

Electricity Security Advisory Board

High-Level Meeting

Tuesday, 17 September 2024

Room 2 (ground floor)
9 Rue de la Fédération, 75015, Paris

International
Energy Agency

iea



Background

Electricity represents a little more than one fifth of the final energy consumption today. As energy and climate strategies give priority to electrification, the share of electricity in energy end-use is expected to double by 2050 to meet the climate pledges made by countries. As a consequence, electricity security will be more and more critical to modern societies.

Power systems are transforming to support the growing role of electricity, reduce dependency to imported fuels, accommodating more variable renewable resources and storage across larger interconnections while digitalisation enables decentralisation and consumer engagement. At the same time, electricity is not immune to barriers to infrastructure development, geopolitics and climate threats. This leads to re-thinking electricity security and address, among others, system adequacy and flexibility, dependencies and co-ordination within the power sector and with other sectors, resilience to cyber and extreme weather events.

The Electricity Security Advisory Board (ESAB) is a forum for discussion between governments, regulators, industry and academics on best practices to meet emerging electricity security concerns and supports the formulation of electricity security policies. It is also a forum for exchange between members of the IEA family on common challenges and lessons learned.

[ESAB 2023](#) supported the continuation and extension of IEA's work on power markets designs, electricity grids, integration of renewables and collection of data on power systems performance.

ESAB 2024 will further explore the trends in the power sector and the corresponding threats as well as the role of power markets in electricity security and electricity decarbonisation.

The ESAB will be followed by the 11th annual IEA-EPRI Challenges in Electricity Decarbonisation workshop, which will deepen and broaden the discussion of some key electricity security topics.

Format

The meeting will be informal in nature and held under the Chatham House Rule. Each session will be introduced by invited members of the Advisory Board and followed by a roundtable discussion. Attendance is by invitation only.

Contact for information: esab@iea.org.



Agenda

Electricity Security Advisory Board (ESAB) High-Level Meeting	
Tuesday, 17 September	
8h30-9h00	Welcome coffee and registration
9h00-9h15	Opening remarks <i>Keisuke Sadamori, Director, Energy Markets and Security, IEA</i>
9h15-9h40	Latest updates on IEA's work on Electricity Security and Renewables Integration <ul style="list-style-type: none">• <i>Jacques Warichet, Power System Transformation Analyst, IEA</i>• <i>Pablo Hevia-Koch, Head of Renewables Integration and Secure Electricity, IEA</i> Followed by Q&A
9h40-10h55	Panel I: Electricity security in the race to triple renewables capacity by 2030 <p>Experts, regulators and policymakers will share experiences on the emerging threats to electricity security arising from the growth of renewables and electrification of end uses, among other main trends, and how they are managing them. The panel will identify the main common concerns and solutions across countries and regions.</p> <p>Moderator: <i>Jason Elliott, Head of Energy Security and Critical Minerals Division, IEA</i></p> Introductory interventions by high-level guests Followed by roundtable discussion
10h55-11h10	Coffee break
11h10-12h25	Panel II: Role of power markets in meeting security and decarbonisation objectives <p>Power markets have been designed to support electricity security. As the power systems transform and decarbonise, power markets need to send the right signals and rewarding availability when and where it is critical. How are instruments evolving, and how can these support the cost-efficient emergence of a diversified yet reliable fleet of market participants contributing to the security of supply?</p>



	Moderator: <i>Dennis Hesselning, Head of Gas, Coal and Power Division, IEA</i> Introductory interventions by high-level guests Followed by roundtable discussion
12h25-12h30	Closing remarks <i>Keisuke Sadamori, Director, Energy Markets and Security, IEA</i>
12h30	Networking lunch

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