



EUROPEAN ALLIANCE TO
SAVE ENERGY

Creating an Energy-Efficient Europe

ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD)

RECOMMENDATIONS FOR IMPLEMENTATION

JULY 2019



E3G



ABOUT EUROPEAN ALLIANCE TO SAVE ENERGY

EU-ASE was established in December 2010 by some of Europe's leading multinational companies. The Alliance creates a platform from which our companies (Danfoss, Kingspan, Knauf Insulation, Signify, Schneider Electric, Saint-Gobain, Siemens and Veolia) can join with politicians and thought leaders to ensure the voice of energy efficiency is heard from across the business and political community.

EU-ASE members have operations across the 28 Member States of the European Union, employ over 340.000 people in Europe and have an aggregated annual turnover of €115 billion.

The Clean Energy for all Europeans policy package led to the revision of several key pieces of legislation related to the renovation of buildings. Most notable was the revision of the EU Energy Performance of Buildings Directive (EPBD) that now sets a clear direction for the full decarbonisation of the European building stock by 2050.

The amended EPBD was published in the Journal of the European Union on 19 June 2018 and entered into force on 9 July 2018. Every Member State must transpose it into national law by 10 March 2020. With the amended text, the EU has given itself a legal framework to continue pushing efforts at national level to tap into the huge potential for efficiency gains in the building sector.

The revision of the EPBD created a clear path towards achieving a highly energy efficient and decarbonised building stock in the Union by 2050, underpinned by national roadmaps with precise milestones and domestic progress indicators, together with corresponding and required public and private financing and investment support, and taking advantage of smart technologies.

Member States must now adopt national long-term renovation strategies with a solid planning and finance-related component. This is to ensure the renovation of existing buildings into highly energy efficient and decarbonised buildings and facilitating the cost-effective transformation of all existing buildings into nearly zero-energy buildings. Full transposition and effective implementation of the amended EPBD is fundamental to achieve 2030 energy efficiency targets and to put the Union on track for the full decarbonisation of national building stocks by 2050.

The EU-ASE recommendations developed in this document are intended to clarify key aspects of the EPBD and provide industry views on the interpretation of essential provisions during the transposition and implementation period, notably:

Long-term renovation strategies (Art 2a)

Technical building systems (TBS) improvements and building automation and control systems (BACs) deployment (Art 2.3, 8, 14, 15)

Smart Readiness Indicator (SRI) (art. 8, Annex IA)



EUROPEAN ALLIANCE TO
SAVE ENERGY

Creating an Energy-Efficient Europe

For more information:
www.euase.eu
info@euase.eu
[@EUASE](https://twitter.com/EUASE)

LONG-TERM RENOVATION STRATEGIES

WHAT DOES IT MEAN FOR MEMBER STATES?

All Member States have developed national renovation strategies for, inter alia, the mobilization of investments, with a first version in 2014 and a second version or update in 2017.

Now strengthened, with a view to support the rapid and effective renovation of the building stock and the achievement of the energy efficiency target for 2030, Member States must provide their new Long-Term renovation Strategy (LTRS) to the European Commission by 10 March 2020. This should also include details on progress with implementation of the current strategy, which should have been provided to the European Commission in 2017. The strategy will need to be updated by June 2024 as part of the integrated NECPs (under the Governance Regulation), which offers the possibility to specify the role of an efficient building stock in the overall energy system.

The LTRS are a great tool for Member States to strategically plan the transformation of the overall building stock to nZEB performance levels as a complement to the requirements that apply to new buildings.

Our recommendations:
What should Member States and stakeholders do?

Member States should follow a series of key steps, as seen below in figure 1 (kick-off, technical appraisal, socio-economic appraisal, policy appraisal, policy package design and implementation) for the **drafting and implementation of all the elements encompassed by the LTRS.**

Member States should systematically **carry out a public consultation** on the strategy in an inclusive and transparent way, engaging citizens, investors and businesses. Summary of the results of the consultation shall be included as an annex to the strategy.

Stakeholders should take an **active and constructive role** throughout the whole process, bringing all their experiences and expertise to the table.

Stakeholders shall **frequently and consistently communicate on the multiple benefits** that arise from buildings **renovation** in their city, region or country, **collaborating with governments, local authorities and the general public**, as well as on its **feasibility and cost-efficiency.**

Member States should develop mechanisms to encourage staged deep renovation via third party financing, such as **Energy Performance Contracts (EPCs)** and to facilitate higher energy savings for example by combining EPCs with ESIF support to enable comprehensive renovations. Depending on the type of facility covered by the contract and fuel type, energy savings in a typical EPC can range broadly (with average of 20 to 30%).

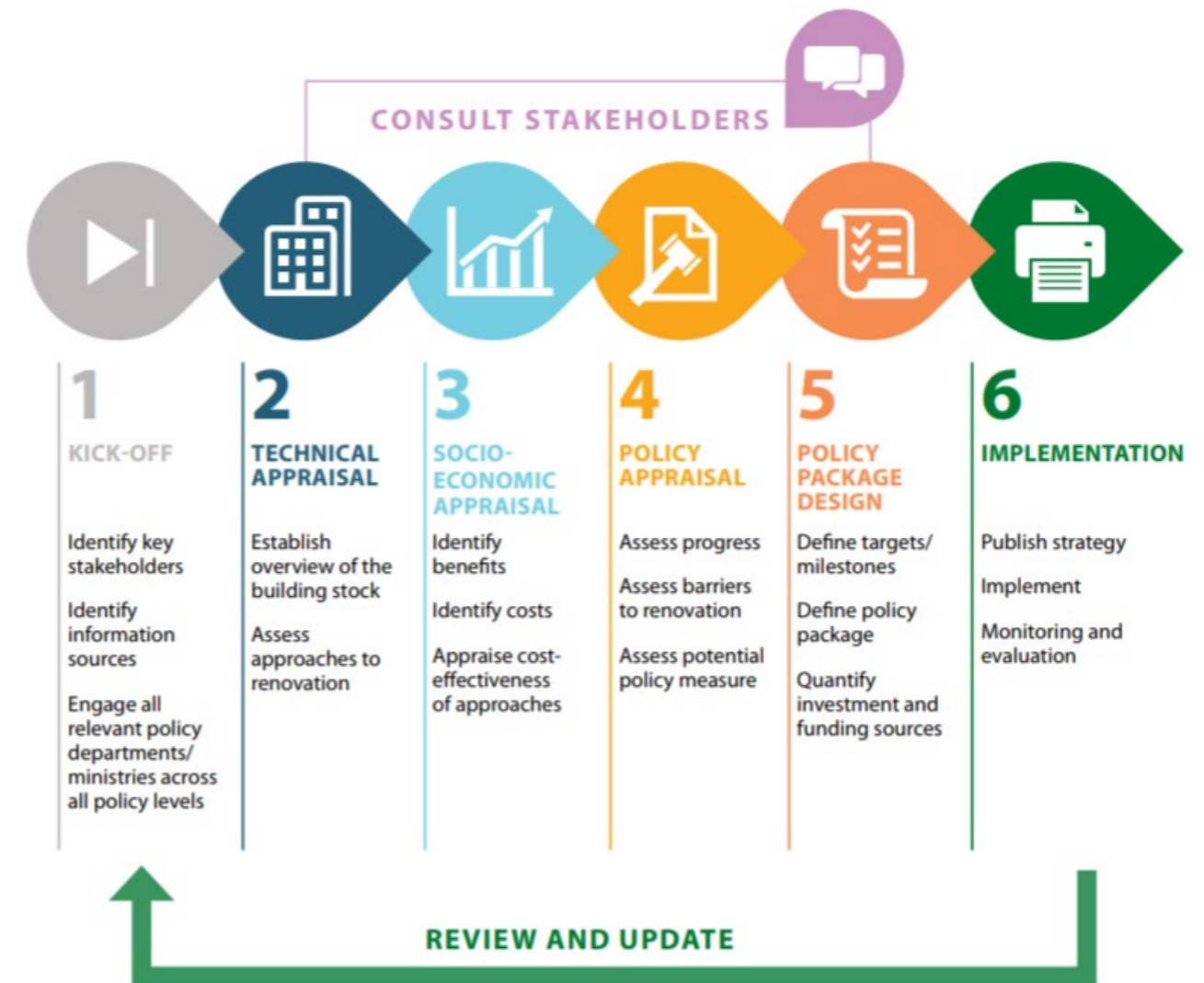


Figure 1 - Phases in developing a renovation strategy (Source: BPIE)

DO NOT FORGET

According to the revised EPBD, Member States should:

-> Define the long term-renovation strategy with the 2050 goal and milestones for 2030, 2040 and 2050 together with measurable progress indicators and specify how these milestones will contribute to achieving the EU energy efficiency target in accordance with the Energy Efficiency Directive.
-> Identify approaches to renovation and 'trigger points' relevant to building types covering single-family homes, multi-family homes, commercial buildings and public buildings.
-> Quantify impacts in terms of energy savings and wider benefits, such as health, energy security and air quality.
-> Establish cooperation with financial sector; use public resources to increase uptake of renovation and therewith-private financing to ensure long-term and predictable renovation programmes linking support to energy performance. Provide the information through accessible and transparent advisory tools such as renovation advice and one-stop-shops.

TECHNICAL BUILDING SYSTEMS AND BUILDING AUTOMATION AND CONTROLS

WHAT DOES IT MEAN FOR MEMBER STATES?

It is essential that national legislation takes a holistic and integrated view when approaching the energy and comfort performance of buildings. This should be done by optimizing the energy performance of technical buildings systems (TBS) and installing automation and control systems (BACS) in both residential and non-residential buildings, under typical, dynamically varying operating conditions. The key to optimizing technical buildings systems is to ensure effective building automation and control as well as to use contractual arrangements such as energy performance contracting. This pays back quickly and has no lock-in effects. According to recent studies, energy savings can range from 23% to 49% depending on the type of building and the energy efficiency level of deployed controls.

Our recommendations:
What should Member States and stakeholders do?

By 2025 Member States shall set mandatory requirements for installation and retrofit of Building Automation and Control Systems in non-residential buildings (existing and new) with effective rated output of over 290 kW.

Member States should set system requirements in respect of the overall energy performance, the proper installation, and the appropriate dimensioning, adjustment and control of the technical building systems which are installed under real-life use conditions.

Inspections must be adjusted in accordance with the Directive to ensure that the energy performance of technical systems is better attuned to the real-life operating conditions. Non-residential and residential buildings equipped with BACS and electronic monitoring of technical systems shall be exempted from inspections. The latter can be also ensured by the use of energy performance contracting supported by real energy consumption monitoring at system level. Member States should also promote those contractual arrangements applied to technical building systems as an alternative to mandatory inspections.

Member States should raise awareness, set control and financing mechanisms in the market related to the new mandatory BACS requirements well ahead of the 2025 deadline for professionals to take them into account early enough in the design of new buildings, and in the preparation of the renovation in existing buildings.

Member States shall introduce requirements for individual room temperature control by self-acting devices, putting people in control of their energy bills and indoor comfort.

SMART READINESS INDICATOR

WHAT DOES IT MEAN FOR MEMBER STATES?

The EBPD mandates the Commission to establish a common framework to rate the smart readiness of buildings including the definition and the methodology to calculate a smart readiness indicator. The aim is to be able to assess the capabilities of a building to adapt its operation to the **needs of the occupant**, of the **grid** and to improve its **energy efficiency** and **overall performance**.

Our recommendations:
What should Member States and stakeholders do?

Support the adoption of the Smart Readiness Indicator as a voluntary scheme, to raise awareness, drive innovation and boost the uptake of smart technologies and smart buildings.

Transpose the EPBD in close coordination with the implementation of other provisions of the Clean Energy Package, such as the new provisions agreed in the Electricity Market Design, as required by the National energy and climate plans and so pave the way for a seamless integration of the buildings sector into future energy systems and markets.



E3G



EUROPEAN ALLIANCE TO
SAVE ENERGY

Creating an Energy-Efficient Europe