

# Our approach to energy and carbon

**In 2020, the water industry published its route-map on how the sector will reach net zero for operational carbon emissions in less than a decade.**

**It is the world's first example of an entire industry coming together to develop a sector-wide plan to drive down emissions.**

Net zero refers to the balance between the amount of carbon emissions produced by a business and the amount removed from the atmosphere, by taking action. We'll reach net zero when the amount of carbon we add is no more than the amount taken away.

Anglian Water has a track record in delivering significant carbon reductions. Not only were we the first UK water company to set targets for reducing capital carbon, but we were also the first company globally to be certified to PAS 2080, the international standard for managing infrastructure carbon.

We are bringing this same focus to how we develop our plans to build and operate the reservoir.

Alongside our own commitments as a business, we are also following the requirements of the National Policy Statement for Water Resources Infrastructure<sup>1</sup>, which provides the framework for how nationally significant water resources such as reservoirs should be developed. This directs us to assess emissions potentially resulting from the project and consider options to manage them. It requires us to reduce carbon through careful design and to investigate renewable energy and energy efficient processes. Ultimately, how we propose to keep greenhouse gas emissions to "as low as reasonably practicable" will be one key consideration in whether the project is given development consent.



In developing our plans, we are considering capital carbon and operational carbon. Capital carbon covers the emissions related to the materials and construction of the reservoir. Operational carbon describes the emissions from the operation of the reservoir.

Our carbon strategy has two main objectives:

- meet the requirements set out in the National Policy Statement for Water Resources Infrastructure and other relevant legislation and policy.
- achieve net zero operational carbon emissions in line with our wider business commitments.

<sup>1</sup> <https://www.gov.uk/government/publications/national-policy-statement-for-water-resources-infrastructure>

## How we're taking action

We have already considered carbon in how the project has been developed to date, including the process we followed to identify a site for the reservoir. The site provides good opportunity to re-use excavated material for the embankments which could reduce the number of vehicle trips we need to and from the site.

Carbon emissions have also been considered in our emerging work to get water from sources to the reservoir, and from the reservoir into supply.

To get water to the reservoir, where possible, we are exploring how we can use existing waterways rather than new pipelines, avoiding the carbon emissions related to materials and construction, and the pumping of water.

Where pipelines are needed (such as when providing drinking water into supply) we are considering opportunities to keep routes as short as practicable as this typically means a smaller carbon footprint compared to longer routes.

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## As we continue to develop the project, we will seek to manage carbon emissions in the following ways:

Identify options to avoid and reduce capital carbon emissions such as through design, selection of low carbon materials and construction fuels, and efficient construction methods.

Identify renewable, low carbon energy sources and energy storage options for construction and to meet the majority of the project's power demand when in operation.

Identify how landscaping and habitat creation could provide opportunities for carbon offsetting, alongside broader environmental net gain and social value.

Take steps to avoid and reduce the emissions from disturbance of peat, where it is found.

Align our approach to industry best practice, as described in PAS 2080<sup>2</sup>, the international standard for managing carbon in infrastructure and the built environment.

Explore opportunities to accelerate the wider net zero transition.

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A mix of renewable energy and low carbon energy sources, alongside energy storage, are being considered for both the construction and operational phases of the project.

A mix of sources would help to match the variable energy demand pattern of the reservoir site and associated water infrastructure once in operation. Further technical work, including environmental assessments, and engagement with stakeholders is required to identify the preferred mix of sources, their respective scale and location and to confirm if it will form part of the project.

More information on how this is being considered in our emerging design for the reservoir is available in our Main Site Design Report and Main Site Reservoir Brochure.

<sup>2</sup> [https://www.bsigroup.com/siteassets/pdf/en/insights-and-media/insights/brochures/pas\\_2080.pdf](https://www.bsigroup.com/siteassets/pdf/en/insights-and-media/insights/brochures/pas_2080.pdf)