

SUSTAINABLE ENERGY WEEK 2023

BUILDING RESILIENT ENERGY SYSTEMS

11-15 SEPTEMBER 2023 | PALAIS DES NATIONS | GENEVA



Agenda Item 5 – [32nd Session of the Committee of Sustainable Energy](#)

Enhancing energy connectivity across the UNECE region



14 September 2023
10h00 - 13h00 CEST (Geneva time)
Palais des Nations (TEMPUS)

About the Session

Objective: To discuss within the Committee how regional cooperation on creating an enabling environment for energy connectivity can help ensure access to affordable, reliable, sustainable and modern energy for all in the UNECE region.

Context: Regional energy connectivity, a diverse energy mix comprising low- and zero-carbon technologies, and energy trade are critical factors to improve the resilience of the energy system in the UNECE region.

Data suggests that electricity accounts for 20% of the final energy mix in the UNECE region. Attainment of the Agenda 2030 and carbon neutrality by 2050, requires fundamental changes in how the different sectors of the economy are structured and powered. It is argued that electrification is one of the means to reduce emissions, thus resulting in incremental electricity demand. Yet, carbon intensity of electricity production remains high, and the existing electricity grid cannot absorb the vast additional intermittent renewable energy capacity needed to satisfy this additional demand.

Reportedly, fossil fuels account for half of the electricity generation mix in the UNECE region, producing 4 Gt of CO₂-e emissions annually, or one-third of total CO₂-e emissions from the energy sector.

Decreasing the carbon intensity of the growing electricity sector will require enabling the simultaneous transition from fossil fuels to low- and zero-carbon emissions generation technologies, coupled with carbon dioxide removal as necessary, to reduce level of CO₂ concentration in the atmosphere.

In addition, energy storage solutions and energy demand management are necessary to accommodate the intermittent nature of renewable energy sources and maintain grid reliability and resilience. In this context, greater energy connectivity allows improved resource diversification and resource planning.

10h00 - 10h15: Setting the Scene**Keynote Address: Electricity System Reliability during the Transition****Jim Robb,**

Chair, Group of Experts on Cleaner Electricity Systems

10h15 - 11h15: Panel I: Technology Interplay for Carbon Neutral Power Systems**Role of Dispatchable Generation****Mark Lauby**Senior Vice President, Chief Engineer,
North American Electric Reliability Corporation (NERC)**Outlook for Carbon Capture and Sequestration****Jon Gibbins**

Vice-Chair, Group of Experts on Cleaner Electricity Systems

Accelerating Renewable Deployment**Kostiantyn Gura**

Chair, Group of Experts on Renewable Energy

Outlook for Energy Storage**Lars Jacobsson**

CEO, TEXEL Energy Storage

End Uses and the Electricity Grid**Stefan Buettner**

Chair, Group of Experts on Energy Efficiency

Power-to-X: Role of green and low-carbon hydrogen**Francisco de la Flor Garcia**

Chair, Group of Experts on Gas

11h15 - 12h15: Panel II: Energy Connectivity and Regional Cooperation**Insights from Central Asia and the Caucasus****The case of Central Asia****Iva Brkic,**

Secretary of the Committee on Sustainable Energy, UNECE

The case of Georgia**Romeo Mikautadze**Vice-Chair, Committee on Sustainable Energy, First Deputy Minister of Economy and
Sustainable Development of Georgia**The case of Republic of Moldova****Sergiu Robu**

Lead Analyst, Institute of Power Engineering of the Academy of Sciences of Moldova

Insights from Western Europe

The case of Austria

Jasmin Haider

Policy Officer, Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation & Technology

Steps towards a global energy interconnected network

Yin Bo

Executive Director of Europe Office, Global Energy Interconnection Development and Cooperation Organization (GEIDCO)

12h15 - 12h30: Discussion & Next Steps

Interventions by member states and a wider multi-stakeholder community

Based on the discussion and documents: ECE/ENERGY/2023/13 and CSE.32/2023/INF.3.

12h30 - 13h00: Day 2 Morning Session - Conclusion and Recommendations