

11th Global Conference on Energy Efficiency

Thematic session

Buildings as active players in the energy transition

Tuesday 30 June 2026
13:30 – 15:00
Room 517-BC

International
Energy Agency



Event background

In today's context of energy market volatility and economic uncertainty, energy efficiency remains essential for affordability, energy security and competitiveness. The 11th Annual Global Conference on Energy Efficiency will bring together global leaders to accelerate action, with efficient, interactive buildings emerging as a key part of more flexible and resilient energy systems.

Buildings account for a large share of global energy demand, which is expected to grow further with electrification, cooling needs and urbanisation. Improving building efficiency and enabling smarter interaction with the grid can lower energy costs, optimise power systems and strengthen resilience.

Governments are not starting from scratch. Established policy tools such as building energy codes, appliance standards, energy performance certification and targeted financial incentives have already delivered major improvements in building efficiency and energy management. These policies have reduced energy consumption, lowered costs for households and businesses, and stimulated innovation across the construction and technology sectors. Such policies remain the foundation of effective building strategies and will continue to play a critical role in avoiding long-term lock-in of inefficient and inflexible buildings.

Through smart and connected technologies, interactive buildings have strong potential to provide demand flexibility while maintaining comfort, supporting energy security, reducing peak demand and avoiding costly grid investments.

This session will explore how countries can future-proof policies to unlock the potential of interactive buildings for affordability, resilience and competitiveness. Participants will learn from international experience, explore emerging approaches, and identify solutions to reduce energy demand and strengthen system resilience.

Objective

This thematic session will explore how policymakers, industry, and utilities can collaborate to unlock the full potential of interactive buildings by ensuring affordability for consumers, energy security for governments, and competitiveness for industry. The thematic session will focus on:

- *Enabling affordability:* Designing policy and market frameworks that unlock investment in interactive buildings, reduce costs for consumers and support near-term deployment at scale.
- *Building for longevity:* Establishing adaptable performance standards and interoperable systems that ensure interactive buildings remain effective as grid conditions evolve.
- *Unlocking flexibility:* Harnessing digitalisation and demand-side response to deliver immediate system value while preparing buildings for future grid needs.

Draft agenda

13:30-13:35	Opening remarks [5 min]
13:35-13:40	Framing remarks: the global imperative [5 min] <i>Overview of the importance of energy efficiency and electrification in the current global context, emphasizing the interconnectedness of affordability for consumers, energy security, and competitiveness for industries. Setting the stage for the role of interactive buildings in this landscape.</i>
13:40-13:45	The policy landscape: efficient interactive buildings in national policies [5 min] <i>Headline findings on how interactive buildings are being integrated into national policies. Highlight the growing recognition of buildings not just as energy consumers but as active participants (prosumers) in the energy system. Present key insights from recent analysis on how interactive buildings contribute to peak load reduction, renewable energy integration, and achieving energy efficiency “doubling” goals.</i>
13:45-14:10	Panel Session 1 – Making interactive buildings affordable: policy and market design for near-term deployment [25 min] <i>This session focuses on how policy frameworks and electricity market design can make interactive buildings financially viable today. It will explore how pricing structures, targeted incentives and improved market access can unlock demand-side flexibility from buildings while ensuring affordability for consumers. The discussion will highlight the need to align building policies with power sector reforms so that buildings can participate in flexibility markets, reduce system costs and deliver tangible economic benefits in the near term.</i>
14:10-14:35	Panel Session 2 – Keeping interactive buildings relevant: policy design for long-term grid integration [25 min] <i>This session looks ahead to how regulatory frameworks can ensure interactive buildings remain effective as grid conditions evolve. It will examine how building codes, appliance standards and digital requirements can be designed to adapt over time, avoiding obsolescence. The discussion will emphasise interoperability, data accessibility and flexibility-by-design, ensuring buildings can continue to respond to future grid needs, including increasingly high shares of renewable energy.</i>
14:35-14:55	Interactive discussion [25 min] <i>Participants engage with panellists to explore barriers, opportunities, and practical pathways for scaling interactive buildings, including affordability, digitalisation, and system integration.</i>
14:55-15:00	Closing remarks [5 min]



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