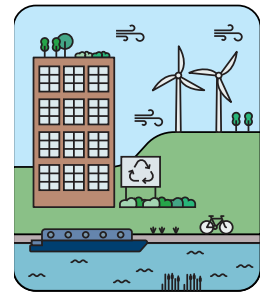


NLA Expert Panel Whitepaper: Net Zero



Introduction

The GLA has integrated Whole Life-Cycle Carbon and Circular Economy policies into the London Plan with associated guidance, recognised to be unique in the UK. This is an innovative approach to mitigate climate change holistically through emissions reduction within the construction sector, through the planning system. Currently, the guidance recommends that applicants prioritise retention and retrofit over new build in order to reduce carbon emissions and waste. Schemes that are referable to the GLA are required to undertake and submit a Whole Life Carbon Assessment (WLCA) from concept to post-completion.

While the policies have had a positive impact in the consideration of retrofit-first principles, the power of WLCA as a design decision making tool and the implementation of Circular Economy principles it is considered there is further development of the Guidance and interrogation of submissions that is possible without altering the over-arching policies. The NLA net zero expert panel proposals aim to provide greater assistance to local authorities and applicants in addressing current policy objectives more consistently at the pre-application and early design stages to achieve lower carbon outcomes.

Mission Statement

We propose a London-wide Carbon Review Panel (CRP) to create the capacity for third party verification and greater interrogation of WLCA submissions. Alongside this, to support the current WLC and CE guidance in prioritising retrofit approaches, we propose a London-wide Demolition Impact Assessment (DIA) requirement added to the Whole Life-Cycle Carbon Assessment Guidance methodology.

Our proposals aim to achieve:

- Consistent and transparent strategic analysis of proposals and improvement in pre-application engagement with planning authorities
- Enable particular focus when existing buildings are involved, prior to a decision being made regarding retention, refurbishment or demolition and new build
- The opportunity for applicants and local authorities to draw on specialist advice and apply for third party review of WLCA and CE submissions
- Upskilling and training opportunities for Local Authorities across London with fewer in-house resources in this field
- Promotion of low carbon and low waste approaches through incentivising successful retrofit and lower WLC emission outcomes for projects

Greater consistency, focus and verification of WLCAs could generate the potential to quantify embodied carbon and whole life carbon emissions such that they could be linked to financial payments, as is currently done for operational carbon emissions. These proposals would strengthen the message to the industry about the urgency of climate change mitigation and the pathway to net zero carbon development.

Carbon Review Panel

Under policy SI2 and SI7 of the London Plan 2021 projects seeking planning approval within the Greater London area and of a scale to be referable to the GLA must submit a Whole Life Carbon Assessment (WLCA) and a Circular Economy (CE) Statement. To provide greater interrogation of

the submissions at pre-application stage, encourage more consistent optioneering and increase the capacity for third party verification of analysis, the NLA Net Zero Expert Panel propose a London-wide Carbon Review Panel (CRP). This needs no update to Policy or Guidance to implement.

The remit may evolve over time, reflecting changes in policy and increasing skills and expertise in the area within planning bodies, clients and design teams. Initially, it would:

- Focus on the implementation of WLCA and CE principles and support a high quality of response in line with the Policy and Guidance
- Encourage optioneering exercises and their interrogation at pre-application and early design stages prior to full submission
- Serve to fill the expertise gaps within Local Authorities and provide independent, transparent third party verification of submissions

The intention is not for the CRP to review every project. Local Authorities could refer projects at pre-application stage if they feel they need support interrogating the options proposed, together with assumptions and calculations. This process would be funded by the applicant. The CRP would either conclude the analysis and conclusions were robust or provide queries that would need a response prior to subsequent pre-application meetings with the relevant Local Authorities. The panel could complete its role there or be requested to carry out further reviews, including again at submission stage to review information and potentially advise officers for their deliberations.



Potential governance models

A Carbon Review Panel (CRP) is introduced as a sister, supporting or technical panel to the London Review Panel, within the GLA. The benefit of this arrangement is the relationship with the GLA in providing a role safeguarding the Policy and Guidance. It is recognised that the GLA or Good Growth team would need sufficient resources to fulfil this arrangement.



Alternatively, greater expertise in Carbon emissions and sustainability could be recruited into a larger cohort of Mayor's Design Advocates and the existing panel simply expanded to make administration simpler.



A further option is for the Carbon Review Panel (CRP) to be introduced as a design panel governed by another body or as an independent body. Governance of this panel would need to be carefully managed to ensure it remained in line with Policy and Guidance remits.



The panel itself should be paid and comprised of a pool of multiple people who serve for a fixed term and are appointed through a transparent application and interview process, with no conflict of interest. All disciplines should be represented including Architects, Structural Engineers, Civil engineers, MEP engineers, LCA professionals, Planners and Sustainability Consultants.

The CRP role may evolve or increase as policy evolve. For example:

- The London Plan and Guidance may evolve to request more projects undertake WLCA
- The current GLA embodied carbon benchmarks might be lowered or established as limits aligned with the UK Net Zero Building Standard

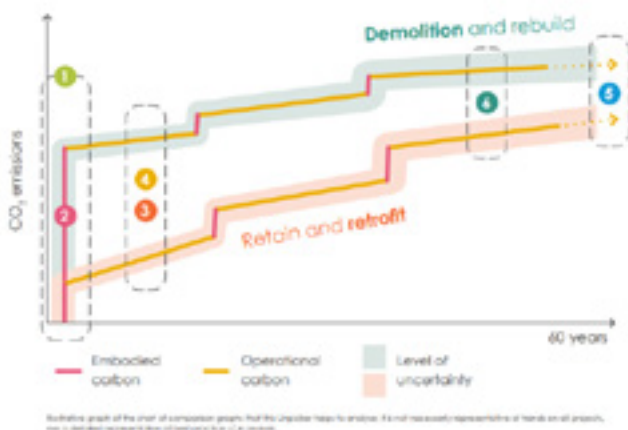
Choosing the higher carbon option at pre-application stage or recording greater upfront carbon emissions at post-completion than expected at planning might incur a fee or offsetting requirement that the GLA might use for wider carbon reduction initiatives.

While the CRP would support the enhanced quality of WLCA and CE considerations at the early design stage and upskilling of Local Authorities, it will also be critical in providing support if the other NLA proposal were taken forwards; Demolition Impact Assessments at pre-application.

Demolition Impact Assessment (DIA)

To urgently limit GHG emissions we need to reduce the embodied carbon emissions of the construction industry. A primary method of doing this is to prioritise the retention, refurbishment and retrofit of existing buildings and the re-use of existing materials over demolition. Our proposal is to introduce:

- An update to existing policy to emphasise the Presumption for Refurbishment and Retrofit over demolition
- A method of assessing and comparing the carbon impact of a refurbishment/ retrofit option with a new build on the same site, where this is relevant, in order that the lowest carbon solution is implemented



The current London Plan policies and guidance are geared towards redevelopment so the revisions can make the approach stronger and reinforce that options for retention should be prioritised and considered. The GLA's CE statement and WLC carbon assessment guidance can support with further guidance on how studies should be constructed to give a consistent result. A mark-up of the existing guidance has been carried out to indicate where the DIA could be signposted and how presumption for refurbishment could be emphasised further.

The content of a Demolition Impact Assessment could include the following:

- Comparative Whole life carbon assessments for retention and new build options
- Life cycle costing
- De-construction methodology and prioritisation of the reuse of materials on-site in their original form for any buildings, structures or material to be removed to facilitate the proposal
- Evidence that alternative build uses, forms and configurations have been considered
- Maximum and consistent energy efficiency measures have been proposed in all options compared

It is proposed that the DIA is carried out at pre-planning stage so that guidance can be given, and a single design carried forward to planning stage. The DIA will apply to any developments that cross a certain threshold of demolition (e.g. % GIA and or facade). At planning stage, a WLC

assessment of the chosen scheme is still required alongside a circular economy (CE) audit of all existing materials/finishes/furnishings should be included and options for their reuse on-site or within the wider CE should be highlighted.

About the Net Zero Expert Panel

To meet the Paris Agreement declaration the Mayor of London has declared a climate emergency, committing to become carbon neutral by 2030. This Panel focusses on understanding the priorities for London to achieve Net Zero, and the role that the built environment has to play in meeting this target. Topics of focus include London and local leadership, retrofit, circular economy, reducing embodied carbon in buildings, and increasing green infrastructure.

Chair: *Ashley Bateson, Hoare Lea*

Gareth Atkinson, Civic Engineers

Lucy Atlee, Transport for London

Marion Baeli, Studio PDP

Louisa Bowles, Hawkins\Brown Ltd

Jennie Colville, Landsec

Kristen Guida, GLA

Simon Hatherley, AHMM

Golnaz Ighany, BDP

Kerstin Kane, City of London Corporation

Georgia Laganakou, Hopkins Architects Limited

Eleni Makri, Stanton Williams

Juliette Morgan, Gensler

Rachael Owens, Buckley Gray Yeoman

Dorte Rich Joergensen, Introba UK

Charlie Scott, Waterman Group