

Construction Products Europe position paper Resource efficient buildings consultation

06.10.2016

The EC study for the 'development of a common EU framework of indicators for the sustainable performance of buildings' includes a public consultation on the first draft proposals for indicators. In order to provide some additional explanatory information to some of the questions, Construction Products Europe would like to contribute with the following statements:



The following pages contain the explanation of the figure and more detailed proposals.

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Advanced vs basic indicators

The consultation deals with the classification of the indicators in two categories: basic and advanced. It is very important to remark that indicators included as advanced are related to life cycle assessment (LCA) and life cycle cost (LCC).

In the view of international experts and our own view LCA and LCC methodologies are mature enough to be the core assessment of resource efficiency building performance. Both methodologies are the most reliable and accurate ways to assess the sustainability of buildings. The "advanced level" for these indicators has been given due to the complexity to make these assessments. It is important to bear in mind that the "sustainability" of a building is something complex, as is the design of any building. The complexity of the assessment methodology should not be an argument to promote less relevant and less holistic approaches. The focus should be on communicating the outcomes of these more complex assessments in an easily understandable way. In fact data, tools and expertise is available and the methodologies are successfully implemented by actual building rating schemes (e.g. HQE, DGNB, BREEAM) and even in regulatory frameworks (e.g. building requirements in the Netherlands).

LCA and LCC should be the core of the assessment for the environmental impacts, for which a holistic approach is required. The other indicators should be considered as useful and important information on the direct performance of the building (directly for the building owner and occupant).

As regards the details on how LCA should be implemented in this framework, Construction Products Europe supports the inclusion of indicators according to the relevant standards, in particular EN 15978 and EN 16627, taking into account that the set of indicators needs to cover enough environmental impacts to avoid burden shifting. Construction Products Europe acknowledges the need to restrict the work to be done to calculate the LCA of the building. The proposal to do this by narrowing the scope to the essential stages and components is understandable but would lead to practical problems on the level of innovative products and specific products and would not create an incentive for manufacturers to declare the environmental performances of what they put on the market. Construction Products Europe proposes to take all the life cycle stages into account as well as all the building elements. In order to simplify the calculations the possibility could be given to make a first calculation based on industry average environmental product declarations, which are then replaced by product specific information for those parts of the building should not create the possibility to hide relevant information or to bias the results of the assessment.

Modelling vs measuring

The proposals included in the document mix two different approaches when assessing the performance of buildings, some indicators are based on design and modelling while others are obtained through measurement of real performance. Both approaches are relevant but while the first is feasible for the majority of indicators, the second is only possible for a limited number of them. The type of each indicator should be explicitly mentioned in the report.

Comments on the indicators

Indicator 1.2 (Operational and embodied Global Warming Potential) is already included as one of the impact categories in indicator 2.1 (Cradle to grave LCA) so in the further definition of the indicators double counting should be avoided.



Indicator 2.1 (Cradle to grave LCA) should cover the end of life of the building, otherwise it cannot be considered a cradle to grave approach. By including this stage, indicator 2.2 (Service life) and indicator 2.3 (Deconstruction & recyclability score) are important scenario parameters to calculate indicator 2.1. Transparency on how this end of life has been modelled provides added value.

Indicator 2.4 (Construction and Demolition waste arisings) covers an additional parameter to the LCA and can be relevant as complementary information to indicator 2.1. However, the unit kg/100m2 of waste arising does not seem appropriate as this puts the focus on heavier building materials. An alternative could be to measure the percentage of waste of each waste stream (% diversion to recycling and re-use). In any case it is not clear how the final destination of the waste would be verified.

Indicator 3.1 (Total mains drinking water consumption) is a complementary indicator to Indicator 2.1 (Cradle to grave LCA). It provides additional information in relation to the use of water but should be considered together with the relevant impact category in the LCA.

Indicator 4.1 (Quantitative reporting on specific pollutant levels) is a complex indicator which should be based in a parallel approach, information from construction products and in situ assessment. The first is addressed by the Construction Products Regulation (EU Regulation 305/201). According to the legal text manufacturers declare the performance of their products according to harmonised test methods. This information should be complementary to a commissioning assessment.

An additional indicator 4.2 (Noise and acoustics) should be included. This kind of assessments are already available and provide relevant information about the comfort and health of spaces.

Indicator 5.1 (Overheating risk assessment), indicator 5.2a. (Additional cooling primary energy consumption) and indicator 5.2b. (Green factor) are complementary parameters to the energy calculations reflecting only one of the adaptation to climate change impacts (summer temperature change). Other impacts such as floods, storms or unexpected weather effects are currently not included in the proposal.

Indicator 6.1a. (Long term utility costs) and indicator 6.1b. (Long term acquisition and maintenance costs) are part of an LCC assessment so a broad approach is required. Cradle to grave LCC including end of life should be the main indicator and the others could be additional parameters to be taken into consideration.

Construction Products Europe (CPE) is a international non-profit making association made up of national and European associations that represent small and medium-size enterprises and world-leading companies. CPE aims to promote the European construction industry, to share information on EU legislation and standardisation and to provide input in all European construction-related initiatives.