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Emailed to: netzeroreview@beis.gov.uk

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Dear BEIS,

RE: Net Zero Review Call for evidence

Introduction to Anglian Water's Net Zero Strategy

Our region is the driest and lowest lying in the UK, more vulnerable than most to the effects of climate change, giving us hotter, drier summers and warmer, wetter winters, and causing sea level rise. The more the world warms, the worse those effects will be. That is why we are playing our part in the global effort to limit further climate change: by moving to net zero operational emissions by 2030.

For many years we have been at the forefront of carbon reduction in the water industry. With a committed leadership and a determined supply chain, by 2020 we had reduced capital carbon by 61 per cent in our capital programmes from our original 2010 baseline and reduced operational emissions by 34 per cent from a new baseline set in 2014/2015. We are also supporting system-wide decarbonisation in the region, for example by exporting waste heat to warm industrial scale tomato greenhouses in our region.

Our goal is to achieve net zero operational emissions by 2030 and to continue this reduction. Net zero covers our operational activities (Scope 1, 2 and outsourced Scope 3 operations). We have also set a 70 per cent capital carbon reduction target by 2030 from a 2010 baseline. Achieving net zero means we will reduce the greenhouse gas emissions from our operations as far as possible and ensure overall we have no impact on greenhouse gases in the atmosphere. Any residual emissions that we cannot avoid or reduce will be counterbalanced from 2030 by an equivalent sequestration of gases including offsetting (which supports biodiversity, improves water quality and provides recreational opportunities). Our net zero strategy impacts all our business operations and those of our supply chain. It requires a flexible approach and the exact steps we will take in our journey will require extensive collaboration with our supply chain, our peers, councils, government and regulators.



Consultation response

1. How does net zero enable us to meet our economic growth target of 2.5% a year?

Economic stability depends on environmental stability. Net zero is crucial for the success of our future economy. Net zero demands new skills, innovation and solutions to deliver new, low carbon infrastructure in the UK. This also provides a competitive advantage and the opportunity to export services. Net zero and smart growth also requires us to use our existing infrastructure more effectively and this also enables resources to be directed to growth locations which have the greatest return from investment.

As a large employer in the East of England we are committed to creating opportunity and levelling up communities through upskilling and early careers development, including apprenticeships and graduate schemes. Net zero and climate resilience projects will enable us and other businesses to employ and train more people in green jobs.

2. What challenges and obstacles have you identified to decarbonisation?

The current uncertain policy environment around net zero created by the Government makes it very difficult to plan. While the Government states that it remains committed to reaching net zero greenhouse gas emissions by 2050, changes in policies, a lack of policy in certain areas or policies that are only short-lived, is creating uncertainty.

For example, at Anglian we worked on a fantastic low carbon project to heat industrial scale greenhouses with heat generated by the wastewater treatment process. However, financial incentives to fund low carbon innovation like this was pulled so we haven't been able to replicate that project in other parts of our region.

3. What opportunities are there for new/amended measures to stimulate or facilitate the transition to net zero in a way that is pro-growth and/or pro-business?

Energy-saving measures shouldn't be underestimated, especially in the context of the cost-of-living crisis. Energy efficiency was highlighted as a key ask to enable net zero in the recently published Climate and Nature Plan by the Environment APPG.

We would also like to see the link made between water and energy efficiency in all net zero strategies or energy retrofit programmes. Tap water contains embedded carbon due to the carbon required to abstract, treat and pump water to homes and businesses. Saving water saves carbon and furthermore, saving hot water saves also saves energy needed to heat the water in the home. The Government should provide more assistance for consumers to make energy efficiency improvements to homes, linked to water efficiency (measures such as low flow showers, tap aerators and cistern displacement devices in toilets). We also urge the government to introduce a mandatory water efficiency label to work alongside the existing energy efficiency ratings. This will have a huge impact on saving water and serves to further the connection between water and energy. New homes should also be built water efficiently, with not just water resources, but net zero in mind. Planning for and delivering low carbon and high-water efficiency homes and business now can support green growth and avoid the need for later retrofitting.

4. What more could government do to support businesses, consumers and other actors to decarbonise?

Create a stable and certain policy environment around net zero. Changes in government should not relate to changes in the national net zero strategy. Over the last few decades there have been a

number of useful carbon strategies which are replaced by new administrations and the learnings appear to have been forgotten. More continuity of policy and strategy is crucial for business to operate with certainty.

In addition, we need stable and secure financial incentives which are available to access over a prolonged period of time, which reflects the length of time planning and delivering large infrastructure takes.

We also would like to see investment to drive innovation in areas such as hydrogen and low carbon materials, such as low carbon concrete, (concrete accounts for 8% of carbon globally).

5. Where and in what areas of policy focus could net zero be achieved in a more economically efficient manner?

Investment and innovation in low carbon transport for heavy good vehicles. As a company which transports heavy goods such as part of our treatment processes, solving this problem is key to us reducing our operational carbon.

Growth should be planned in areas which utilise existing infrastructure (including water infrastructure) capacity to limit the amount of new infrastructure required and therefore the embedded (capital) carbon of the construction and operation of that new infrastructure.

Investment in commercial opportunities around energy storage and in carbon offsetting, with the creation of markets to develop and support offsetting initiatives which also create biodiversity benefit.

6. How should we balance our priorities to maintaining energy security with our commitments to delivering net zero by 2050?

A basket approach to energy generation has been recognised as the optimal approach with a mix between nuclear and different forms of renewable energy, including solar, wind and tidal. In addition to this, investment into hydrogen and energy storage will promote a more resilient infrastructure.

We acknowledge that hydrogen is a fantastic opportunity for the UK, from a water company perspective, there needs to be caution around location and sustainability of water supplies. Hydrogen requires a great deal of water in its production and it is vital that the water resources are available in that region to supply this new and potentially vast demand.

The provision of renewable energy and storage at critical infrastructure sites also improves resilience and aligns with the CReDo programme supporting the interconnectivity energy, water and telecoms from extreme weather events including flooding.

We recognise energy security also relates to low carbon heat within the UK and we would like more opportunity to develop low carbon heat generation from within the wastewater treatment process.

7. What export opportunities does the transition to net zero present for the UK economy or UK businesses?

As part of Defra's very recent Accelerated Delivery programme for water companies, we have proposed we accelerate the delivery of new systems to enable export of biogas to the national grid. If Defra agree to this, this project will support energy self-sufficiency and decarbonisation of three key cities in our region – Norwich, Northampton and Milton Keynes. These are three out of the nine locations where we have potential to install this circular economy technology. We plan to continue the

roll-out of gas export to the national grid in the future and integrate it with new developments in the hydrogen economy. This scheme supports the Government's 2050 net zero carbon target and facilitates the creation and production of green energy in the UK. At maximum capacity across all nine sites, we would be able to produce over 61 million m³ of raw biogas (60% methane content). This is equivalent to over 355 million KWh of energy. Our approach would bolster energy resilience and eventually enable us to produce enough gas for nearly 30,000 homes.

Playing our part

We are in a climate emergency, which could evolve into a climate disaster without rapid global action to reduce carbon emissions. To spur others on, it is essential that organisations like ours lead by example and deliver on our ambitious targets. The time for talking is over, this is now time for action. We are working with others in the sector, regulators including the Environment Agency and Councils in the region to share our knowledge and build an evidence-based approach to low carbon growth.

We welcome further conversations with BEIS about our net zero strategy.

Yours sincerely

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