

Electricity Security Advisory Board

**Making the most of power systems:
Delivering security and affordability
in the Age of Electricity**

Wednesday, 7 October 2026

**Room 1 (1st floor)
9 Rue de la Fédération, 75015, Paris**

**International
Energy Agency**



Background

Electricity now accounts for over one-fifth of final energy consumption, and its role continues to expand thanks to its versatility, efficiency, and capacity to reduce dependence on imported fossil fuels. As modern economies grow ever more reliant on electricity for essential services and economic activity, ensuring secure, affordable and sustainable supply has become a fundamental priority.

Electricity differs from other energy commodities such as oil or gas. It is difficult to store at scale, supply and demand must be balanced continuously and instantaneously, and disruptions can propagate across interconnected systems within seconds. Against this backdrop, ensuring electricity security requires a holistic approach, covering the full spectrum from policy and market design through regulation and system planning to real-time operations. This also underscores the importance of bringing together the relevant stakeholders to identify and address the key emerging issues.

Convened annually by the IEA, the Electricity Security Advisory Board (ESAB) provides a platform for dialogue with experts from academia and the electricity industry on emerging electricity security risks and on the development of effective policies for the rapidly evolving electricity sector. It facilitates valuable exchange on common challenges and on lessons learned from diverse global experiences. The ESAB complements the Electricity Security Task Force (ESTF), established in December 2024, which provides a forum for policymakers from IEA Member countries to discuss electricity security matters. The Electricity Systems and Markets Division of the IEA serves as the Secretariat for both the ESAB and the ESTF, and the insights shared during ESAB discussions directly inform subsequent ESTF deliberations and IEA analysis.

Following the 2026 IEA Ministerial High-Level Dialogue on Energy Security in the Age of Electricity, and in the context of continued affordability pressures created by the current energy crisis, the ESM Division is convening its annual edition of the ESAB on 7 October 2026 at IEA headquarters in Paris. The meeting will bring together leading experts from academia and industry to review and discuss the IEA's current power sector work, with the aim of identifying emerging trends and solutions. The overarching question guiding this year's ESAB is: ***How do we ensure a secure and affordable electricity system in the Age of Electricity by making better use of infrastructure, system operations, markets and investment?***

Format

The meeting will be informal and conducted under the Chatham House Rule. It will be held in person only. Each panel session will be introduced by invited speakers, **followed by a roundtable discussion**. Attendance is by invitation only.

Target audience

The ESAB brings together senior experts from industry, utilities, academia, and think tanks.

For more information on the event, please contact: esab@iea.org

Please consult our [Personal Data Protection Notice for Visitors to the IEA and IEA Event Participants](#).



Final agenda

Electricity Security Advisory Board (ESAB): Wednesday, 7 October 2026

9h30-10h00	Welcome and registration
10h00-10h10	Opening Remarks
	Mr Shinichi Kihara, Director of Energy Markets and Security, IEA
10h10-10h35	Latest updates on IEA's work on Electricity Security
	Ms Maria Sicilia, Head of the Electricity Systems and Markets Division, IEA Presentation followed by Q&A
10h35-11h55	Session 1 – Grid infrastructure: Unlocking more value from assets
	Objective: Across many countries, grid congestion and connection queues are creating system costs and delaying electrification. While some congestion can be economically efficient, persistent constraints point to the need for a toolkit that combines grid expansion with reforms to planning and connections processes to unlock more value from existing infrastructure. The session will explore how planning and connection processes can unlock more value from power systems while managing congestion. Guiding questions: • How can TSOs and DSOs make better use of existing assets while modernising them to better manage congestion? • What operational, regulatory and market reforms are needed to reduce structural congestion and increase hosting capacity? • How can grid planning and connection processes better account for flexibility and uncertainty around future supply and demand outcomes? • What role should locational signals play in investment, planning and connection decisions? • What role can storage, demand-side flexibility and other distributed resources play in increasing hosting capacity and managing congestion in increasingly electrified power systems? Scene setting: Mr Isaac Portugal, Clean Electricity Transitions Analyst, IEA Introductory interventions (8 minutes each): • Mr Luis Rouco Rodriguez, Professor, Universidad Pontificia Comillas • Mr Timon Dubbeling, Senior Energy Regulator, The Netherlands Authority for Consumers and Markets • Ms Anuja Ratnayake, Emerging Technologies Executive, EPRI Followed by roundtable discussion
11h55-12h10	Coffee break

12h10-13h30	Session 2 – Operations: Ensuring flexible assets deliver system value
	Objective: The rapid growth of batteries and other flexible assets is reshaping system operation, but their value depends on how well they are integrated into real-time system needs. The session will explore how operational frameworks and price signals can align individual asset revenue optimisation with system-wide outcomes, so that flexibility is deployed where and when it can reduce system costs and maintain electricity security. Guiding questions: • How can market and regulatory frameworks incentivise flexibility where and when the system needs it most? • Are current price signals sufficient to reward services beyond energy arbitrage? • How can participation across multiple value streams be enabled while ensuring that incentives encourage assets to be available where they deliver the greatest system value? • What lessons have emerged on the system-friendly deployment and operation of storage and flexibility assets? Scene setting: Ms Grace Henry, Energy Analyst, IEA Introductory interventions (8 minutes each): • Mr Eoin Kennedy, Director of Innovation and Planning, EirGrid • Dr Alfonso Zarate Conde, Independent Energy Expert, Naturgy • Ms Vera Silva, Chief Strategy and Technology Officer, GE Vernova Followed by roundtable discussion
13h30-14h30	Lunch
14h30-15h50	Session 3 – Markets: Securing investment for resource and flexibility adequacy
	Objective: While operational frameworks determine how flexibility is used, markets must also ensure that sufficient generation and flexible resources are built to meet future system needs. The session will examine how resource adequacy frameworks, investment support schemes and market design can provide efficient investment signals in rapidly electrifying power systems. Guiding questions: • Are existing market arrangements providing sufficient investment signals for both generation and flexibility adequacy? • How should resource adequacy frameworks evolve to value flexibility alongside firm capacity? • What lessons have emerged from recent developments in capacity mechanisms, reliability obligations and other investment support schemes?

	- How can policymakers strike the right balance between market-based investment and targeted intervention while minimising costs to consumers? Scene setting: Mr Eren Çam, Electricity Analyst, IEA Introductory interventions (8 minutes each): - Ms Paula Conboy, Chairperson of the PJM Board, Former Chair of the Australian Energy Regulator - Mr Kenichi Onishi, Executive Researcher, Power Policy & Markets Group Manager, The Institute of Energy Economics Japan - Mr Rahmat Poudineh, Head of Electricity, Oxford Institute for Energy Studies Followed by roundtable discussion
15h50-16h10	Coffee break
16h10-17h30	Session 4 – Consumers and investments: Managing affordability under rising system costs
	Objective: Rising system costs linked to grids, flexibility and policy-related charges and levies are increasingly reflected in retail electricity bills, raising questions about cost allocation and affordability. The session will explore how electricity tariff design, investment recovery mechanisms and the structure of taxes, levies and policy funding can support continued electrification while maintaining social acceptability and protecting vulnerable consumers. Guiding questions: - How are rising network and system costs changing electricity bills? - How should investment costs be allocated between current and future users? - What retail tariff or tax reforms can encourage efficient electrification while protecting vulnerable consumers? - How can cost recovery mechanisms support investment without negatively impacting competitiveness and continued electrification? Scene setting: Mr Augustin Lorne, Energy Analyst, IEA Introductory interventions (8 minutes each): - Ms Rachel Fletcher, Director Regulation and Economics, Octopus Energy - Ms Lana Stockman, Commissioner, Australian Energy Market Commission - Mr Ulrik Stridbaek, Vice President, Head of Global Regulatory and Public Affairs, Ørsted Followed by roundtable discussion
17h30-18h00	Conclusion and next steps