



smartEn
Smart Energy Europe

Shaping the Renovation Wave

smartEn contribution to the European Commission's consultation

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smartEn welcomes the initiative by the European Commission to launch a Renovation Wave across Europe covering both public and private buildings.

A priority action: the Renovation Wave for smart and active buildings

The reasons for this initiative to be ambitious are multiple:

- Creation of new local jobs, boost to the entire value chain and support to a wide array of sectors and services of multiple sizes in a continent hardly hit by the economic crisis following the COVID-19 pandemic,
- Improvement of comfort and well-being of occupants,
- Increase in value of the existing building stock,
- Requalification of entire neighbourhoods and urban areas,
- Limit the exploitation of greenfield sites by focusing on already built assets,
- Optimisation of energy performance and reduction of running costs, while alleviating energy poverty,
- Update of building stock to become increasingly smart, sustainable and future proof,
- Acceleration of the switch to electric mobility by easing charging at home, at work and the integration of electric vehicles with buildings and grids,
- Significant contribution to the achievement of climate neutrality as the EU building stock is the largest single energy consumer in Europe with 40% of energy consumption and 36% of EU GHG emissions.

Although most of these benefits have been correctly underlined in the Commission's Roadmap, a key opportunity has been neglected: the Renovation Wave should provide the opportunity to stimulate the active participation of energy users in the clean energy transition thanks to the uptake of decentralised energy resources in buildings and their engagement in demand-side flexibility.

As [recently outlined](#) jointly by organisations representing energy efficiency, renewable and demand-side flexibility, the refurbished smart buildings should contribute to the achievement of climate neutrality by adapting their energy consumption, generation and storage in a flexible way. By responding to signals received by the surrounding energy system, buildings can support a more efficient energy system and help balance an increasingly renewables-based electricity system, while enabling direct financial benefits to the buildings' owners and occupants.

A smart Renovation Wave will be facilitated by Member States' implementation of the Clean Energy Package by December 2020. By creating the necessary market access for demand-side flexibility, this will form the solid regulatory basis to foster the energy system integration of buildings as real energy infrastructures and flexibility assets.

In this light, it is of paramount importance that Member States eliminate existing regulatory barriers and foster the demand-side flexibility of buildings through the correct and coherent implementation of both the EPBD and the Electricity Market Design in time for the Renovation Wave.

Recommendations for a smart Action Plan

smartEn welcomes that the strategic Communication will establish an Action Plan with both legislative and non-legislative instruments and enabling tools. In particular, smartEn would recommend the Commission to:

- Recognise and promote fully integrated renovations based on energy efficiency, on-site renewables and demand-side flexibility to achieve smart and decarbonised buildings.
- Valorise all decentralised energy resources (distributed renewable generation, energy storage and demand response) in buildings as

key enablers of the clean energy transition and support their deployment by:

- Allocating a significant proportion of EU funds, notably the Recovery Fund, to behind the meter, smart energy assets,
- Removing tax barriers to the deployment of active building installations,
- Promoting innovative fiscal and financing schemes, such as Energy Performance Contracting, on-tax or on-bill programmes,
- Incentivizing Member States to remove administrative barriers to decentralised energy resources and EV smart charging in buildings (e.g. planning and building rules, electric code, safety rules, ...).

Particularly households with limited sources of capital will need financial support to invest in decentralised energy resources and comply with regulations phasing out carbon-intensive devices as natural gas heating systems.

- Require all new buildings and renovations from 2025 onwards to include an interoperable Energy Management System (EMS) that integrates buildings with the grid to enable automated flexibility, and favour a greater digitalisation of buildings.
- Foster the direct electrification of smart and active buildings and the cross-sector integration behind the meter.
- Promote the smart integration between buildings and transport sectors by mandating increased cabling and ducting requirements and by supporting the installation in buildings of normal-power, smart charging infrastructure for electric vehicles, as already foreseen in UK, France and Finland.
- Foster access to data of energy assets.
- Bundle smaller/individual renovation projects into aggregated ones, including by leveraging the innovative role of energy communities, as foreseen by both the Electricity Directive and the revised Renewables Directive or, in the medium-term, through the revised TEN-E Regulation to support a pool of small-scale, decentralised projects on the demand side. Integrating renovation concepts on the district and city level should aim at increasing system efficiency.
- Leverage other bottom-up initiatives targeting energy consumers, notably the European Climate Pact, to engage citizens in the clean energy transition, notably through the smart renovation of their homes and offices.
- Avoid developing new “renovation labels”, but streamline existing certificates and indicators as currently investigated by DG GROW under the Building Digital Logbook initiative. The Renovation Wave Strategy should also foresee in the medium-term the definition of an actual performance quantification to trigger renovation upgrades.