

ACE PRIORITIES FOR THE REVISION OF THE EPBD

ACE's strategic objectives

With the revision of the EPBD, the ACE pursues the following strategic objectives:

- Create sustainable value through high-quality architecture;
- Incorporate a whole life approach in built environment legislation;
- Embed feedback and validation of building performance in use ('Measure to Manage');
- Accelerate and scale up low embodied carbon and deep retrofit;
- Incentivise sustainable finance.

ACE's priorities

For the achievement of these strategic priorities, the ACE considers that it is of utmost importance to ensure that the EPBD reflects the following priorities:

- **PRIORITY #1: reflect and follow the core values, principles and thematic axis of the New European Bauhaus**, in order for the EPBD to be a driver of greater quality and accountability in the built environment. To this end, it will be important to develop the expertise of professionals and policy makers in Member States to deliver the EPBD's ambitions, better quality of life and wellbeing.

- **PRIORITY #2: allow for the validation and disclosure of building performance in use**, to ensure that the investment of natural resources and funds deliver the anticipated outcomes, reducing resilience and investment risks ("Measure to Manage").

- **PRIORITY #3: set a clear trajectory for a comprehensive and holistic decarbonisation of the EU building stock**, based on clear and ambitious targets and taking into account whole life-cycle greenhouse gas emissions; indoor environmental quality; climate change resilience; circularity; cost-optimality; value-creation throughout life-cycle; use of solar energy. The Level(s) scheme, the Bill of Materials and strengthened Energy Performance Certificates can contribute to support this objective.

- **PRIORITY #4: sets out the immediate priorities for reducing whole life GHG emissions in the building sector** and define the timescales for a comprehensive review of all building-related EU legislation to provide for the legal basis for streamlined legislation in line with EU Climate objectives and initiatives. Even though the emissions from renovations are lower than newbuild, the scale of the retrofit effort means that emissions from retrofits will outpace new buildings. The benchmarks, methodologies and infrastructure required to minimise emissions from construction need to be developed immediately to avoid locking in emissions from business-as-usual construction processes and to ensure that funds invested in construction now support the creation of a circular economy already.

- **PRIORITY #5: support the high quality and low embodied carbon deep retrofit of the existing building stock**, through ambitious National Building Renovation Plans and Minimum Energy Performance Standards (MEPS), planning for the financial and local infrastructure required to alleviate energy poverty through addressing the worst-performing buildings.

- **PRIORITY #6: empower a neighbourhood approach to renovations**, as well as local self-organisation.

- **PRIORITY #7: enable the use of nature-based solutions** for mitigating the local heat island effect and improving biodiversity and wellbeing.

- **PRIORITY #9:** includes legal instruments that are robust and effective to **underpin sustainable finance incentives** and that these financial instruments contribute to the achievement of the above priorities.

Most-needed changes to the EPBD

The highest priority is to strengthen Energy Performance Certificates so they reflect validated performance so they can underpin Minimum Energy Performance Standards. Ensure that certificates record and benchmark metered performance and that they are based on the as-built building in terms of spatial and material composition and technical systems validated by an independent expert. This will ensure that EPCs in fact reflect the actual delivered quality of a project empowering markets to effectively contract for performance.

Desired changes to the EPBD:

- Inclusions of new definitions under article 2:
 - **Energy Efficiency Potential (EEP)** means the theoretical energy use of a building calculated for the purposes of an Energy Performance Certificate (= “in the lab” performance).
 - **Metered energy use** means the energy use based on annualised readings from utility meters for all fuels and energy generated and used on site or exported (= “as driven performance”).
 - **Inspection** means the on-site, remote and desktop verification of the assumptions behind the calculations for the energy performance certification, including thermal performance, materiality, technical system efficiency, and the configuration of controls, in an existing or completed building. This should include at the minimum, air-tightness testing, thermal imaging, smart meter readings, and photographic evidence of the envelope build-up at critical junctions and openings. Upon completion of a construction project, the results of the above tests as well as the as-built Bill of Materials and products used. This should be included in the Building Renovation Passport and verified by an independent expert.

- **Bill of Materials** means a record of the type, source and quantity of construction products and materials that are used to construct or renovate a building, which affect the thermal performance, technical system efficiency, as defined in Annex I para 4-5, as well as fire performance and indoor air quality.
 - **Verification of performance** means that a project underwent the inspection and reconciliation of performance required to ascertain that the construction or renovation can meet the designed energy performance and citizens' satisfaction and trust. This also requires the annualised reporting of metered energy use to greatly improve the accountability for performance and long term resilience of buildings.
 - **Reconciliation of performance** means the adjustment of the calculations for a building's Energy Efficiency Potential to reflect a building's as-built spatial, thermal, structural, and material characteristics under standardised occupancy profiles to validate whether the building's energy consumption under actual operating conditions reflect its assumed energy efficiency potential. The reconciliation should include the comparison of submeter and main meter readings whenever these are available in a building.
- Verification of an "EPC as built" and the reconciliation with in-use performance should be referenced in articles 16-19 and referred to in Annex 1, 3, and 3(a) – where the optional stance should be changed to a requirement.
 - Independent commissioning should be linked to the issuing of the Smart Readiness label – ACE supports the increased regulation of controls, which are a leading cause of the performance gap, but smart controls must be implemented as specified and verified by an independent expert.
 - Annex V. Template for Energy Performance Certificates should at the minimum include the metered energy consumption as well as the energy efficiency potential (EEP) for new buildings and refurbishments in the 'shall display at least' section. It should also say whether a Bill of Materials is available for the project.