Modernising Grids in the Age of Electricity:

Scaling Digital Technologies and AI for Better Use of Existing Networks

Report launch webinar
Monday, 26 October 2026
14:00 – 15:00 Central European Time
09:00 – 10:00 US Eastern Time
21:00 – 22:00 Singapore Time
Online (Zoom), broadcast live on iea.org

International Energy Agency

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Background

Grid expansion and better use of existing infrastructure must go hand in hand. Electricity demand is growing fast, but new networks take many years to plan, permit and build, and expansion is lagging behind. Projects waiting for connection and the rising cost of congestion show that grids are becoming a bottleneck for electrification, energy security and affordability.

Digital technologies, including AI, can unlock capacity from existing networks in months rather than years. The IEA report Modernising Grids in the Age of Electricity shows that many of these solutions are proven, yet they often stall before becoming standard practice. The main barriers are institutional rather than technical, and the report sets out five fronts for action: regulation, data, skills, assurance and security, and international co-operation.

This webinar presents the main findings of the report and brings together diverse stakeholders from across the electricity sector to discuss what it will take to move from pilot projects to standard practice. Attendees are invited to submit questions in the Zoom Q&A box throughout the webinar, and a selection will be put to the IEA team and the panellists in the final part of the session.

Agenda

All times are indicated in Central European Time (CET)

Monday, 26 October 2026	
14:00 – 14:05	**Opening remarks** *Maria Sicilia, Head of Electricity Systems and Markets Division, IEA*
14:05 – 14:20	**Presentation of the report** The IEA team presents the key findings and recommendations of the report. • Why making better use of existing grids has become urgent • Digital technologies and AI across planning, operational planning and real-time operation • Benefits quantified through power system modelling • Regulatory readiness and recommendations for scaling up deployment *Jacques Warichet, Energy Analyst, Electricity Systems and Markets Division, IEA*
14:20 – 14:45	**Panel discussion: From pilots to standard practice, what will it take to scale digital technologies and AI across electricity networks?** Senior representatives from across the electricity sector react to the report and discuss how to accelerate deployment. • Where digital technologies and AI already deliver measurable value • Barriers to scaling: regulation and incentives, data, skills, trust and cyber security • Priority actions for the next five years Moderator: *Zubin Postwalla, Energy Analyst, Electricity Systems and Markets Division, IEA* Panellists: - *Claudia Blanco, Chief AI and Innovation Partnership Officer, GE Vernova* - *Jonathan Thurlwell, Head of Emerging Technologies, Ofgem* - *John Ward, Research Director, CSIRO, and Vice-Chair of ISGAN*
14:45 – 14:57	**Questions from the audience** Open Q&A with the IEA team and the panellists. Attendees can submit questions in the Zoom Q&A box from the start of the webinar. Moderator: *Zubin Postwalla, Energy Analyst, Electricity Systems and Markets Division, IEA*
14:57 – 15:00	**Closing remarks** *Maria Sicilia, Head of Electricity Systems and Markets Division, IEA*