

Ms Jane Anderson comments

Page: [Policy SI2 Minimising greenhouse gas emissions](#)

Section: [N/A](#)

I support the statement "Major development should be net zero-carbon. This means reducing carbon dioxide emissions from construction and operation, and minimising both annual and peak energy demand in accordance with the following energy hierarchy:.."

However although this sentence includes construction, the GHG impacts of manufacturing the materials used in construction does not seem to be included, yet this can be a major impact, especially for zero carbon (in operation) buildings. There is also tremendous scope to reduce these embodied impacts of construction materials, by designing differently, using materials more efficiently and using materials with lower impact.

I would encourage the GLA to consider including embodied impacts of construction materials alongside the operational impacts, known as whole life carbon, to ensure that the impacts of our buildings really are reduced. Both the RICS and RIBA have recently published statements providing an agreed methodology for assessing whole life carbon based on the European Standard EN 15978, and there are now numerous Building LCA tools available at a range of costs (some free) to make the assessments. Data for materials is widely available - there are over 5000 Environmental Product Declarations to EN 15804 available (see <https://constructionlca.wordpress.com/2018/02/20/epd-numbers-continue-to-increase/> for more info). Whilst the UK has shied away from this type of regulation, in the Netherlands it has been part of their Building Act since 2012 to assess the embodied carbon of all housing projects, and office developments over 100m², and since January limit values have been put in place. In France, a pilot regulation (E+C-) is being tested assessing the embodied carbon of developments.

An alternative approach could be to consider the Buy Clean California Act recently implemented in California, which requires all public procurement of key building materials to require Environmental Product Declarations to demonstrate that their impact is below set limit values.

Page: [Policy SI7 Reducing waste and supporting the circular economy](#)

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The policy in relation to the circular economy focusses on construction and demolition waste generated. As well as generating large amounts of waste, construction can also use large amounts of recovered material. Although all uses of recovered material do not automatically reduce impact, in general increasing the amount of recycled content improves impact. I would recommend that the recycled content of the development is considered, and that this is done alongside the reporting of embodied carbon to ensure that impacts are correspondingly reduced.

I believe this is relevant because almost all C&D waste could be recovered, but a driver for demand is missing. Additionally, the benefit of recycling material today is felt today, the benefit of recycling material when a new building is demolished in say 50-100 years is of no benefit in the next 20 years when the need to reduce climate change is at its highest.