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Chair, Environmental Audit Committee
House of Commons
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Dear Philip,

Environmental Audit Committee inquiry: Sustainability of the built environment

Thank you for the opportunity to submit evidence to your committee's inquiry into the sustainability of the built environment.

Anglian Water is the water and water recycling provider for over 6 million customers in the east of England. Our operational area spans between the Humber and Thames estuaries, and includes around a fifth of the English coastline. The region is the driest in the UK and the lowest lying, with a full quarter of our area below sea level. This makes it particularly vulnerable to the impacts of climate change including heightened risks of both drought and flooding. Additionally, our region has the highest rate of housing growth outside of London and the South East, and encompasses most of the Oxford-Cambridge Arc growth area.

The Sixth Carbon Budget, which the government has now adopted, means the UK needs to reduce its emissions by 78% by 2035. The Climate Change Committee states that this must be achieved by increasing the take up of low-carbon solutions, expanding low carbon energy production, reducing demand for carbon-intensive activities, and transforming land management to help sequester greenhouse gases from the atmosphere.

Each of these measures are relevant to the water industry. As an energy intensive sector, companies use three per cent of the UK's electricity just pumping and treating water and sewage across the country. The CCC's recommendations are being implemented within the sector through the industry's [Net Zero 2030 Routemap](#), with Anglian Water co-leading the technical work. For us, this means building nature-based solutions like [treatment wetlands](#), expanding our renewables programme, encouraging consumers to use less water, building PAS2030-accredited infrastructure, and operating our assets more efficiently through smart systems. However, we need policymakers and other stakeholders to also play their part.

Within the scope of this inquiry, there are some simple but critical actions government must take to enable all stakeholders - including regulators, local authorities and housing developers - to help improve the sustainability of the built environment. These will help reduce flood risk, cut water demand, increase energy efficiency, and improve river health whilst helping to meet the UK's net zero target. I have set out our recommendations in the attached annex.

With every best wish,

Daniel Johns FCIWEM
Head of Public Affairs



Our response focuses on those questions where we feel we can add value to the committee's call for evidence.

4. What role can the planning system, permitted development and building regulations play in delivering a sustainable built environment? How can these policies incentivise developers to use low carbon materials and sustainable design?

The planning system, permitted development, and building regulations are all potentially very powerful tools that policymakers in national and local government have at their disposal to deliver a net zero built environment. The problem is that these tools are not being used to the effect that they could. National planning policy lacks any real ambition, whilst at the same time restricting local planning policies from going further and faster.

For example, the scale of the challenge posed to [long term water resource security](#) and [increasing flood risk](#) from climate change and growth are well documented. In order to deliver the necessary change, the frameworks governing the built environment must be underpinned by rigorously enforced, ambitious minimum standards, which also allow and incentivise developers and local authorities to go further where needed. This should include:

- Government **tightening Part G of Building Regulations to apply a 100 litres of water per person per day standard or below for new homes**, and outlining a clear timeline to tighten this further to 85l/p/d in time. This should also include the measures to reduce wider water consumption that Defra [consulted](#) on in 2019, and to which there has yet to be a government response.
- Allowing local authorities to set **tighter water efficiency standards under local planning policies where there is high growth in areas of water stress**. A lack of available water will otherwise begin to constrain growth. One million new homes are planned in the Oxford-Cambridge (OxCam) Arc, within areas of severe water stress.
- **Ensuring that new housing development and highways authorities adopt a natural-by-default approach to drainage and flood risk management, particularly in relation to surface water**. This would keep surface water, which does not require treatment, out of combined sewers. Excess run off entering sewers heightens flood risk to homes and increases the likelihood of discharges from storm overflows into rivers. This should be done through increasing (or even mandating) the take up of Sustainable Drainage System (SuDS) in both new development and maintenance projects by highways departments.
- **Remove the automatic right for developers to connect surface water drains to combined sewers**. This should be done through commencing Schedule 3 of the Flood and Water Management Act 2010. The automatic right to connect has been removed in Wales, and SuDS are a requirement in new development in Scotland. A May 2020 [review](#) commissioned by Defra concluded that the approach adopted in England to deliver and maintain effective sustainable drainage systems is insufficient and not fit for purpose.

Above all, the longer the automatic right remains, the pressure on existing infrastructure (including Storm Overflows) will grow at time when it needs to be eased to facilitate housing growth and improve river health. Water companies are not asking for complete control over what can and cannot be connected to the public sewer, rather we want a rebalancing so that the onus moves to the developer to demonstrate

that all other possibilities have been exhausted. We want connections to combined sewers to be the genuine last resort, rather than the easiest option for developers.

- **Adopt a new, mandatory SuDS national standard that is aligned with the SuDS specification set within the water industry's [Design and Construction Guidance](#).** The current planning-based approach to SuDS does not work because whilst SuDS are encouraged, it is all too easy for developers to either not build them at all, or to build grey underground SuDS to a poor standard that falls into disrepair. Improving the national standards and making them mandatory will enable water companies to adopt and maintain SuDS, with customers having to pay no more than they already would through drainage charges, and possibly less if the system does not itself drain to a sewer.
- **Introduce a right to connect new surface water to existing surface water drains.** This would allow water companies and other drainage authorities to connect surface water drainage to other surface water systems, like rivers and canals. Currently this is often subject to fees which make it cost-prohibitive. By allowing surface water to surface water discharge, there would be additional carbon reduction benefits as it will reduce the amount of unnecessary water treatment. Such a power would also relieve pressures on existing infrastructure if there were greater options automatically available for water companies.

7. How well is green infrastructure being incorporated into building design and developments to achieve climate resilience and other benefits?

Unfortunately, green infrastructure remains the exception and grey infrastructure the norm in new development. Weaknesses in national planning and other policies perpetuates this as outlined in our response to question 4. Ambitious minimum water efficiency standards, support for rainwater harvesting and reuse, and a long term retrofit strategy for SuDS and green infrastructure, are all critical if the built environment is to both reduce its emissions and be more resilient to climate impacts.

In relation to water efficiency, the need for national policy intervention has long been [established](#) and the policymaking process seemingly held up, despite repeated ministerial assurances in response to Parliamentary questions.

The Government should announce:

- the **introduction of mandatory water efficiency labelling and minimum efficiency standards for water-using products** such as taps, showers, dishwashers and washing machines. This would empower consumers to make better-informed decisions and drive fundamental change in water efficiency, akin to the success of the energy efficiency label.
- a **national water savings target** that incorporates household and non-household consumption, and leakage within water networks and customer properties, defined as a percentage reduction in water company 'Distribution Input' by a fixed date.
- plans to **tighten Part G of Building Regulations to apply a 100 litres of water per person per day standard or below for new homes**, using a fittings-based approach which requires developers to install only 'A-rated' taps, showers and appliances according to the new label mentioned above.

The need to improve water efficiency is clear, and it makes economic and environmental sense to introduce such measures at the design phase of development. The CCC [estimates](#) it would cost £300 per property to install the measures, compared to £3300 per property to retrofit

them¹. It makes economic sense for consumers to bear the smaller cost upfront, than consumers or taxpayers (if funding a future retrofit scheme) being left to pay more than ten times the cost later down line.

8. How should we take into account the use of materials to minimise carbon footprint, such as use of water harvesting from the roof, grey water circulation, porous surfaces for hardstanding, energy generation systems such as solar panels?

These should be accounted for within the Future Homes Standard, with existing homes being able to retrofit said materials in order to apply for and achieve the standard. We have expanded on this in our response to question 10. There is also a role for a mandatory water efficiency label in accounting for the carbon footprint of water-using products and fixtures and fittings in the home.

9. How should re-use and refurbishment of buildings be balanced with new developments?

We should not be looking to 'balance' existing buildings with new development, rather the focus should be on greening the entire building stock whether new or old. The existing building stock will be with us for decades to come and therefore it is critical to get the sustainability standards we will need in the long-term in place now. Otherwise, homeowners will be expected to make a series of incremental improvements to their properties when doing it once, and done well, would save both time and money in the long run.

We suggest the creation of a target that links both greening of existing homes and new developments. For example, a **national target that aims to retrofit two existing homes with energy and water efficiency measures for every new home built to the same high environmental standards**. This is where we believe there is a role for the Future Homes Standard in ensuring consistent environmental standards across new and existing buildings (see question 10).

10. What can the Government do to incentivise more repair, maintenance and retrofit of existing buildings?

We believe that the Future Homes Standard (FHS) should be applied to both new build and the existing housing stock, and it should cover both water and energy performance.

The FHS could become a quality mark of environmental excellence for those buying, building and improving homes, as well as for lenders and insurance providers. By giving homeowners the opportunity and an incentive to upgrade their homes and apply for the standard, the private building stock would, alongside other enabling schemes like a comprehensive Green Homes Grant, progressively improve.

At its heart, the FHS must require high performance on both water and energy efficiency. For water, we would urge the minimum water efficiency performance within the Future Homes Standard to be set at 100 litres per person per day or below. In the long term, this minimum standard should be tightened to 85l/p/d to further reduce water and energy consumption. Any property acquiring the standard should have a smart water meter installed so that the household can understand their consumption and look for further ways to save money.

The government should relaunch a longer term, locally-delivered Green Homes Grant, with a broader remit to include energy and water efficiency within the existing building stock

¹ Committee on Climate Change (2019), [UK Housing: Fit for the future?](#), p42.

It is disappointing that the Green Homes Grant (GHG) has been closed. The rationale and intent behind the policy was right, but its poor design and implementation meant it failed to live up to its potential. The urgent need to retrofit the existing housing stock at scale remains.

Part of the issue seems to arise from hurried policy implementation followed by a boom and bust in investment being available. Instead, the government should focus on providing attractive, stable incentives to homeowners and the private rented sector. We have seen this in the homebuilding market with Help to Buy, which runs over multi-year periods, and provides developers with a high degree of certainty. A similar multi-year approach would help the successor to the GHG deliver on its promise and allow it to scale up over time to address the millions of homes in need of attention.

The scope of the GHG should also be broadened to truly green the existing housing stock. As outlined above, our central message to policymakers is that improvements in both energy and water efficiency in homes and buildings are urgently needed, and with modest changes to schemes like Green Homes Grants these can be achieved hand in hand.

Local authorities should integrate water efficiency into their own household retrofit schemes, in particular for social housing

As noted by the Climate Change Committee², there are number of low regret water efficiency actions that can be taken that have a positive impact on energy efficiency and a household's carbon footprint. However, consumer awareness is low and it should be incumbent upon local and national government to drive change in this area to support activity by water companies.

For example, local councils are uniquely placed to promote improvements in their communities, such as in social housing and the private rented sector. Water efficiency measures should be included in local energy efficiency retrofit programmes and social housing quality standards.

² Committee on Climate Change (2019), [UK Housing: Fit for the future?](#), p78.