

Project Overview

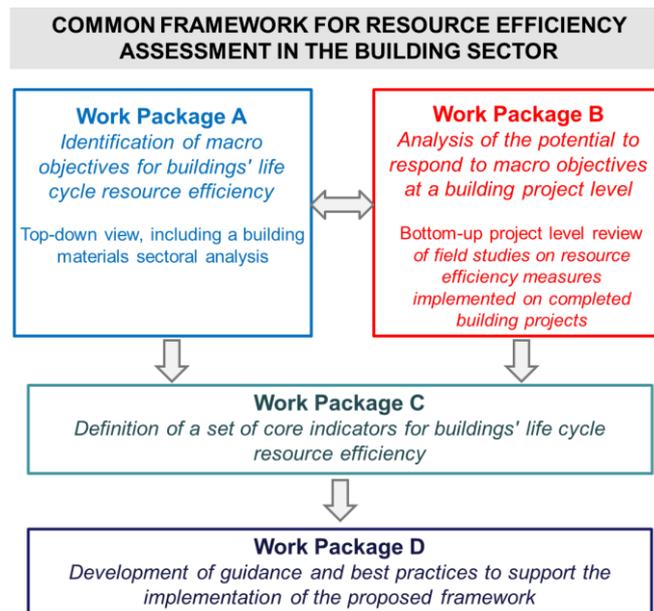
EFFICIENT BUILDINGS

Development of a framework of core indicators for the assessment of environmental performance of buildings

1. Project's description

In July 2014, the European Commission released the Communication on Resource Efficiency Opportunities in the Building Sector - COM(2014)445. This Communication describes the need for a common European approach to assess the environmental performance of buildings throughout their lifecycle, taking into account relevant resources such as energy, materials and water. Such an approach requires the existence of a framework of core indicators to be used when assessing the environmental performance of buildings, to be developed in this project. This framework should be open source in the sense that it should be possible to use it: 1) directly by building professionals and their clients to prioritise their focus for making environmental improvements, as well as; 2) indirectly by assessment and certification schemes to ensure that their criteria reflect priority areas of focus for resource efficiency at a European level and to assure the comparability of data and results. The Commission will lead the framework development but will do so in close co-operation with relevant stakeholders.

The project will have the following structure, consisting of four interlinked work packages:



Work Package A: Identification of macro objectives for buildings' life cycle resource efficiency

This will consist of a top-down approach aimed at identifying the most relevant macro objectives for buildings' life cycle resource efficiency. Macro objectives are understood as not only resource efficiency considerations as such, but also as any significant environmental impact or functional performance aspect associated with the lifecycle of buildings and which could be addressed at EU level. The work package will review existing legislation, standards, building schemes, collaborative field-based research projects and other relevant literature. It will include the identification of environmental hot spots along the life cycle of buildings and buildings' materials directly impacting on the possibility to achieve the macro objectives. Potential trade-offs between different resource uses, impacts along the life cycle and functional performance, such as embodied impacts vs energy efficiency, natural lighting vs glare discomfort, air tightness vs indoor air quality, *etc.*, will be identified for further analysis.

Work package B: Analysis of the potential to respond to macro-objectives at a building project level

This will consist of a bottom up approach analysing field studies in order to understand the potential to respond to macro objectives for buildings' life cycle resource efficiency at building project level. It will focus on the practical link between the macro objectives and the core indicators to be used at project level. Both new build and renovation will be covered. The analysis will build on real-life performance of buildings documented by field studies or collaborative projects.

Work Package C: Definition of a set of core indicators for buildings' life cycle resource efficiency

The final set of indicators to be included in the framework will be defined at this stage. This will be directly informed and guided by the analyses and conclusions from the previous top-down and bottom-up approaches. Draft conclusions will be cross-checked with indicators that have been implemented by commercial and public initiatives. Each proposed indicator will go through a feasibility check, applying a set of suitable criteria (potential for integration in existing schemes, practical at project level, relevance towards macro-objectives, *etc.*). The entire set of indicators will also be assessed in terms of complementarity, completeness and usefulness from a demand side (*i.e.*, real-estate and finance sectors) perspective.

Work Package D: Development of guidance and best practices to support the implementation of the proposed framework

Even with the best set of core indicators, the challenge remains to match them to real-life processes and decisions if they are to be widely applied by the sector. In order to address this, guidance and a collection of best practices will be developed at this stage. This will draw upon the lessons from the previous work packages but also from significant interactions with stakeholders representing different actors in the value chain both on the supply and demand side.

2. Key project milestones:

Stakeholder Working Group meeting 1 (WG1): June 2015.

The purpose of this Working Group meeting is to gather stakeholder input regarding macro objectives for buildings' life cycle resource efficiency. A working paper on macro objectives for buildings' life cycle resource efficiency, including a draft proposal set of such macro objectives, will be circulated among stakeholders in advance of the meeting in order to inform and nucleate the discussion. This paper would consist of background desk research on the subject, highlights of key aspect that we believe should be addressed in the discussion and, as previously referred, a proposal of a set of macro objectives. This will provide stakeholders with a specific proposal to comment and/or amend. There will be a specific period after the meeting (indicatively three weeks) during which written comments to this document will be accepted. The final set of macro objectives for building life cycle resource efficiency will take strongly into account the input received at this meeting.

Public Consultation (PC): June, July and August 2016.

The purpose of this public consultation is to gather very wide societal stakeholder input on the proposed set of core indicators for buildings' life cycle resource efficiency. A working paper on core indicators for buildings' life cycle resource efficiency, including a draft proposal set, will be released with the public consultation in order to inform the wider public. A report summarizing the outcome of the public presentation will be prepared and fed into stakeholder Working Group meeting 2 (WG2).

Stakeholder Working Group meeting 2 (WG2): November 2016.

The purpose of this Working Group meeting it to gather stakeholder input regarding core indicators for buildings' life cycle resource efficiency. The same working paper on core indicators for buildings' life cycle resource efficiency that served as a background document for the public consultation, plus the report of the public consultation outcome, will be circulated among stakeholders in advance of the meeting in order to inform and nucleate the discussion. The final set of core indicators for buildings' life cycle resource efficiency will take strongly into account the input received at this meeting.

Conclusion of Project: June 2017.

At this time the project's final deliverables will be released: a final set of core indicators, including a roadmap for their implementation to indicate the vision ahead, and a toolkit comprising guidance and best practices to support implementation of the proposed common framework of core indicators.

3. Consultative Stakeholders groups

Throughout this project the Commission will be supported by different specialised stakeholder groups, each group having specific competencies and providing advice in particular aspects of the framework development.

Stakeholder Group 1 (SG1): involved in all Work Packages

This will be a high level advisory group consisting of stakeholders that have an overview of the sector and can help to steer the project. It will include actors from the supply side but also from the demand side (*i.e.*, real-estate and finance sectors). The group will be involved through periodic steering meetings where the whole project framing will be fine-tuned and wider consultations and Working Group meetings will be structured. It will also be involved by providing expert advice throughout all Work Packages and are expected to participate *in loco* in the Working Group meetings.

Stakeholder Group 2 (SG2): involved in Work Packages A and C

This will be an expert group consisting of stakeholders that are specialists in resource efficiency, *e.g.*, authors of key items of evidence used in the project. This could include experts from the Commission, Member States and private/independent bodies. They will be involved by providing expert advice on resource efficiency macro objectives and indicators and by participating *in loco* in the Working Group meetings.

Stakeholder Group 3 (SG3): involved in Work Packages B, C and D

This will be an expert group of building sector specialists in project-level aspects of resource efficient construction, renovation and operation. Members of this group will be experts that have been involved in real life cases of construction, renovation and operation where particular emphasis was placed on resource efficiency. They will be involved by assisting on a representative selection of cases studies to be analysed in the project, by providing expert advice on resource efficiency indicators and by participating *in loco* in the second Working Group meeting.

Wider Stakeholder Group 4 (SG4): involved in Work Packages A and C

This group will be formed by stakeholders who have a wider interest in the subject matter of the project, and who are willing to attend Working Group meetings and to contribute with written comment on the ensuing consultation periods.

4. Project Timeline

