Background:
In the context of the ongoing public consultation on the Energy Performance of Buildings Directive (EPBD), EuroACE is hosting a series of three webinars focusing on different aspects of the EPBD which have the potential to considerably increase energy renovation rates and depth in the EU. The first webinar of the series entitled "A “deep” thinking around Minimum Energy Performance Standards" explored the introduction of MEPS, their regulatory nature and how these policy instruments fit into the EPBD ‘architecture’ (i.e. alignment with the EU climate goals, linkages with long-term renovation strategies, etc.) as well as which embedded elements could support their roll-out. The main presentations were given by Jonathan VOLT, Buildings Performance Institute Europe (BPIE), Louise SUNDERLAND, Regulatory Assistance Project (RAP), and Françoise REFABERT, Énergies Demain and ORFEE.

In the following pages you will find a summary of the main points discussed during the session.

Introducing MEPS via the EPBD: where to start?
Jonathan VOLT, Buildings Performance Institute Europe (BPIE)

Setting the targets to decarbonise the buildings sector by 2050 in the national long-term renovation strategies (LTRS) is the easy part but coming up with policies and measures to achieve them is the difficult part. This is where MEPS become relevant. Minimum performance standards are policy instruments requiring buildings to meet a certain performance standard by a specific time or according to natural trigger points in the building’s lifecycle (e.g., property sale/rent etc.). The standard is typically based on energy performance levels (kWh/m²/year) but can also incorporate broader aspects (e.g., climate performance standards...
(CO₂/m²/year), comfort, indoor environmental quality etc.). In Europe, the Energy Performance Certificates are commonly used as instruments to set energy performance thresholds for buildings, hence they could be used as a framework for the introduction of MEPS.

One of the priorities for MEPS in reaching a highly energy-efficient and decarbonised EU building stock could be to improve worst-performing buildings by requiring them to comply with a minimum energy performance threshold that increases over time. MEPS could be differentiated depending on building type/ownership, and their introduction could be supported at individual building-level by the introduction of Building Renovation Passports (BRPs). MEPS should be designed to give a signal to the market, especially to building owners, enabling them to carry out renovations.

The EU Taxonomy, which defines what is a ‘green’ investment in buildings, rewards the top performing buildings by offering incentives for a deep renovation, e.g., in the form of advantageous loans or subsidies. Using MEPS and the EU Taxonomy in parallel could lead to a smooth decarbonisation of the building stock.

In essence, within the framework of the introduction of MEPS, the role of LTRS is to set the ambition. They should identify how to best introduce MEPS (e.g., thresholds, timeline, for which building types) and, in doing so, link MEPS to a wider ecosystem (one-stop-shops, Building Renovation Passports, financing, etc.). In addition, MEPS should be designed to directly support the LTRS objectives and milestones, especially with monitoring, verification and issuing penalties for non-compliance.

How to design and implement MEPS? A deep dive into best practices and examples
Louise SUNDERLAND, Regulatory Assistance Project (RAP)

MEPS already exist all over the world, e.g., in The Netherlands, France, UK and Belgium in Europe but also in Australia and the USA. They are a family of policies instead of a one-size-fits-all instrument. Based on these designs, the following models can be formulated:

- **Single-standard MEPS** are the most used in Europe. They are based on energy performance standards and usually rely on Energy Performance Certificates (EPC). The most well-known example could be the one implemented by The Netherlands, which requires at least EPC C for office buildings by 2023 (see [here](#)).
- **Progressive-standard MEPS** would perhaps be a more pertinent model vis-à-vis the implementation of LTRS and achievement of their goals at national level. At the point of announcement of the regulation, all future incremental increases and a clear timeline are already indicated. This has already been implemented in Scotland for privately rented homes (EPC ‘E’ from 2021, EPC ‘D’ from 2022 (new tenancies), EPC ‘D’ from 2025 (for all tenancies)).
- **Deep-standard MEPS** examples do not exist in implementation, but this has been proposed by the French Citizens Convention for Climate, and along with the progressive standard model, could be interesting to be kept in mind for their likely introduction. In essence, we would start deep-renovating the worst-performing residential buildings rated ‘F’ and ‘G’ according to the national EPC scale to achieve a ‘B’ rating by 2030 and then by 2040, we would move on the next category of worst-performing building (i.e., ‘D’ and ‘E’) to achieve a ‘B’ class.
- **Trigger point only MEPS** are linked to a specific point, e.g., during the sale or rent of a building. These are usually used in addition to other standards.
➢ **Measure-based MEPS** require the installation of specific physical measures (e.g., insulation, heating) at a trigger point in the life of the building (e.g. replacement of a boiler).

➢ The **stock average model of MEPS** has been implemented in the USA. It usually focuses on large buildings (i.e. multi-family blocks) and requires buildings below a certain carbon or energy performance (in comparison to an average/threshold calculated for the entire building stock) to make improvements. The average is revised by the authorities every four to five years.

➢ The **renovation target model of MEPS** sets a percentage of buildings, belonging to a specific segment, that must be renovated each year. An example of this model can be found in Article 5 of the EED Directive where 3% of certain public buildings have to be renovated each year.

MEPS is a flexible policy tool; it can be designed in a variety of ways and this process should heavily rely on a solid data or building assessment tools. MEPS should set ambitious goals and be applied in an impactful way (which means not to restrict them to a specific or marginal building segment). It is also important to note that MEPS are meant to send a signal to building owners at the moment of announcement. They should provide guidance to owners by embedding funding and technical support, which should ensure that the majority of the renovations are done before the set deadline. Finally, a clear and well-balanced MEPS design is crucial for its success and its enforcement by the authorities.

**One-Stop Shops as embedded framework to support MEPS: the ORFEE model**

Françoise REFABERT, Énergies Demain and ORFEE

According to the revised EPBD (2018/844/EU), One-Stop Shops (OSS) are “accessible and transparent advisory tools” which play the role of trusted third parties and aggregate housing renovation projects mostly in the private residential sector. OSS in implementation today do not really correspond to this EPBD definition, however some business models do exist such as: Facilitation OSS, which raises awareness and provides initial advice (this model is not suitable for supporting the introduction of MEPS), Integrated Home Renovation Services model, which includes two sub-models: 1) Coordination OSS model, which is led by a local authority and whose aim is to gather market actors of the energy renovation value chain to create a marketplace for energy retrofits; 2) and All-inclusive OSS, led by one entity which offers a full-service package (from design of the retrofit to the selection of installers etc.). If the entity is a third-party lender, it can provide financing and it can monitor and verify compliance and performance of the renovation projects.

Even though OSS are still at an early stage of development, they could support the roll-out of MEPS, in the long-run and in the context of a larger embedded framework of policy measures. OSS could also be responsible for the credibility of the overall quality of the renovation (which can go beyond sole energy performance and include broader aspects). Once OSS are set up at local level, they can take account of the disparities between housing typologies and act as an aggregator to compensate for difficult renovation cases and easily ensure replication.

**ORFEE** (Office of Renovations and Financings for Energy Efficiency) aims to 1) set up in France a resource-centre to strengthen the structure of third-party financing companies 2) provide high quality guarantees for a long period of time (20-25 years) to building owners. In this context, it could be envisaged to link ORFEE with the proposal stemming from the ‘Sichel Report’ of Caisse des Depots to set up national banking bodies that provide long-term loans to those who do not have access to finance.
About EuroACE - Energy Efficient Buildings
EuroACE represents Europe’s leading companies involved with the manufacture, distribution and installation of energy saving goods and services for buildings. EuroACE members employ more than 220,000 people in these activities in Europe and have over 1,100 production facilities and office locations. The mission of EuroACE is to work together with the EU institutions to help Europe move towards a more efficient use of energy in buildings, thereby contributing to Europe’s commitments on climate change, energy security and economic growth.

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