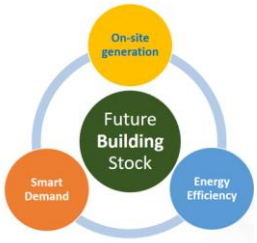
Support an EU framework fit for the decarbonization of the building stock including renewables on-site solutions

Solarpower Europe believes that the upcoming revision of the RED and the EPBD, together with the 2030 climate change and energy transition objectives represent a **turning point for setting the basis of a future-oriented regulatory framework for the decarbonization of the building stock.**

An **integrated vision of the future of the building stock combining the three fundamental dimensions:**

- *Reducing energy demand from buildings*
- *Developing smarter management of demand in buildings through automation and control*
- *Developing energy-positive buildings through on-site generation*



As storage, automation, or smart appliances**, renewables on-site generation, and especially Building-Integrated Photovoltaic (BIPV) products contribute to transforming the building stock into a zero-emission and ultimately energy-positive sector**. This is an essential step towards decarbonization, as the building sector is currently responsible for 36% of the EU's CO_2 emissions. BIPV products enable energy-positive building envelopes (roofs, façades, windows, …) by combining two functions:

- Energy conservation as an element of the traditional building envelope, and
- Energy production functions providing electricity to the building through solar energy

BIPV technologies have emerged in Europe where industry leadership remains until today. The sector is developing a variety of innovative products that are compatible with traditional design rules, and that perfectly complement the development of smart buildings and cities.

The stakeholders involved in the production and uptake of Building-Integrated Photovoltaic (BIPV) solutions are concerned by the current regulatory developments, which could be damaging to this sector.

The cost-optimal principle related to construction products privileges mature technologies like insulation, which are far advanced in their learning curve. This could lead to an over-weighted use of traditional solutions and create a lock-in effect preventing innovation. The development of innovative sectors like BIPV, which are currently a niche market could be damaged by a strict application of the cost-optimality principle. It would impede the economies of scale effects that would lower the price of these emerging solutions. Mid and long-term impacts must be considered: comfort of occupants; aesthetics of buildings; contribution to a decarbonized and flexible electricity system; EU's industrial competitiveness; opportunity costs and local job creation.

Specific consideration of innovative products such as energy-positive building envelopes providing both traditional and energy-production functions is key to safeguard this important market in Europe. Encouraging Member States to provide a positive factor for these products in the calculation of energy performance of buildings can make a real difference for these innovative European solutions to emerge.

In a few figures: The Building-Integrated Photovoltaics sector (BIPV)

Many different types of applications and aesthetics

Enormous potential of BIPV

⇨ > 4000 km² in EU

⇨ ~ 32% demand coverage at EU level (range 24-40%)

Façades, roofs & windows show a huge variety

=>'standardized' customization

=> Local, non-outsourceable jobs

=> Resource optimization

=> Key for nearly-zero energy buildings

Construction incl. glass industry is very traditional and local, e.g.:

> 90% of flat glass is customized close to the glass manufactures

< 600 km: Typical travel range of glass

Source : Members of Glass Alliance Europe (GAE)