



11th Global Conference on Energy Efficiency

Thematic session

Demand-Side Energy Data for Improving Lives

Tuesday 30 June 2026
13:30 – 15:00
Room 520-A

International
Energy Agency

Event background

In today's context of energy market volatility and economic uncertainty, energy efficiency remains one of the most effective tools to support affordability, energy security and competitiveness. The 11th Annual Global Conference on Energy Efficiency will bring together global leaders to accelerate policy action at this critical moment. The availability, quality, and use of demand-side energy data are essential enablers of effective energy efficiency policy.

As clean energy transitions accelerate, understanding energy consumption across end uses, sectors and population groups is increasingly important, yet, demand-side energy data remains limited, particularly in the emerging economies. This limitation constrains government's ability to design targeted policies, support planning and address challenges such as energy access and heat stress.

These challenges are largely structural. Periodic national surveys are often resource-intensive and difficult to sustain, while existing data systems continue to operate in silos across ministries and utilities with limited interoperability. Many emerging economies still lack annualised and cost-effective frameworks that can be integrated into regular statistical and planning processes. Addressing this requires a shift from isolated and infrequent data exercises toward continuous, institutionally owned, and community-informed systems that governments can sustainably operationalise and utilise.

At the same time, the enabling conditions for change are emerging. Advances in geospatial technologies, open data standards, AI and digital technologies are reducing the cost and complexity of data collection. The deployment of smart meters, connected devices, and advanced analytics enables more granular and real-time insights into energy use. Coordinated action across governments, industry, and civil society is required to scale solutions in a practical and affordable manner.

This session will explore how countries can strengthen demand-side energy data collection and reporting frameworks, and how improved data can be translated into more effective energy policies.

Objective

This session brings together governments, industry, international organisations, and civil society to move the demand-side data agenda from dialogue to action. Discussions will focus on:

- *Strengthening demand-side energy data systems:* Improving availability, quality and accessibility of data, particularly in emerging and developing economies
- *Overcoming structural barriers:* Addressing fragmentation, cost and institutional challenges, and enabling integrated and continuous data systems
- *Unlocking innovation and scaling collaboration:* Leveraging digital tools, geospatial approaches and emerging best practices, while fostering partnerships across governments, industry and civil society

Draft agenda

13:30-13:35	Opening remarks [5 min]
13:35-14:15	<p>Panel Session 2: Why Demand-Side Data Matters: Aligning Policy, Markets, and Community Needs [40 min]</p> <p><i>This theme will explore how demand-side energy data can directly improve outcomes for people, such as access to affordable cooling, reliable electricity, and targeted support mechanisms. Representatives from governments, industry, and civil society will reflect on how data gaps affect their ability to design policies, deliver services, and respond to community needs, particularly in addressing energy poverty and climate risks.</i></p>
14:15-14:55	<p>Panel Session 1: Leveraging Innovation and Community Knowledge - Bridging the Last-Mile Data Gap [40 min]</p> <p><i>This theme will highlight how civil society, research institutions, and industry can complement government efforts through geospatial tools, open data platforms, and community-driven approaches. The discussion will explore how combining technology with local knowledge can improve data coverage.</i></p>
14:55-15:00	Closing remarks [5 min]

Contacts

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