would be removing the income offset to developers from April 2025, we have encouraged companies to play their part in giving incentives to developers and third parties to build water efficient new homes and sites with sustainable drainage. Since then, many companies have offered incentives of varying designs and strengths. We explore below the design of some of these incentive schemes and evidence of their impact.

3.5.1 Case study – Thames Water

Thames Water offers a tiered environmental discount to developers for implementing water efficiency and water neutrality, as summarised in Figure 4.

Figure 4: Thames Water's environmental incentives 2023–24

| Tier 1 Water efficiency (£400) | Tier 2 Water reuse (£600) | Tier 3 Water neutrality (£800) |
|---|--|--|
| Achieved by demonstrating the development has been designed to achieve 110 litres/person/day, using the Fittings Approach as outlined in Table 2.2 of Part G2 of the Building Regulations 2010 Approved Document G. | Achieved by installing rainwater harvesting or greywater recycling as the primary source of water for all WCs, plus tier 1 criteria. | Achieved by ensuring the new development is water neutral, i.e., it does not add additional water demand pressures to its water resource zone supply needs. This is accomplished by first making the developments as water efficient as possible and then offsetting the development's remaining water demand through savings made on existing homes and businesses in the same water resource zone. |

When it launched the incentives in March 2022, Thames Water had three main aims: i) to strengthen water efficiency device installation; ii) to encourage water reuse technologies; and iii) to enable delivery of water neutrality.

An important aspect of Thames Water's incentive scheme is that developers must use the fittings approach for calculating water efficiency as per Part G2, if they want to qualify for the incentives (i.e., they cannot use the calculation approach). Thames Water says evidence from its smart water data from new builds shows that water consumption levels in homes built

using the calculations approach do not achieve the consumption levels stipulated in Part G2. Whilst variability in behaviour explains some of this, Thames Water concludes that the calculation approach allows non-water efficient devices to be installed in new homes, leading to higher levels of actual consumption once the homes are occupied. It sees the fittings approach as a more robust methodology for ensuring that efficient fixtures and fittings are specified and installed by developers. This preference for the fittings approach is in line with Defra's move towards encouraging the fittings approach in the next decade, in conjunction with a water efficiency labelling system.

Over the first 10 months of the scheme, Thames Water received 60 applications for incentives, with 90% of these being for tier 1 only. Thames Water was able to approve only 15% of applications because the remainder did not use the fittings approach. Thames Water acknowledges that the fittings approach requires the developer to specify devices and appliances within certain flow rates and volume limits, and that, in the absence of clear water labelling, this information can be difficult to locate. Also of note is that all of the applications for incentives were for single properties from private builders. Thames Water notes a move towards a mandatory water efficiency label for water fittings would improve the simplicity of the fittings approach considerably and be the best solution for ensuring household water efficiency in the longer term.

Thames Water offers a £30 discount on the infrastructure charge for each property for either a reduction of surface water runoff discharged to its network by 95% based on a 1-year return period, utilising SuDS, or total removal of all surface water run off discharged to its network.

3.5.2 Case study – Southern Water

Southern Water introduced a tiered environmental incentive scheme for implementing water efficiency and water neutrality in the 2023-24 charges year, as shown in Figure 5.

Figure 5: Southern Water's environmental incentives 2023-24

| Tier 1 Water efficiency (£250) | Tier 2 Water recycling (£800) | Tier 3 Water neutrality (contribution of approximately £300) |
|--|--|---|
| For properties achieving an efficiency rating of 100l/p/d through the installation of water efficient devices. | For the installation of water reuse technologies, such as rainwater harvesting or grey water recycling. A benefit of 50 litres of water per property per day being captured by the solution for re-use will need to be demonstrated. | Assuming water savings associated with tiers 1 and 2, Southern Water calculates baseline property average daily water demand to be 217 litres/property/day. This demand can be offset by carrying out 7 water efficiency visits to existing homes, costing roughly £700. Southern Water is willing to contribute around £300 to carry this out on behalf of a developer, resulting in a cost of around £400 to the developer. |

Southern Water is also providing **environmental incentives for wastewater services**. It offers a full discount on the infrastructure charge where the developer retrofits sustainable drainage on existing non-permeable sites, such that the reduction in surface water offsets the wastewater discharge from the new development. Where SuDS have been employed on the new development, remediation requirements will be less, reflecting the reduced discharge to be offset.

Southern Water has also trialled the use of slow-drain water butts to reduce the risk of storm overflows activating by slowing the amount of surface water entering the sewer. It offered existing household customers in a village on the Isle of Wight a free slow-drain water butt, and after 132 customers took up the offer, Southern Water noted a 70% reduction in spills from the nearby storm overflow site. It plans to increase the scale of this initiative to 1000 customers. Although this initiative was used with existing households, it could be applied to new developments too.

3.5.3 Case study – United Utilities

United Utilities currently offers an efficiency incentive for achieving 100l/p/d and a discount off the wastewater infrastructure charge if there is no connection to the existing sewer, which combined represent a 90% saving on the typical water and wastewater infrastructure charges. However, once the discount has been successfully applied for, developers are then subject to an audit on the fixtures and fittings installed, to ensure that the standard is met. Developers then receive a report confirming the findings of the audit. 'Second strike' audits for those who failed their first audit will take place in June 2023 and those who fail this will have their incentive payment clawed back and not be permitted to apply for future schemes for 12 months.

Of the 156 properties audited between January 2021 to present, 37% passed. The main cause of audit failure was the flow rates in taps and thermostatic showers, suggesting that flow limiters had not been inserted during installation. This audit process checks whether incentives are being complied with and provides developers with insights as to how any issues can be rectified going forward.

3.6 Environmental incentives industry working group

In December 2022, water companies established an industry working group, a sub-group of its New Connections Committee (**NCC**), to review the environmental incentives offered by companies to developers and explore how companies could be more ambitious going forward. The group was led by Southern Water and comprised water companies and also sought input from new appointees and other stakeholders.

The initial conclusions of the working group are that:

- water efficiency incentives represent a valuable opportunity to reduce water consumption and reduce wastewater discharge from new developments;
- a certain level of standardisation across companies would help drive uptake, including a tiered approach; and
- common terms would benefit the development of future incentives and could improve uptake.

The working group will recommend that all water and wastewater companies:

- should offer water and wastewater incentives for the 2024–25 charging year;
- should develop common terms for environmental incentives, in time for the 2024–25 charging year;
- adopt a tiered approach to environmental incentives, based on water efficiency, water recycling and water neutral/positive development; and
- seek to enhance their wastewater incentives.

The NCC will consider the recommendations from the working group.

3.7 Ofwat funds and performance commitments

In 2022 we announced a new fund of up to £100m to help stimulate a transformative, sustained and measurable reduction in water demand nationally, using a range of water efficiency approaches.²²

Additionally, in our PR24 final methodology, we set out our expectation that English and Welsh companies deliver long-term water demand reductions for leakage and per capita consumption, including a minimum reduction of 50% in leakage and a PCC level of 110 l/h/d by 2050. We confirmed that we will set separate performance commitments relating to the different components of water demand – leakage, per capita consumption and business demand (which will include the largest users of water). We will also expand the scope of enhanced incentives, which aim to encourage innovation and very high performance, to include the leakage and per capita consumption performance commitments.

The combination of a range of demand-side interventions recognises that the issues of water efficiency and demand are complex and will require a range of interventions to solve them.

Progress on water efficiency is also being made through projects supported by the Ofwat innovation fund. Affinity Water, Albion Water, BUUK Infrastructure and Aquality are examining water neutrality at new appointee sites, and their project aims to understand how the total amount of water used in the community can be the same as before the new homes

²² [PN 41/22 Price Review 2024: A healthier environment and better customer services – Ofwat sets out plans for the water sector – Ofwat.](#)

were built.²³ Anglian Water is leading the Enabling Water Smart Communities project, which has a vision to 'rethink whole-life water stewardship to accelerate the adoption of integrated water management, supporting communities and the environment to thrive'.²⁴ This includes the consideration of both hardware solutions, such as SuDS and water recycling, and software interventions, integrating people into the cycle as active citizens, rather than passive consumers.

3.8 Other stakeholders' views

We have engaged with a wide range of stakeholders, as well as with water companies, to understand and explore their views on water efficiency and what can be learned from their experience to take forward for future incentive schemes. These stakeholders included

- The Future Homes Hub, which has been set up to develop a long-term delivery plan for in line with the Government's legally binding net zero and wider environmental targets. Defra worked with the Future Homes Hub and other stakeholders to develop its roadmap on water efficiency for new developments and retrofits.
- The Bathroom Manufacturers Association, which acts as an information highway between Industry, Government and consumers on all issues affecting bathroom business in the UK.
- The Planning Advisory Service, which provides support to local authorities to help them understand and respond to planning reform, to help get local plans up-to-date and to improve decision-making.
- Barratt Homes, a large residential property developer in the UK.
- The Home Builders Federation, a representative body of the home building industry, with its member firms accounting for some 80% of all new homes built in England and Wales in any one year.
- The Consumer Council for Water, the independent voice for water consumers in England and Wales.
- The Water Research Centre (**WRc**), a consultancy that provides research, testing and accreditation services in water, waste and the environment.
- Waterwise, a UK water efficiency non-governmental organisation whose vision is to see water used wisely, every day, everywhere, by everyone. They carry out important work driving efficiency ambition in the water sector, including administering a reputational scheme for offices to demonstrate water efficiency.
- Sheffield Water Centre at the University of Sheffield, where academics research innovations to solve challenges in the water sector.

We gathered the following helpful insights from our conversations with these stakeholders.

²³ Affinity Water: [Our water neutrality project - Affinity Water](#).

²⁴ Enabling Water Smart Communities (2022): [Enabling Water Smart Communities \(EWSC\)](#).

- Encouraging the construction of new homes that are more water efficient will involve input from a range of parties. While individual stakeholders may contribute to water efficient new homes, a collective response from across the sector is likely to yield greater success.
- Going beyond water efficient fittings and devices and adopting technology such as greywater recycling is desirable and may be necessary, but there are major challenges, such as upfront cost and the need for on-going maintenance. Other technology, such as small-scale SuDs, are likely to be much less costly and could still yield benefits.
- There may be practical barriers to promoting greater water efficiency, particularly if limited resources need to be prioritised. Checking homes are compliant with the Building Regulations and company incentive schemes may be a low priority activity for local planning authorities and water companies respectively. Also, we heard different views about whose role it is, or should be, to ensure new homes comply with building regulations.
- There can be tensions at the level of the individual homeowner, where the consequences of being more water efficient may affect the perceived quality of the new home, which can have adverse consequences for developers. If a customer is unhappy with their new home's water fittings, they are likely to complain to the developer, rather than the water company.
- Developers are keenly focused on minimising costs and are risk averse when it comes to trialling new water saving fittings. There can be additional costs with using fittings that are more water efficient, especially with more ambitious water reuse schemes. Where the cost of implementation is considerably more than a less-efficient alternative, the developer is likely to go for the alternative unless legislation mandates otherwise.
- There appear to be some products and approaches already existing which could be used to promote water efficiency in new homes (such as delay fill valves for toilet cisterns, and the Unified Water Label²⁵). It is not clear why these are not more widespread, although one reason might be a lack of awareness. In the case of the delayed fill valve, the cost is similar to that of standard fill valves, suggesting that cost is not the barrier to their use.
- It will be important for companies to measure the success of their environmental incentives.
- Increasing standardisation in the design of components of SuDs would make them more cost effective and easier to install on a wider scale.

²⁵ [The Water Label | Setting the European standard for water-efficient products \(europeanwaterlabel.eu\)](https://europeanwaterlabel.eu/).

3.9 Enforcement of compliance with incentive criteria

We have heard from several stakeholders that some new homes are in theory constructed to meet the water efficiency requirements of Part G2, but in practice fail to be compliant when tested. This non-compliance risks undermining any environmental incentive scheme.

While responsibility for complying with Part G2 sits with developers, and ensuring compliance sits with Local Planning Authorities, companies also have an incentive to address non-compliance. For example, if a new home was compliant, then the homeowners could be expected to exhibit per capita consumption (**PCC**) at the water efficient level, other things being equal. However, in a non-compliant home, where fittings and appliances are less water efficient, those same homeowners (displaying the same behaviours) would have higher PCC. One consequence of this could be that the company has to, at potentially higher cost, intervene with offering water saving devices and water audits and other ways to increase efficiency, in order to reduce PCC and meet its regulatory performance commitments.

Incentives paid to a developer reflect the value to the company of reduced stress on its network. But incentives paid to developers of non-compliant homes both undermines the incentive scheme and does nothing for reducing stress on the existing network.

3.9.1 WRc case study – compliance with Building Regulations

WRc has been investigating compliance with and enforcement of the Building Regulations 2010 and associated guidance and has summarised their findings in this case study.

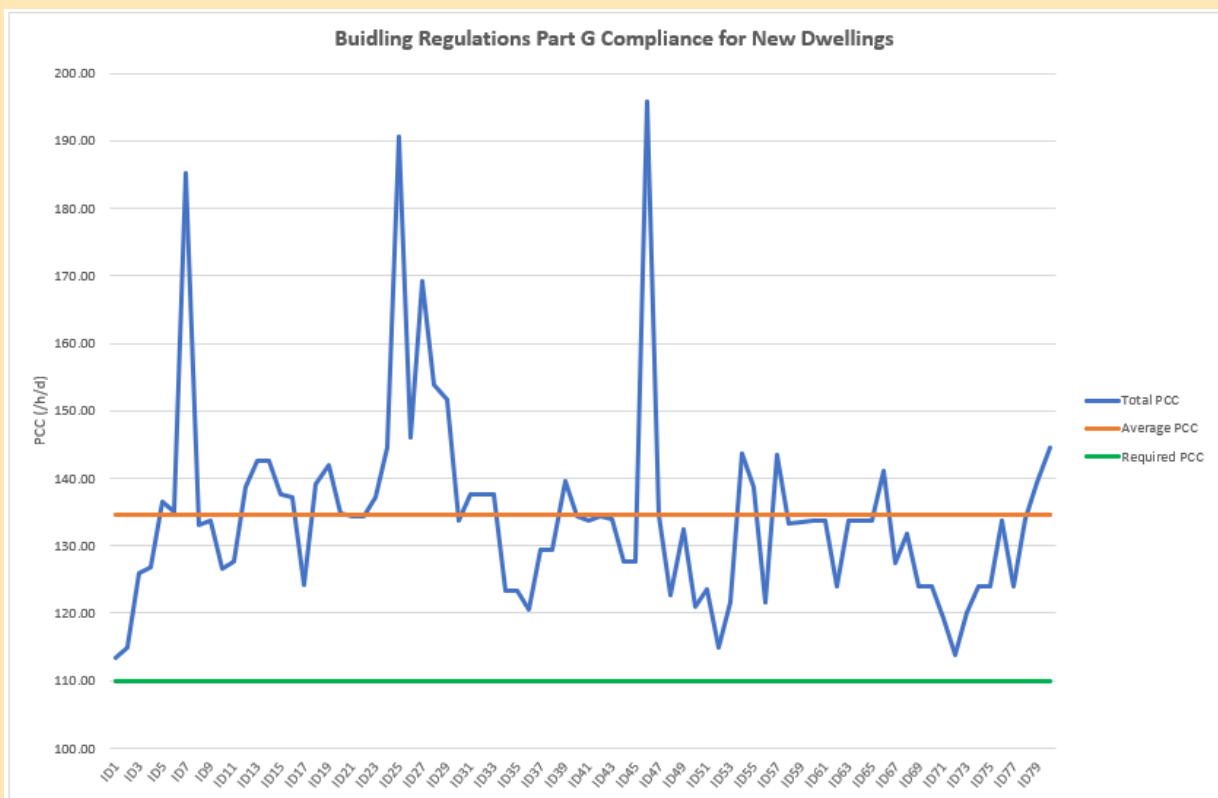
WRc has completed part of a project looking at the [Building regulations guidance: part G \(sanitation, hot water safety and water efficiency\)](#) and both the effectiveness of the regulations on domestic dwelling consumption and their enforcement across Wales. At present, all dwellings in Wales must comply with either a 110 litres/head/day (PCC) calculation or compliance to the performance tables which detail maximum flow rates.

Objectives

- Understand the role of Building Regulations: Part G on setting the standards for water efficiency within new domestic dwellings.
- Understand the compliance of new dwellings against Part G for either calculation and/or fittings-based approaches.

Summary

The project has reviewed the post-construction and pre-occupation of 80 properties spread across Welsh Water's operational area and consists of large and small developers whereby compliance to part G is established. The assessment included using a flow cup to measure all outlets and answering all elements of the calculation bespoke to each dwelling to create a PCC figure or compliance to the fittings-based approach. Following the analysis, no single property complied with the regulations for either approach. For the calculated approach, the average consumption was found to be 135 PCC (>20% above regulation specification of 110 PCC). One property even exceeded 195 PCC which is almost 80% over the regulatory standard



3.10 Comments on case studies

The case studies above provide useful context for our proposals in chapter 4. We note the following observations.

- Any environmental incentives offered by companies should be compatible with wider work, in particular Defra's roadmap to water efficiency.
- The move towards compulsory sustainable drainage across England is a welcome move but incentives can still play a role in incentivising specific types of SuDS.
- Thames Water's experience of 15% approval rate for applications is disappointing and emphasises more needs to be done engaging with developers so that their

applications will be successful. The fact that all applications were for single properties is also worth reflecting on further.

- Southern Water's offering of free slow-drain water butts in a specific region to reduce storm overflow activation is a good example of a bespoke incentive and emphasises that any standardised approach should leave flexibility for companies to offer bespoke incentives as appropriate in their area.
- United Utilities' experience of post-incentive property auditing demonstrates the importance of communicating effectively with developers to improve incentive compliance and the role check-ups can play in ensuring water efficiency is delivered.
- We welcome the proposals made by the NCC environmental incentives working group and see them as a natural next step from the early efforts made by companies to introduce environmental incentives. We would encourage the group to continue to think about how ambition can be pushed in this area, including considering the implementation of the proposals outlined in this consultation.
- The conclusions of the WRc compliance case study are worrying and understanding the reasons for the lack of compliance will be a crucial determinant of the success of environmental incentive schemes going forward, as well as efforts to manage household water efficiency more broadly.

Q4) Do you have any comments on the case studies outlined? We are particularly interested in comments on the findings that only a minority of new properties complied with the water efficiency standards.

4. Common framework for environmental incentives

Q5) Do you have any comments on our proposed standardised incentive tiers?

Q6) Do you have any comments on our proposal for a common methodology / technical standards to assess water efficiency?

Q7) Do you have any comments on the details of our proposal for companies to offer bespoke incentives?

Q8) Do you have any comments on the potential for reputational incentives?

Q9) We seek views on how the process for agreeing and paying environmental incentives might best be organised in practice, and whether this is consistent with existing developer services processes.

Q10) Do you have any comments on how high levels of compliance with the incentive technical criteria might best be achieved?

In this chapter we set out our proposals for a common framework for environmental incentives, comprising standardised and bespoke financial and reputational incentives. We also propose a common methodology for assessing water efficiency and examine how companies and developers can collaborate on an efficient process for verifying and awarding environmental incentives.

4.1 A common framework for environmental incentives

In October 2021 we confirmed our intention to remove income offset for developers from April 2025 for English companies and encouraged companies to offer environmental incentives in their place. Since then, some companies have made progress in developing and implementing incentives, notably Southern Water and Thames Water. However, we think companies can – and should – do more.

In chapter 2 we set out our proposed aim for environmental incentives of greater water efficiency and / or more sustainable drainage across all types of new development. We also set out, in Figure 2, what we thought the characteristics of good environmental incentives should be: that they are transparent, stable and fair; that they support innovation; that there is trust and confidence in the incentives; that they are accessible to all; and that they complement wider policy.

We think our proposed aim is best achieved if companies work within **a common framework for environmental incentives**. This would include a set of standard, consistently-defined incentives, with agreed technical standards for eligibility and aligned with the characteristics we set out in Figure 2. And to balance the benefits of coordination and

simplicity with each company's plans and obligations, companies would also be able to offer bespoke incentives for water efficiency and sustainable drainage solutions that were not part of the common framework, with some restrictions discussed below. Over time, companies could share their learning and best practice, which would enable them to increase the standard set of incentives.

We propose that from April 2025 all water companies use this common framework and that it would be specified in a document, which would be referred to in our new connection charging rules, similar to the existing document Common Terms and Worked Examples.²⁶

4.2 Standardised incentives

We propose that all companies offer standardised incentives. We think that incentives that are standardised across all water companies can be more transparent and stable, they improve trust and confidence in the incentives, and increase access to the incentives for all developers and other parties, because they are easier to communicate and understand. Standardised incentives therefore support many of the characteristics we have identified of good environmental incentives.

We propose that the incentives would be similar to the tiers of incentives implemented by Thames Water and Southern Water, so as to create a common framework for all companies that all developers can become familiar with. This is illustrated in Table 2, together with bespoke incentives which we discuss further below.

Table 2: Common framework for environmental incentives

| Description | Incentive | Illustrative reputational tier | Offered by company? |
|--|-----------|--------------------------------|-------------------------|
| Standardised incentives | | | |
| Development built to at least 100 litres/person/day | £X00 | Bronze | ✓ (all companies offer) |
| Installation of SuDS | £X00 | | ✓ (all companies offer) |
| Installation of one of: rainwater harvesting; greywater recycling; water reuse | £X00 | Silver | ✓ |
| Water neutrality | £X00 | Gold | ✓ |
| Bespoke incentives | | | |
| Bespoke incentive (e.g., green roof installation) | £X00 | | ✓ |

²⁶ Ofwat (2021) [Common Terms And Worked Examples Effective April 2022.pdf](https://www.ofwat.gov.uk/common-terms-and-worked-examples-effective-april-2022/) (ofwat.gov.uk).

Under our proposed common framework, all companies would offer incentives for new built homes achieving at least 100 l/p/d water efficiency and for ensuring the installation of SuDS of some description. We are proposing 100 l/p/d as this aligns with Defra's standard in the EIP for when there is a clear local need, but we want to give companies the flexibility to set more ambitious l/p/d incentives should they be more appropriate for the locality. For example, a company in a water scarce area may choose to offer a standardised incentive of 85l/p/d as well as or instead of the 100l/p/d. Similarly, we are proposing all companies offer an incentive for a certain specification of SuDS.

We propose that we specify some consistently defined standardised incentives. Each of these incentives would have a standardised England-wide name suitable for communication purposes, e.g. as a social media hashtag. We propose that:

- Some of these incentives would be offered by all companies. In particular, we propose that this be for incentives for at least 100 l/p/d and for installation of SuDS.
- Some of these incentives may not be offered by all companies. But any incentives that each company did offer would need to be consistent with the standards; we are proposing this for water recycling/ harvesting and water neutrality.

Under our charging rules, we do not have direct powers to require companies to offer credit payments, though we can require companies to offer discounts on charges where specified conditions are met. Subject to this constraint, we think in principle that each standardised incentive should be of a minimum value that is specified under the common framework, because an incentive of negligible value will not change behaviours.

Subject to a minimum value, each company would be free to set the size of environmental incentives. We think that the incentive payments should broadly reflect the benefits to the water company and / or wider society and the environment for achieving the standard. For example, we would expect greywater recycling to command a larger incentive payment than achieving a water use level of 100l/p/d. We are comfortable not requiring a detailed methodology for estimating the size of the payment, as the benefits of more water efficient homes are complex to estimate, sensitive to modelling assumptions, and may vary by location.

Q5) Do you have any comments on our proposed standardised incentive tiers?

4.3 Methodology for assessing water efficiency

So that developers can have trust and confidence in their eligibility for incentives, we propose that the methodology and / or technical standards for meeting water efficiency standards (**the methodology**) would be set out in the common framework document. Where possible, the methodology would be consistent with an established methodology – for example building regulations – and therefore would simply refer to another published

document. We propose that the methodology would be more analogous to the existing building regulations fittings approach, not the calculations approach, for the reasons we outline in chapter 3.

We think that the eligibility should be dependent not only on the fittings, but also that they are fitted correctly, so that the water efficiency benefits are realised.

When determining the water efficiency associated with a particular technology or fitting, it would also be relevant to consider evidence on the water saving realised in practice, accounting for residents' behaviour (in general rather than for a specific development) including whether they might override the technology.

We want the technical criteria for meeting water efficiency charges to be flexible enough to support innovation in water efficiency. In practice, we think this could be achieved by augmenting the established technical criteria (such as the fittings approach) with alternative means by which the developer might meet an efficiency standard. For example, the planned introduction of mandatory water efficiency labelling will provide an opportunity to augment the technical criteria; and there could be a fair, consistent process for incorporating water efficiency technologies that had been subject to certain testing standards into the criteria so that they provided alternative means of meeting the efficiency standards.

We discuss how this might be implemented in section 5.3.

Q6) Do you have any comments on our proposal for a common methodology / technical standards to assess water efficiency?

4.4 Bespoke incentives

We propose that companies can offer additional incentives (**bespoke incentives**) where these do not undermine the benefits of standardisation, to support innovation. In practice, we think that this means that the **company must offer the standardised incentive, and that the size of the bespoke incentives should be proportionate to the size of the standardised incentives**.

An example of such a bespoke incentive could be to encourage the installation of slow-drain or smart water butts to properties in areas which are prone to flooding. Southern Water,²⁷ United Utilities²⁸ and South West Water²⁹ all have experience of trialling these new initiatives.

²⁷ [Kent town benefits from cutting edge technology to help reduce storm overflows. \(southernwater.co.uk\).](https://www.southernwater.co.uk/news/kent-town-benefits-from-cutting-edge-technology-to-help-reduce-storm-overflows)

²⁸ [Largest ever UK trial of smart water butts taking place in Lancashire \(unitedutilities.com\).](https://www.unitedutilities.com/news/largest-ever-uk-trial-of-smart-water-butts-taking-place-in-lancashire)

²⁹ [Devon village project pilots smart technology to manage surface water \(smartwatermagazine.com\).](https://www.smartwatermagazine.com/news/devon-village-project-pilots-smart-technology-to-manage-surface-water)

Our intention is that once an incentive has been tested, to resolve problems of definition for example, it would then be included in the standardised incentives.

Q7) Do you have any comments on the details of our proposal for companies to offer bespoke incentives?

4.5 Reputational incentives

Environmental incentives could be both financially rewarding and reputationally enhancing for the developer. We expect that developers would respond primarily to a financial incentive. But an incentive that could enhance a developer's reputation may also be valuable, potentially offering benefits over the longer-term and be more visible to its customers and the home building sector.

We are therefore proposing the common framework includes a **reputational element**. This could take the form of, for example, a bronze/silver/gold label for each development, where gold reflects the most ambitious and beneficial approaches, recognising the effort developers are making towards improving sustainability. This could be calculated on the basis of the information that a developer or third party would submit to the water company to apply for the financial incentive, updated to reflect the payments made.

Under such a scheme, a developer or third party could apply for an overall bronze/silver/ gold rating using the evidence accrued through the environmental incentive process. Waterwise runs a checkmark scheme for water efficient offices and communities,³⁰ which may be a good model on which to base a reputational incentive scheme.

Furthermore, there are likely to be benefits from **transparent reporting of data on incentives**, such as how many applications have been made and of those, how many have been successful, and the types of incentives that developers apply for. This would be important for identifying sustainable developers and for monitoring the effectiveness of environmental incentives. This could work in two complementary ways.

- **Sector-level reporting:** Companies aggregate and report on uptake of the incentives at a sector level; for example, this could be an overall classification for each developer (or developer by region) based on a simple, transparent methodology. It could be reported on an annual or multi-year basis, providing an ongoing incentive to sustain the building of more sustainable homes in order to retain or improve on their grading.
- **Open data:** The disaggregated information is published in a consistent format, allowing third parties to use the data, for example to incorporate into a wider sustainability rating for new homes.

³⁰ [Waterwise Community Checkmark – Waterwise](#) and [Checkmark for Offices – Waterwise](#).

Q8) Do you have any comments on the potential for reputational incentives?

4.6 Process for agreeing and paying environmental incentives

As stated previously, one of our proposed characteristics of good environmental incentives is trust and confidence: developers have confidence that they will receive their due payments through an efficient and effective process.

It can take months between the initial application for a connection and the customer moving into a property. Our understanding is that infrastructure charges are payable before the developer installs fittings within the property, so before eligibility for the environmental incentive can be verified, and hence there could be problems with deducting the environmental incentive from infrastructure charges.

Developers will need to plan water efficiency and sustainable drainage early, and this means they want to have confidence regarding the size of the incentive payment and the standards required. In practice, we think this means that a contractual agreement is made at an early stage between the developer and the water company. Water companies want to have confidence that the new development has met the necessary standards, which would mean that the incentive is paid at a late stage in the process – for example after the fittings have been installed but before occupancy. We are seeking views on how this might best be achieved.

In addition, developers should have trust and confidence that they will receive the incentive through an effective and efficient process. Water companies have service levels, where they must respond to developers and third parties within a particular timeframe. Both compliance with these service levels and the developer experience is used to calculate D-MeX, which means that companies are financially incentivised to provide a good service to developers and third party providers. We are seeking views on whether existing arrangements, including the calculation of D-MeX, may be sufficient to cover the process of applying for and receiving environmental incentives.

Q9) We seek views on how the process for agreeing and paying environmental incentives might best be organised in practice, and whether this is consistent with existing developer services processes.

4.7 Compliance with environmental incentive criteria

As well as developers having confidence that they will receive their due payments through an efficient and effective process, water companies and society need to have trust and confidence that the environmental incentives mean that new homes are more water efficient with sustainable drainage.

It is important for the success of environmental incentives that companies and developers are confident that any incentive based on meeting a specified level of water efficient use is correctly applied. It is in developers' interests to be able to demonstrate that their homes comply to earn the incentive, and in companies' interests to be able to show they are properly applying their incentive schemes.

To support this, companies need to engage effectively with developers, particularly small developers, and with third party providers. They should ensure developers are highly aware of the availability of these incentives and what they need to do to meet the requirements, so they can incorporate the requirements early into their plans. Companies providing clear, up to date information is a prerequisite to this.

In addition to engagement and effective communication, companies could:

- make the **payment conditional on a sample of new homes passing an audit of compliance** with the relevant standard. This would mean that the payment was made after fittings were installed.
- introduce a **deterrent in the form of disqualification from applying for future environmental incentives** (for a period) if a developer failed compliance audits.

Q10) Do you have any comments on how high levels of compliance with the incentive technical standards might best be achieved?

5. Incentives and our regulatory framework

Q11) Do you have views on whether environmental incentives are best funded as an environmental component of the infrastructure charge or as a separate charge?

Q12) Do you have any comments on our proposal for guidance issued under the charging rules and how they are developed and maintained?

Q13) Do you have any comments on our approach for managing interactions with the regulatory framework?

Companies are responsible for their developer charges, including incentives they offer to promote environmental sustainability. They work within the legal and regulatory framework of which key components are our charging rules, our price review, the Act and general competition law. We want to ensure that environmental incentives are implemented properly, incentivise the right behaviours, and support effective competition in the new connections market. In this chapter we set out some considerations for companies when they implement environmental incentives.

5.1 Funding environmental incentives – principles

In our PR24 draft methodology, we confirmed that environmental incentives offered by companies to support more efficient homes should be self-funded by the developer community.³¹ This is consistent with our reforms to remove cross-subsidies between different types of customers.

We also confirmed, as part of our final methodology for PR24, that water companies would not benefit financially from overcharging because any (net) revenue associated with environmental incentives will be subject to a revenue cap.³² Infrastructure charges are also subject to this cap.

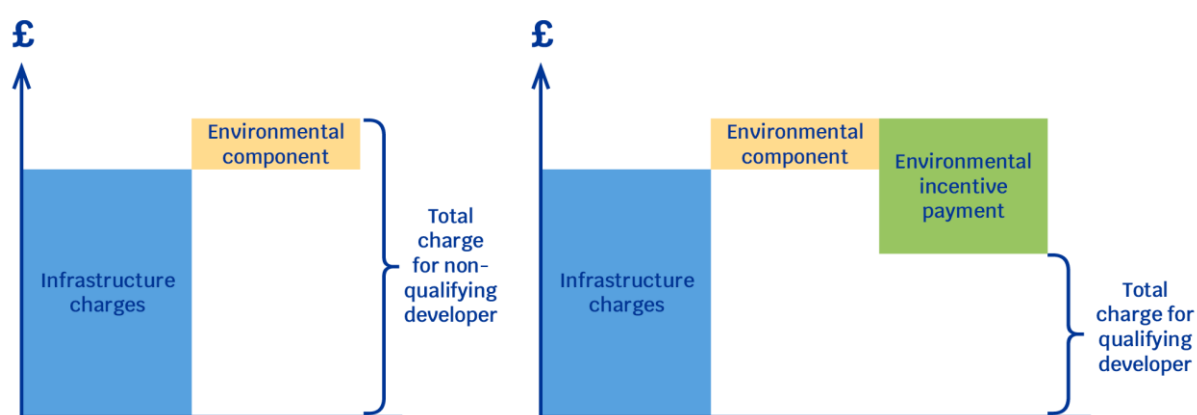
In practice, this approach means companies will need to collect revenue from the developer of every site in its area, in much the same way as they currently collect infrastructure charges to fund network reinforcement. While this may take the form of a new charge, we propose that the environmental incentive revenue is collected as a new environmental component within the infrastructure charge.

³¹ See page 30, [Appendix 3 – Developer services - Ofwat](#).

³² The revenue associated with environmental incentives will be included in the network plus price control. See page 21, [Appendix 3 - Developer Services - PR24 Final Methodology](#).

Figure 6 illustrates how this might be achieved in practice. Each water company would estimate the number of developers it anticipates would benefit from incentive payments and the value of these incentives. The water company would then set the environmental component of the infrastructure charge at the level for it to be financially neutral overall over a number of years. There is likely to be some variation year to year between the amount of revenue generated by the environmental component and the total value of incentives paid out, but we expect companies to adjust their component over time consistent with the charging principles, including stability and predictability of the environmental incentive and cost.

Figure 6: Proposed mechanism for funding environmental incentives for developers from April 2025



In Figure 6,

- the **blue box** represents the infrastructure charge currently paid by all developers.
- The **yellow box** is the proposed additional environmental component to be paid by all developers, which creates the fund from which environmental incentive payments are paid out.
- The **green box** is the environmental incentive payment paid out to a qualifying developer and the bracket below gives the net charge paid by a qualifying developer.

Note that the total environmental incentive payment may be larger than the infrastructure charge, depending on which tier of incentive is awarded.

To include this environmental component as part of the infrastructure charge, we would need to amend the rules relating to infrastructure charges. Specifically, we would specify that infrastructure charges must also include the environmental component, for the purpose of funding the company's environmental incentives scheme. Companies would then use this additional revenue for the purpose of supporting their incentive schemes, which would be netted off revenue within their revenue control. We would not expect companies to use the revenue for any other purpose.

Q11) Do you have views on whether environmental incentives are best funded as an environmental component of the infrastructure charge or as a separate charge?

5.2 Funding environmental incentives – simple model

We have undertaken some high-level analysis to model how a single-tier incentive scheme could be implemented, including where take-up is higher than expected and how companies could adjust for this. There is likely to be some variation year to year between the amount of revenue generated by the environmental component and the total value of incentives paid out, depending on the number of developments, the number of successful applications and the level of incentive applied for, and companies will need to manage this.

Figure 7 shows how a company could implement an environmental component to fund environmental incentives. Under scenario A, actual take-up is the same as forecast take-up. In scenario B, actual take-up is higher than expected and scenario C shows how the company adjusts its environmental component to recover the imbalance.

Figure 7: hypothetical model for a single-tier incentive scheme

| Scenario | A | B | C |
|--|----------------------------------|-----------------------------------|---|
| Scenario name | 5% actual take up vs 5% forecast | 10% actual take up vs 5% forecast | 10% actual take up vs 10% forecast plus revenue imbalance |
| New properties (Nr) | 10,000 | 10,000 | 10,000 |
| Tier 1 discount (£) | 200 | 200 | 200 |
| Properties forecast to qualify for incentive | 500 | 500 | 1,000 |
| Properties actually qualifying for incentive | 500 | 1,000 | 1,000 |
| Infrastructure charge (£) | 300 | 300 | 300 |
| Total revenue from infra charge (£) | 3,000,000 | 3,000,000 | 3,000,000 |
| Incentive-funding component (£) | 100,000 | 100,000 | 200,000 |
| Revenue correction component (£) | 0 | 0 | 100,000 |
| Total additional charge for developers (£) | 100,000 | 100,000 | 300,000 |
| Incentive-funding component per prop (£) | 10 | 10 | 30 |
| Total incentive pool (£) | -100,000 | -100,000 | -200,000 |
| Incentive per qualifying developer (£) | -200 | -200 | -200 |
| Total incentive paid out (£) | 100,000 | 200,000 | 200,000 |
| Current year revenue imbalance (£) | 0 | -100,000 | 0 |
| Ongoing year revenue imbalance (£) | 0 | -100,000 | 0 |
| Net charge for qualifying properties | 110 | 110 | 130 |
| Net charge for non-qualifying properties | 310 | 310 | 330 |

Scenario C highlights one mechanism for managing the difference between actual and forecast level of incentive take-up – adjusting the level of environmental component. Companies could also address the revenue imbalance by adjusting the value of the incentive offered or by raising the bar in terms of qualifying criteria, to encourage more ambition in building environmentally sustainable homes.

We are not consulting on these arrangements here. Our current intention is that we will consult on these proposed changes to our charging rules later, as part of a wider set of changes to our charging rules and reporting requirements we propose to make to implement the revised developer services framework following our PR24 final methodology.³³ We have included additional lines in PR24 business plan table DS1e to enable companies to report revenue and expenditure associated with environmental incentives.

If these proposals are to apply to Welsh companies, we would need to extend the rules relating to infrastructure charges to these companies for the first time, and remove the cap in those companies' current condition C, including if appropriate any transitional provisions. We would be able to do this because infrastructure charges form part of Charges Scheme Rules for Welsh companies. We are conscious that the regulatory framework for developer services will still be different in other respects in Wales (for example, in the provision of income offset).

5.3 Guidance in charging rules

To assist with the transition towards a common incentive framework, we are proposing introducing guidance, issued under the charging rules. This would ensure there is consistency across companies. The contents of this guidance could focus on methodologies or technical standards, for example rainwater harvesting, or defining the minimum water saving expected from a given intervention, for example rainwater harvesting should save a minimum of 30l/p/d. It would also provide common terms and definitions.

The NCC industry working group may be the most appropriate group to undertake the work of preparing this document, given their work so far on reviewing environmental incentives and their recommendation that all water and wastewater companies develop common terms for environmental incentives in time for the 2024-25 charging year. Ofwat would decide whether to require companies to follow it and make any necessary amendments.

To allow for incorporation of new technology, the technical standards should be subject to a change control process which allows for updating. This would best be achieved through an impartial expert panel making recommendations to Ofwat.

³³ We said in our PR24 final methodology, pp36-37, that we would consult on potential changes to charging rules to make sure that developer services customers that have a limited choice in the market are sufficiently protected. [PR24 final methodology main document](#) .

Q12) Do you have any comments on our proposal for guidance issued under the charging rules and how they are developed and maintained?

5.4 Transparency and stability

Developers make decisions on the installation of fittings in new homes well in advance of making a new connection to the water network, thus they require a degree of certainty around any incentive payment they could expect to receive on completion. To help ensure this certainty, we expect companies to continue to publish their incentives as part of their annual charging arrangements. Companies should explain how developers can qualify for incentives and promote them to all their developer customers. Where companies need to make changes to their incentive frameworks from year to year, they would be subject to the existing arrangements around significant changes. In practice, this would likely mean that environmental incentives are included in worked examples.

5.5 Supporting new appointees and developer services markets

To ensure an effective developer services market, there needs to be a level playing field between new appointees, self-lay providers (**SLPs**) and incumbent companies in terms of offering incentives to developers.

Just as with infrastructure charges and income offset currently, the incentives (where applicable) and charge would be applied for all new developments connected to the incumbent company's network, and so be unaffected by which parties (for example an SLP, developer or a water company) lay the on-site infrastructure.

The common framework would establish a basis and approach for new appointees to be compensated, for example, for investment and ongoing maintenance of development-level water recycling arrangements. New appointees have the opportunity to innovate and differentiate their offerings by designing more ambitious incentives, which could be desirable from a developer's points of view. We encourage incumbent companies to work with new appointees to support these initiatives through innovative environmental incentives or through discounts to bulk supply or discharge charges.³⁴

It may be beneficial to both new appointees and incumbents, and more practical, to use different but equivalent metrics such as ongoing water consumption or discharge volumes. These would be more valuable to incumbents than one-off incentives to developers because they are contingent on the properties continuing to be water efficient, say, whereas the

³⁴ For example, see [Project Zero - Ofwat Innovation Fund \(challenges.org\)](https://www.challenges.org/en/projects/project-zero-ofwat-innovation-fund) – project led by Affinity Water to examine water neutrality at New Appointee sites.

benefits of new homes can dissipate due to for example occupiers replacing fittings. These benefits should be reflected in bulk supply charges.

One-off environmental incentives would still require the incumbent company to have sufficient assurance that the technical standards are met.

Bulk supply charges must not have adverse unintended consequences in terms of water demand management. In our September 2022 review of environmental incentives, we discussed the interaction between bulk supply charges and the business decisions of the new appointee. At the negative extreme, there are scenarios in which the new appointee could earn greater returns if its customers used more water, creating a perverse incentive for the new appointee to avoid encouraging its customers to conserve water. In the same document we also provided examples of how this could be managed through innovative bulk supply structures. We will engage with the new appointee bulk charging working group on incorporating environmental incentives within bulk supply and discharge charges to new appointees.

5.6 D-MeX

We are not proposing to include specific service levels relating to environmental incentives in the developer services measure of experience (**D-MeX**) at this stage. As part of PR24, we are consulting on D-MeX policy issues this summer.

Introducing a standardised environmental incentive framework across all companies should mean that developer satisfaction regarding environmental incentives is broadly consistent from company to company, provided that the companies provide high quality responsive services.

The system of environmental incentives will work more effectively if developers can have confidence regarding their associated service levels. In practice, we think this means agreeing certain service standards and response times. When they are established, they could then be incorporated into D-MeX.

Q13) Do you have any comments on our approach for managing interactions with the regulatory framework?

Appendix 1

Tables A1 and A2 set out companies' environmental incentives for 2023-24 and 2022-23 for water efficiency and sustainable drainage respectively.

Table A1: Discounts for improving water efficiency

| Company | Water infrastructure charge 2023-24 (£) | Water infrastructure charge 2022-23 (£) | Criteria for water efficiency discount – Achieving estimated usage of a certain level in litres per person per day (l/p/d) | Water efficiency discount 2023-24 £ per qualified property | Water efficiency discount 2022-23 £ per qualified property |
|--------------------|---|---|---|--|--|
| Anglian Water | 233 | 293 | N/A | N/A | N/A |
| Hafren Dyfrdwy | 459 | 411 | N/A | N/A | N/A |
| Northumbrian Water | 165 | 130 | < 110 l/p/d | 165 | 130 |
| Severn Trent | 405 | 363 | < 100 l/p/d | 380 | 280 |
| Southern Water | 150 | 0 | 3 tiers available: tier 1 = <100 l/p/d; tier 2 = greywater harvesting/rainwater recycling; tier 3 = water neutrality | Tiered discount offering: Tier 1 = £250; Tier 2 = £800 Tier 3 = subsidised water neutrality rate (£400) | 230 |
| South West Water | 96 | 96 | < 110 l/p/d | 75% reduction in water infrastructure charge | N/A |
| Thames Water | 660 | 445 | 3 tiers available: tier 1 = <110 l/p/d using 'Fittings Approach'; tier 2 = greywater harvesting/rainwater recycling; tier 3 = water neutrality | Tiered discount offering: i) £400; ii) £1,000; and iii) 1,800 Note figures are cumulative | Tiered discount offering: i) £200; ii) £1,000; and iii) £1,800 Note figures are cumulative |
| United Utilities | 302 | 302 | < 100 l/p/d | 30 | 272 |
| Dŵr Cymru | 487 | 428 | N/A | N/A | N/A |
| Wessex Water | 174 | 199 | N/A | N/A | N/A |
| Yorkshire Water | 96 | 80 | < 110 l/p/d | 20% discount | percentage discount will be equal to the percentage that the estimated water usage is below 125l/p/d |

| Company | Water infrastructure charge 2023-24 (£) | Water infrastructure charge 2022-23 (£) | Criteria for water efficiency discount – Achieving estimated usage of a certain level in litres per person per day (l/p/d) | Water efficiency discount 2023-24 £ per qualified property | Water efficiency discount 2022-23 £ per qualified property |
|-------------------------------------|---|---|--|--|---|
| Affinity Water | 434 | 366 | < 110 l/p/d | 258 | 84 |
| Bristol Water | 293 | 309 | < 110 l/p/d | 75% discount trial for selected developments | 75% discount trial for selected developments |
| Portsmouth Water | 318 | 321 | < 100 l/p/d | 50% discount | 50% discount |
| South East Water | 633 | 633 | Discount offered for a smaller diameter connection (20mm rather than 25mm) | 50 | 50 |
| South Staffs Water | 305 | 305 | < 100 l/p/d | 40% reduction | 40% reduction |
| Sutton and East Surrey Water | 375 | 312 | Two-tiers; discount for achieving < 105 l/p/d and larger discount for achieving < 80 l/p/d | 207 for achieving 105 l/p/d; 375 for achieving 80l/p/d | 15% reduction to infrastructure charges if bathroom fittings are A-rated OR grey water recycling or rain water harvesting if fitted; 30% reduction if both conditions are met |

Source: Ofwat analysis of water companies' charging arrangements.

Table A2: Discounts for sustainable surface water drainage

| Company | Sewerage infrastructure charge 2023-24 (£) | Sewerage infrastructure charge 2022-23 (£) | Criteria for sustainable drainage/surface water reduction discount | Efficiency discount 2023-24 £ per qualified property | Efficiency discount 2022-23 £ per qualified property |
|---------------------------|--|--|--|--|--|
| Anglian Water | 400 | 490 | Implementation of sustainable surface water discharge method, including: rainwater harvesting re-use; infiltration methods; discharge to open surface water body; drainage to a drainage system at a restricted rate | 50% reduction in the | N/A |
| Hafren Dyfrdwy | 459 | 411 | N/A | N/A | N/A |
| Northumbrian Water | 75 | 95 | No surface water connection to an existing public sewer | 75 | 95 |
| Severn Trent | 330 | 295 | No surface water connection to an existing public sewer | 124 | 124 |
| Southern Water | 563 | 608 | Retrofit sustainable drainage on existing non-permeable sites to offset new connection | 608 | N/A |
| South West Water | 707 | 707 | N/A | N/A | N/A |
| Thames Water | 380 | 320 | a) Reduction of overall discharge to network by $\geq 95\%$ or; b) removal of all surface water run off discharged into network | 30 | 25 |
| United Utilities | 279 | 279 | No surface water connection to an existing public sewer | 28 | 251 |
| Dŵr Cymru | 487 | 428 | N/A | | 100 |
| Wessex Water | 744 | 664 | Inclusion of SuDS to attenuate the flow of surface water into network | 372 | 332 |
| Yorkshire Water | Foul water = £60; Surface water = £150 | 220 | No surface water connection to an existing public sewer | Full discount | 160 |

Source: Ofwat analysis of water companies' charging arrangements.

**Ofwat (The Water Services Regulation Authority)
is a non-ministerial government department.
We regulate the water sector in England and Wales.**

Ofwat
Centre City Tower
7 Hill Street
Birmingham B5 4UA
Phone: 0121 644 7500

© Crown copyright 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3.

Where we have identified any third party copyright information, you will need to obtain permission from the copyright holders concerned.

This document is also available from our website at www.ofwat.gov.uk.

Any enquiries regarding this publication should be sent to mailbox@ofwat.gov.uk.

OGL