

## Frequently Asked Questions – call H2020-EE-2016-2017

*12 January 2016*

Question	Answer
EE-03-2016: in the topic section "expected impact", what does the last bullet point "impact on heating and cooling industry as a whole (not just for a specific product)" refer to?	The impact described in topic EE-03-2016 defined as "impact on heating and cooling industry as a whole (not just for a specific product)" refers to the impact that proposals would have on improving the conditions for the whole heating and cooling industry (market) and not on the impact for a specific product. It will be therefore up to proposers to demonstrate that the solutions put forward in a proposal would have a significant impact on the industry/market as a whole as opposite to being only applicable only in a niche market.
EE-04-2016-2017: is topic EE-04 looking for new technological development using low temperature resources or is the topic looking for new solutions that integrate different technologies with the aim to achieve the impacts mentioned in the topic?	The work programme is challenge-based approach which gives applicants more freedom to come up with innovative solutions to the outlined challenges. Topic EE-04 is looking for overall solutions. It will be up to proposers to demonstrate how the proposed solutions will contribute to the topic challenge whilst being in line with the scope of the topic. It will be also up to proposers to demonstrate how the expected impacts are met. Proposals can include technological development as necessary. Proposals should in any case take into account the overall system, i.e. not only at the supply technology but also and the means in which low grade sources of thermal energy can be put to a useful application resulting in improved overall efficiencies. The challenge-based approach gives applicants more freedom to come up with innovative solutions to the outlined challenges.

<p>EE-04-2016-2017: in this topic activities are expected to be implemented at TRL 4-6; what does this practically mean in a project? Should a project go through all phases: first activities at TRL 4 and ends at TRL6? Can a project focus on one TRL, e.g. 5?</p>	<p>As mentioned in the topic description for EE-04, the activities are expected to be implemented at TRLs 4-6. The description TRLs can be found in the General Annexes to the work programme 2016-2017:  <a href="http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-ga_en.pdf">http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-ga_en.pdf</a>: TRL 4 – technology validated in lab TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies) TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies) The topic EE-04 is not prescriptive concerning the TRLs at which proposals need to start or finish as long as the main focus of the proposal is to include activities implemented within TRLs 4-6. Therefore a proposal could start at TRL 4 and end up at TRL 5 or start at TRL 5 and end up at TRL 6 or start at TRL 4 and finalize at TRL 6. This aspect of a proposal will be evaluated by an independent panel of experts and applicants are expected to justify it. In all cases proposals should demonstrate how they would "achieve to advance" on the TRLs of the technology / concepts / solutions addressed in the proposal. Sometimes, different elements of proposals may have different starting points on the TRLs and sometimes some small parts of proposals might have lower or higher TRL level than those stated in the topic description. This in some cases might be justified and in other cases not. It is up to proposers to explain and justify this. In summary the focus of the proposal should be on activities implemented within TRL 4-6 and proposals should demonstrate how advancement on the TRL would be achieved.</p>
<p>EE-05-2016: title reads "models and tools for H&amp;C mapping and planning". However scope description mentions "The modelling tools should be [...] able to model the full energy system, i.e. H&amp;C, electricity and transport". What does this mean in practice?</p>	<p>The focus of topic EE-05-2016 is on the development of "models and tools for heating and cooling mapping and planning". The important idea behind the mapping and planning of "heating and cooling" is that it is looked at as a component of the wider energy system, to find an optimal solution to provide heating and cooling. This objective of finding the optimal solution is the one that makes modelling mapping and planning a necessity. Heating and cooling (demand and supply) has to be analyzed in their specificity and in depth, also covering possible synergies with the supply and demand for electricity and with transport; because these can support each other, e.g. provide supply sources, additional demand or storage for balancing of the energy system. Having in mind this integrated perspective, the modelling needs to take into account the possible synergies and the interdependences of the three key energy system sectors: heating and cooling, electricity and transport.</p>

<p>EE-05-2016: the terms "modelling tools", "planning tools" and "heat and cooling mapping tool" appear in the description of the topic. What do these terms mean exactly?</p>	<p>The emphasis of topic EE-05-2016 is, as mentioned in the topic title, on "models and tools for heating and cooling mapping and planning". Hence the models (modelling) and tools developed should serve the purpose of mapping and consequently of planning. Modelling provides input to both mapping and planning. In order to plan modelling is needed to explore and evaluate the different available options. Still, mapping can provide an input to modelling, because it explores and provides a comprehensive overview of the available resources in a given geography, e.g. renewables and waste (residual) heat, in relation to the (type of) demand. The results of the modelling can also be reflected in the mapping. All these should be an input to prepare energy planning. The scope of the topic refers to "planning tools", referring to the tool or set of tools that will enable all of this to be put into practice. In this regard note that the scope of the topic reads: "Actions are needed to mainstream and further develop methods and tools of heating and cooling planning (heat planning) in the administrative practices of public authorities".</p>
<p>EE-05-2016: the description of the topic mentions that "the modelling tools should be user friendly and open source". What does this mean?</p>	<p>In general, open source refers to something that can be modified and shared because its design is publicly accessible. For topic EE-05-2016 this would mean that the source code underpinning the models and tools to be developed are available for modification or enhancement by anyone. Other aspects concerning the tool or set of tools developed, including availability of the tool, business models and exploitation plans, need to be given consideration in proposals and will be evaluated by experts on a proposal by proposal basis. It is therefore up to proposers to demonstrate how a proposal would result in a tool or set of tools suitable for the target group of this topic and to put adequate approaches for the mainstreaming of these tools in the administrative practice of public authorities. It is likely that different approaches would be required according to each of the specific territories and markets addressed as planning is very often undertaken in different manners and by different actors.</p>
<p>EE-10-2016: does 15% cost reduction refer only to investment cost or to Life Cycle approach (operation, maintenance, etc.) or to global cost (as defined in EPBD cost-optimal methodology) or building's expected lifetime? Does it include energy expenditure?</p>	<p>The specific Challenge makes clear that deep renovations of buildings are "often too expensive". Additionally, the scope includes "more cost-effective, higher quality, holistic and faster deep renovation of buildings". These references principally refer to the investment or capital cost of the renovation work, but they also do not exclude other associated costs relating to maintenance, operation or design.</p>

<p>EE-10-2016: What is the "IEA report on Prefabricated Systems for Low Energy Renovation of Residential Buildings" referred to in the Specific Challenge?</p>	<p>This refers to work prepared by the Energy in Buildings and Communities Programme (EBC) of the International Energy Agency (IEA). The work goes under the name "EBC Annex 50 Prefabricated Systems for Low Energy Renovation of Residential Buildings" and is available on the IEA-EBC website via this link: <a href="http://www.iea-ebc.org/projects/completed-projects/ebc-annex-50/">http://www.iea-ebc.org/projects/completed-projects/ebc-annex-50/</a></p>
<p>EE-10-2016: Does it matter whether proposals address residential or non-residential buildings?</p>	<p>The topic text makes no reference to residential or non-residential buildings, therefore it is up to proposers to suggest the particular focus of their proposal. Proposers will also notice the reference to a "defined building typology" in the Impacts. This is also up to proposers to define.</p>
<p>EE-10-2016: Could proposals that demonstrate a lower reduction than 60% compared to pre-renovation levels also be considered?</p>	<p>The expert evaluators will be asked to assess the impacts presented in the proposal against what is written in the topic description. It would be up to proposers to convince the evaluation panel that a reduction of less than 60% addresses the topic requirement. Although a slight reduction in this figure might not in principle disqualify a proposal, proposers should bear in mind the importance of the impact criterion and the fact that experts will assess the impact of each proposal against the others.</p>
<p>EE-10-2016: How does the fact that the proposal is implemented under the Public Private Partnership on Energy-efficient Buildings (EeB PPP) influence the evaluation of proposals?</p>	<p>Topics which fall under the PPP have been jointly prepared with private industry and specifically aim to address issues that the PPP board consider to be industry priorities. PPP topics are also jointly funded by industry. Other than that, proposals falling under PPP topics are submitted and evaluated like any others under Horizon 2020.</p>
<p>EE-10-2016: How should we calculate a 15% cost reduction? Which reference point or price per square metre should be taken into account?</p>	<p>It is up to the proposer to determine a reference point for this, to convince the evaluation panel that the reference point is appropriate, and to demonstrate how the proposal would achieve the impact.</p>
<p>EE-10-2016: Are unit costs eligible for demonstration of solutions?</p>	<p>The Annotated Model Grant Agreement (AMGA) explains eligibility of costs in detail: <a href="http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf">http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf</a> In theory, unit costs are possible if they are specifically linked to energy efficiency measures in buildings (as indicated on page 26 of the AMGA). However, page 98 of the same document adds that this only applies to Smart Cities and Communities (SCC) calls. Unit costs are therefore not eligible for this topic. Any demonstration activities should instead be listed as subcontracting items with an appropriate description of the related activities, method used, expected energy savings, as well as an indication of the technology or equipment that might be employed.</p>

<p>EE-10-2016: Is the actual construction of the built solution part of the eligible cost?</p>	<p>Any built demonstration is indeed eligible for funding. In the case of a building, only those elements that directly address the topic would be eligible. For example, if a proposal were to include a new type of energy efficient heating system, only the heating system would receive funding even if the proposal includes demonstrating it in a new building (or even across several buildings). This principle is further explained in the Rules for Participation that are available via the H2020 Online Manual in the <a href="http://ec.europa.eu/research/participants/portal/desktop/en/funding/index.html">Participants' portal: http://ec.europa.eu/research/participants/portal/desktop/en/funding/index.html</a></p>
<p>EE-10-2016: Is it acceptable for parts of the proposal to be at lower or higher TRL than 6-8?</p>	<p>In principle it is possible for some limited parts of the proposal to start at a lower TRL and be developed during the project, or to be already available in the market, however the bulk of the work should be aimed at the TRL levels indicated in the call. It is up to proposers to convince the evaluation panel that the chosen TRL levels are appropriate for this topic.</p>
<p>EE-10-2016: Does the proposal need to demonstrate solutions in real, full-scale buildings?</p>	<p>The activities in topic EE-10-2016 are expected to be implemented at Technology Readiness Level (TRL) 6-8. An explanation of TRLs, which are on a scale 1-9, can be found in Part G of the General Annexes to the Horizon 2020 Work Programme 2014-2015, but here is a summary: TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies) TRL 7 – system prototype demonstration in operational environment TRL 8 – system complete and qualified In the case of energy efficient buildings we would interpret "demonstration in operational environment" to mean that the proposal is demonstrated in a real, full-scale building or buildings, or a part of a building, or a suitable equivalent to this environment. Solutions at TRL 8 are very close to full deployment in the mass market.</p>