

Stakeholder workshop #2 for the revision of the Energy Performance of Buildings Directive 2010/31/EU: Minimum energy performance standards (MEPS) for existing buildings

Answers by the European Copper Institute (ECI)

Questions for the second workshop:

1. What are the key elements to guarantee a successful roll-out of MEPS at EU level?

The roll-out of MEPS needs supporting measures to increase trust in energy-related renovation investments. ECI therefore recommends to focus on:

- a) Bridging the performance gap via real, operation-based energy performance monitoring and reporting and a requirement for energy management where relevant;
 - b) Holistic approach, integrating non-energy mandatory minimum requirements, such as fire safety and electrical safety;
 - c) Communicating to the general public about the wider benefits of energy renovation (such as safety, indoor climate, health, comfort, household bill savings and the local job creation) to increase public acceptance of MEPS and reach high levels of user engagement.
- **How to ensure that MEPS are based on reliable information on building performance (link with EPCs?)?**

European Copper Institute (ECI) advises to fully pin MEPS on bridging the energy performance gap (the over-estimation of energy savings based on design-based calculated promises). **It is therefore important that MEPS are based on real, operation based energy monitoring and reporting** and that they require energy management in relevant categories of (non-residential) buildings; so as to ensure energy savings in buildings are real and maintained over time. This would deliver huge energy and CO₂ savings, and avoid saddling the EU with a building stock that is far from energy efficient for decades to come.

Building Renovation Passports could help to link MEPS with EPC, as BRPs provide a roadmap on long-term improvements.

- **How to set up an accurate approach to identify buildings to be targeted by MEPS (e.g. worst-performing)?**

The roll-out of MEPS should be coupled with non-energy mandatory minimum requirements (MMR) to improve fire safety and alleviate energy poverty.

The current 23 million households suffering from energy poverty are well identified and are a key target group in the implementation of MEPS. In a second step, the other vulnerable population (elderly, disabled) and their living places are a matter of concern.

On the other hand, performance is strongly dependant on the reliability of installations. Statistics from several European countries reveal that 30% of all domestic fires have an electrical origin, with dramatic consequences in terms of fatalities, injuries, and the economic cost to society. Our recommendation is to integrate the dimension of safety into MEPS, primarily for domestic building stock (worst performing target). With focus on safe electrical installations which are a prerequisite for the clean and just energy transition, as electrification of buildings (heating, renewable energy generation, EV charging) is going to play an important role in the decarbonisation of our building stock.

- **Which elements should be defined at national level, to ensure that MEPS could be adapted to national conditions of the buildings stock?**

Convergence is key to take on the lesson learned from the EPCs which unintentionally led to a fragmentation of the EU market, creating barriers for adoption and additional costs to society. We

support a European MEPS scheme that defines core principles and strict rules to avoid loopholes (as is the case with the nZEB definition) and that applies across the Union's building stock. Member States should be given flexibility to tailor to their building stock and needs however without reducing the impact of the measure.

2. What intensity level should be targeted? (pace, depth, part of stock addressed, etc.)

• Which buildings or building elements should be targeted?

Space and water heating, still the highest energy demand in buildings, using predominantly fossil fuels requires special attention and energy performance of heating systems should be specifically targeted via staged deep renovation approach.

Measures that improve the efficiency of operation of building energy services equipment, such as building automation and control systems, help bridge the energy performance gap and produce quick wins towards the EU objectives. They can be deployed more rapidly across a broader mass of the building stock and because they don't involve such disruptive intervention, are much more acceptable to building owners and occupiers. Moreover, they are very cost effective with short payback terms, for which they can drive further investments.

In the national MEPS implementation roadmaps, priority should be given to public buildings (leading by example while saving on public expenditure) and large non-residential buildings (e.g. office buildings). For domestic buildings, rented properties should be in focus, although specific accompanying measures should be put in place for the most vulnerable citizens.

• Should MEPS be linked to trigger points (rent/sale of buildings)?

A combination of progressive enforcement milestones (with public buildings taking a head start and leading by example) and trigger points may work but it is important that we need a long-term strategy aiming at a planned, standardised & systematic approach, especially for Technical Buildings Systems (TBS). When replacement of TBS is planned in advance, renewable and low carbon heating technologies are easier to be integrated in the systems, and fast, rarely long-term solutions, as replacement of already failed equipment might be avoided. Building Renovation Passports (BRPs) may support MEPS schemes in advance planning of staged deep renovations. MEPS should be designed to overcome barriers to renovation, such as in particular split incentives between owners and tenants, for example with a ban on rent increase and even on renting the worst performing buildings.

• What are the most appropriate performance metrics: final energy? GHG? Comfort levels? Others?

A GHG metric should be considered so as to ensure the wider decarbonisation goal of the renovation wave. MEPS should drive decarbonisation of heating and cooling. Moreover, MEPS focus on the individual building, while supporting measures to enable individual buildings to electrify and interact with the energy system (eg. via demand side flexibility) are also needed. The metrics should set a level playing field between demand and supply side efficiency while supporting overall system efficiency. As an example: primary energy might better reflect the system cost, but can unintentionally penalise solar heat and thermal storage.

3. What are the first steps which are needed to set up a MEPS scheme?

Early investments are the most cost effective, therefore decarbonization efforts should be ramped up in the first decade towards an ambitious sub-target in 2030. National experiences show that early announcement of the introduction of an MEPS and its targets, flanked by incentive programmes, contribute to high levels of compliance at lowest cost.

MEPS can drive both the desired pace and depth of renovation. Given the labor-intensive nature of the building sector, which is largely dominated by local SMEs, renovations of buildings will also help Europe recover from the COVID-19 pandemic. Doubling the current renovation rate will create 568,000 net additional direct jobs in 2030, increasing by two-thirds the number of energy



efficiency renovation jobs in this valuable sector of the European economy, delivering local jobs across all geographies.

Building Renovation Passport (BRP) may support MEPS schemes in advance planning of staged deep renovations.

- **How to avoid the risk of sub-optimal investments (lock-in towards 2050 targets, link to LTRS)?**

MEPS cannot be seen as a stand-alone measure, but they need to be part of a comprehensive policy package that includes, at a minimum, tailored information to homeowners to carry out deep staged renovations and appropriate financial tools. Building Renovation Passports (BRPs) and Energy Performance Certificates, separately or in combination can be good long term planning tools. BRPs are useful tools to support owners with personalised renovation advice and ensure coordination of works during the different stages of the renovation for all involved parties. BRPs may complement EPCs and increase renovation rates and depth and accelerate energy savings. When designed as progressive standards and as part of policy package to ensure deep and holistic renovations, MEPS should be incorporated into the LTRS, including measurable targets and planned measures.

- **What should be done to support availability of appropriate financing?**

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