

Council 21 October 2021

Supplementary Written Question response

4. Councillor Copley

To Councillor Thornburrow the Executive Councillor for Planning Policy and Transport

Cambridge City Council are to partner with Anglian Water in order to propose the relocation of Anglian Water's Waste Water Treatment Plant on the edge of Cambridge.

It is noted that a Cambridge City Council press release from January 28th, 2021, stated that "The proposed relocation would allow a new net zero carbon facility, meeting exemplar environmental standards, to replace the existing plant near Cambridge North railway station." [1]. It is also noted that it has been reported in that "Anglian Water has announced it wants the plant to be located between Fen Ditton and Horningsea, near Cambridge. It said the facility would be carbon-neutral and provide green energy." and that "The government has allocated up to £227m to Anglian Water and Cambridge City Council to relocate the water treatment plant and use the existing site to build housing and commercial properties." [2]

However, increasing numbers of experts including the Architects' Journal [3,4] are calling for a greater emphasis on the role of embodied carbon as part of the transition to net zero, and to ensure that carbon accounting takes note of the role of emissions occurring from construction. The Royal Institute of Chartered Surveyors (RICS) estimates that 35% of the lifecycle carbon from a typical office development is emitted before the building is even opened, and that for residential premises the figure is 51% [5].

In order to assess the carbon emissions associated with this proposed facility, and to assess whether this facility can be described as net zero, knowing whether these figures include the embodied carbon is important. Embodied carbon calculations are estimated from the energy used to extract and transport raw materials as well as emissions from manufacturing processes. Often, comparisons of carbon emissions associated with alternative options exclude the embodied carbon associated with new construction, instead only focusing on the carbon emissions associated with running costs.

In order for councilors and members of the public to determine whether they support the proposed development of this area as described in the draft area action plan (North East Cambridge Area Action Plan - NECAAP), which is reliant on the relocation of Anglian Water's Waste Water Treatment Plant, it is essential for them to have a true understanding of the environmental impacts of this development which must include the carbon emissions associated with the proposed move.

Questions therefore are as follows:

Part A) What is the expected lifespan of the current Waste Water Treatment Facilities (assuming current levels of demand stay consistent)?

Part B) What is the estimated total embodied carbon that would be emitted as a result of:

B1) demolition of current Waste Water Treatment Facilities?

B2) construction of Waste Water Treatment Facilities on proposed Honey Hill Site and associated additional infrastructure in order to deliver waste water and any other associated necessary infrastructure?

B3) The total of both of the above?

NB If applicable: if a range of construction options are being considered, would an upper and lower range be provided in response to each of the above questions?

Part C) What proportion of the lifetime emissions of the proposed relocated sewage treatment works would be emitted before the facility would be opened, i.e. what proportion of the total emissions (embodied carbon + any carbon emissions associated with the running of the facility) are a result of the embodied carbon?

NB: For any questions for which Cambridge City Council is not able to provide a response, will they resolve to communicate directly with Anglian Water to obtain a response on the grounds that:

- The NECAAP proposed development is dependent on the relocation of the Waste Water Treatment Works
- This environmental costs of any proposal is a critical issue for councilors and residents as they consider whether to support this in the context of the existential threat of the climate emergency and urgent need to reduce carbon emissions and avoid every form of needless waste?

References:

1. <https://www.cambridge.gov.uk/news/2021/01/28/councils-encourage-communities-to-help-shape-environmentally-friendly-waste-water-treatment-plant>
2. <https://www.bbc.co.uk/news/uk-england-cambridgeshire-55833833>
3. <https://www.architectsjournal.co.uk/news/retrofirst>
4. <https://www.architectsjournal.co.uk/news/retrofirst-parliamentary-inquiry-into-whole-life-carbon-launched>
5. <https://www.bbc.co.uk/news/business-53642581>

Response:

The North East Cambridge Area Action Plan (NECAAP) is predicated on the relocation of the Waste Water Treatment Plant (WWTP) having *taken* place. Waste provision is the responsibility of the County Council as Minerals and Waste Authority, however, the WWTP relocation project is being taken forward, led by Anglian Water, under the Development Control Order process, which is subject to its own environmental assessment process. The WWTP relocation project process is therefore a separate process to the NECAAP being prepared by the City Council

and South Cambridgeshire District Council as the local planning authorities. If the relocation does not take place the proposals contained in the draft AAP would not be able to be taken forward.

The AAP will consider the sustainability impacts of development proposed within the plans and as part of the Sustainability Appraisal supporting the AAP, the impacts of the Council's plan in combination with other plans and projects, including those prepared by other organisations, will be assessed.

The question asked is therefore a matter for AW to respond to. However, to assist Members, the question has been asked of AW who have provided the following response:

In regard to the relocation project itself, the need for the project was acknowledged in the Secretary of State's s.35 decision dated 18 January 2021 which identified that the project will provide a key contribution to the development of Cambridge, particularly to the North East of the city, and to the investment in waste water infrastructure, and provide waste water services to a proposed development at Waterbeach New Town.

The project is currently in design development and as such no specific carbon figures have been published. However, Anglian Water's commitment is to achieve an operationally net-zero plant through the implementation of technologies which minimise process emissions and the use of renewable energy. Details of the relocation project and its emerging design have been made public for consultation here (<https://cwwtpr.com/document-library>) – see specifically the Phase Two Consultation information.

The new plant will comply with commitments made within the Net Zero 2030 Routemap published by Water UK for which Anglian Water, as a leader within the water industry, is a signatory.

It will not be possible to build the new plant and decommission the current one with no embodied (or embedded) carbon impact. However, Anglian Water's commitment is that against a theoretical 2010 baseline build, we will achieve a 70% reduction in embodied carbon at the new facility – i.e. we plan to build, decommission and reuse/recycle materials in the most environmentally friendly way, prioritising carbon reductions.

Further details regarding Anglian Water's net zero carbon plans for the relocation project and assessment of the carbon impact will be made available as the design of the proposed development is progressed, during the statutory Phase Three Consultation, currently scheduled for spring 2022, when a greater level of design detail will be shared for public consultation, and in the subsequent full DCO application submission. We anticipate this important area being a key area of focus and scrutiny during the Development Consent Order planning examination for the project from late 2022.

The assessment of carbon associated with the preparation of the Core site for development, the associated demolition of the structures at Milton site, and any

future development of the Core site, will be assessed and considered as part of the development scheme planning and design process and as part of the planning application for that development.