

Report to	Cabinet
Date of meeting	14 th December 2021
Lead Member / Officer	Cllr Brian Jones, Lead Member for Waste, Transport and the Environment (covering Net Carbon Zero Council) / Steve Gadd, Head of Finance and Assets; Alan Smith, Head of Business Planning and Improvement (Climate and Ecological Change Programme Sponsor).
Report author	David Lorey, Lead Officer Corporate Property & Housing Stock
Title	Proposed Minimum Standard for Denbighshire County Council (DCC) Non-Domestic New Build and Major Extension/Refurbishment Construction Projects which includes targets for in use and embodied carbon

1. What is the report about?

- 1.1. The report sets out the proposed minimum standard to which all DCC non-domestic new build and major extension/refurbishment construction projects must adhere to which includes targets for in use and embodied carbon.

2. What is the reason for making this report?

- 2.1. A decision is required on the adoption and implementation of the proposed minimum standard.

3. What are the Recommendations?

- 3.1 That Cabinet agree to the adoption and implementation of a DCC Construction Standard for non-domestic new build and major extension/refurbishment construction projects to meet in use and embodied carbon targets.
- 3.2 That the implement of this standard must be done in a way that is compatible to the Council's Ecologically Positive by 2030 goal.

3.3 That the Committee confirms that it has read, understood and taken account of the Well-being Impact Assessment (Appendix 1) as part of its consideration.

4. Report details

- 4.1. DCC declared a Climate Change and Ecological Emergency in July 2019 which committed the Council to become net carbon zero by 2030. The Climate and Ecological Change Strategy 2021 – 2030 was adopted by Council in February 2021 and provides a route map to achieve the net carbon zero goal which requires a reduction in carbon emissions from non-domestic Council Buildings by at least 60% by 2030 compared to 2019/20 baseline.
- 4.2. While concerted efforts are being made to tackle the Council's existing non-domestic building stock, it is likely that existing regulatory standards will be insufficient to ensure any new buildings or major extensions adequately contribute to achieve the Council's net carbon zero goal. Introducing our own enhanced standard will avoid the potential need for retrofit carbon reduction measures at a later stage within non-domestic new build and major extension/refurbishments.
- 4.3. It is proposed that DCC adopt a construction standard to meet in use and embodied carbon targets for all non-domestic new building projects, including major extensions and refurbishments, with immediate effect for any projects which have not progressed beyond RIBA stage 3 – spatial coordination¹.
- 4.4. See Appendix 2 for details on the standard which is based on the UK Green Building Council's (UKGBC) definition and best practice in construction.
- 4.5. It is proposed that the adopted construction standard is implemented incrementally. See Appendix 3 for details on the incremental approach.
- 4.6. It is also proposed that the implementation of this standard must be done in a way that is compatible to the Council's Ecologically Positive by 2030 goal. See Appendix 4 for how the Council would intend to do that.

¹ The RIBA Plan of Work organises the process of briefing, designing, constructing and operating building projects into eight stages as follows: 0: Strategic Definition; 1: Preparation & Briefing; 2: Concept Design; 3: Spatial Coordination; 4: Technical Design; 5. Manufacturing & Construction; 6: Handover; 7: Use.

- 4.7. There are examples of non-domestic new build and major extension/refurbishment construction projects which are being or have been completed following a similar construction standard in the UK. See Appendix 5.

5. How does the decision contribute to the Corporate Priorities?

- 5.1 The adoption of this standard would directly contribute to Denbighshire County Council delivering upon its declared Climate Change and Ecological Emergency and subsequently adopted the Climate and Ecological Change Strategy which commits the Council to become net carbon zero and ecologically positive by 2030, as well as reduce supply chain emissions by 35%.
- 5.2 Additionally the Council's Corporate Plan has a priority for the Environment and targets on renewable energy generation and to protect and restore biodiversity.

6. What will it cost and how will it affect other services?

Cost

- 6.1 It is anticipated that there will be up front design and construction cost implications to adopting and implementing such a standard, although in use costs should reduce significantly with potential cost neutrality over the operational life of the building. It is anticipated that upfront capital costs will normalise over time as elements of this standard become industry norm.
- 6.2 Services requiring non-domestic extensions, refurbishment or new buildings will need to include the likely additional costs in project business cases and external funding applications and demonstrate compliance with the proposed standard through internal democratic and approvals processes.
- 6.3 An estimation can only be given at this stage to the potential initial up front capital cost increase to be expected from adoption of this standard due to there being limited case studies and benchmarks. However, it is estimated c.19% uplift at current 2021 prices and approaches. Further detail is provided in Appendix 6, which also includes the anticipated cumulative impact this could have on the planned programme of work within the Education portfolio.

Services

6.4 Many different services within the Council commission non-domestic new builds and major extension/ refurbishments. All should use the Council's internal Design & Construction service. Whilst the Council's Design & Construction service will automatically apply the proposed standards (following the incremental implementation approach specified) to projects they are commissioned to undertake, Services will need to be aware of this standard and recognise it will need to be considered at the very start of project feasibility and costs factored into funding models and any associated external funding bids.

6.5 It is suggested that the proposed standard, if adopted, would be communicated widely to all Service Areas and those we work in partnership/collaboration. A list of non-domestic building construction projects in the Council's pipeline that we are aware of that have not reached RIBA Stage 3 onwards, and thus would need to interact with this standard, is provided in Appendix 7. Please note: list is not exhaustive and some projects listed are subject to securing external funding.

7. What are the main conclusions of the Well-being Impact Assessment?

7.1 See full Wellbeing Impact Assessment in Appendix 1 including main conclusions on page 3.

8. What consultations have been carried out with Scrutiny and others?

8.1 The action for the Council to adopt a Construction Standard based on targets around in use and embodied carbon was included in the Climate and Ecological Change Strategy (2020/21-2029/30) which was consulted on with Members in September/October 2020, with the public in November/December 2020 and finally adopted unanimously by Council in February 2021.

8.2 Targeted consultation with Education and Children's Services as they are potentially the most impacted service within the Council from this decision, with discussion at the Modernising Education Programme Board and ongoing at officer level. Discussions on the proposed standard have taken place with Senior Leadership

Team, North Wales Construction Framework Manager, Community Benefits Manager and Project Manager working with Community Support Services.

9. Chief Finance Officer Statement

9.1 Although there will be an initial increase in costs of project, this needs to be seen in conjunction with the decrease in running costs and the avoidance of expensive retrofit projects in the medium term as standards are increased. Obviously the overall contribution to the Council 2030 target on Net Zero Carbon also has to be considered.

10. What risks are there and is there anything we can do to reduce them?

10.1 Risks of adopting the standard include:

- Additional costs may be higher than anticipated. This will need to be monitored and the “pilot” project approach will help to determine the effectiveness of the proposed measures in achieving net zero carbon and the cost.
- Additional staff resources may be difficult to attract and retain given the growing demand for energy/decarbonisation schemes. While it is ideal to have internal trained staff building up and retaining knowledge of the Council’s building stock, use of external consultants is not uncommon to manage knowledge and/or capacity deficiencies.

10.2 Risks of not adopting the standard include:

- we build projects which hinder the organisations ability to achieve net carbon zero by 2030
- we build projects which then have to be retrofitted at a later stage to achieve local goals or/and national regulation/legislation change
- we don’t capture additional finance/grant opportunities being afforded currently to early adopters.
- We bake in higher operational costs in buildings.
- We risk reputational damage with our public as build projects not perceived in line with the Council's Climate Change and Ecological Emergency declaration.

11. Power to make the decision

11.1 See appendix 8.