



20 February 2023

EPBD: Recognise sector coupling solutions to foster demand-side flexibility of buildings

In the context of the Energy Performance of Buildings Directive (EPBD) revision, 12 industry associations, call for **an ambitious, forward-looking, and comprehensive definition for demand-side flexibility**. The signatories of the letter welcome the ITRE report proposal for a definition on “demand-side flexibility”. While key for unlocking smart buildings potential, the definition can still be improved ahead of the plenary vote on the EPBD, planned for March. Ahead of the plenary vote, our industries **call on MEPs to recognise the key role of sector coupling solutions, such as hybrid heat pumps and smart cogeneration, as part of the definition on demand-side flexibility.**

Recommendation:

6a. demand-side flexibility” means the capability of customers and smart energy appliances to react to external signals and adjust their energy generation and consumption, individually or through aggregation, with regard to time and cost, which may be provided by smart, decentralised energy resources, including demand management, energy storage, and distributed renewable generation, as well as sector coupling, such as hybrid heat pumps and smart cogeneration, to support a more reliable, sustainable and efficient energy system;

Specifying system integration solutions, including hybrid heat pumps and smart cogeneration, as critical for buildings “demand side-flexibility” definition, ensures that European buildings are ready to positively contribute towards a carbon neutral, resilient and cost-effective energy system, especially as these solutions increasingly run on renewable gases, including biomass, biomethane, renewable hydrogen, waste heat, renewable LPG, etc. This is supported by multiple studies and aligned with key EU Green Deal legislation:

- It is aligned with the **European Commission’s Energy Efficiency First Guideline**, which recommends that power markets set the right incentives or requirements for demand-side flexibility to compete with generation on an equal footing. This should include *“support for installation of smart equipment able to respond to grid signal such as micro-cogeneration or other hybrid devices using renewable gas and electricity. Such support should typically be granted through transparent, competitive and non-discriminatory processes.”*¹

¹ COMMISSION RECOMMENDATION (EU) 2021/1749 of 28 September 2021 on Energy Efficiency First: from principles to practice — Guidelines and examples for its implementation in decision-making in the energy sector and beyond, page 35.

- Hybrid heat pumps, cogeneration or combinations of both are recognised as key solutions to **reduce electricity peak demand in the context of the ongoing energy crisis**, as captured in the recent European Commission’s Smart Grids Task Force publication²:
- **Ensures consistency with EPBD Annex I, Paragraph 5 (b)** requirement to consider the positive influence of “electricity produced by cogeneration”, along district heating, natural lighting, and local solar exposure conditions. Referring to smart cogeneration ensures that the highest efficiency controllable power source is used to cover peak demand and provide inter-seasonal firm capacity, at times of insufficient intermittent renewable power. This can be achieved at site level, via micro-cogeneration or via DHC.
- It is **complementary to the Electricity Market Design and ongoing efforts to develop a network code on demand side flexibility**, while further adapting it to the buildings’ context.

² European Commission Smart Grids Task Force, December 2022. [Paper on electricity demand reduction: Measures to mobilise consumers’ flexibility this winter and beyond.](#)