UNECE Group of Experts on Energy Efficiency

Task Force on Energy Efficiency in Industry: bi-monthly open discussion forum

15 June 2023, 14h00–16h00 CEST (online)

BACKGROUND

Scaling of intermittent renewable energy will require vast energy storage solutions to make best use of low carbon resources and maintain energy security. Interconnected energy systems as well as energy storage on system and end-use level (i.e. in buildings, factories, vehicles), are enablers for systemic and individual energy resilience, as well as catalysts for many energy-related challenges and opportunities.

In the medium to long-term, demand-side flexibility and virtual storage provided by large energy consumers, as well as a variety of storage types (electrical, mechanical, thermal, chemical), should be employed to decrease the need for fossil-based electricity or thermal generation in this role unless it can be made net-zero compatible by other means.

There is not one technology that is to be found, but instead the right mix of technologies for any specific situation, context, and aim. For this reason, it is of utmost importance to provide knowledge on the vast range of forms to store energy and create the capacities and foundations to identify what needs to be considered in shaping the right mix of technologies to support energy access, a stable, resilient and increasingly decarbonized energy system and means for end-users work towards their desired outcomes (including peak-shaving, maximizing self-consumption, improving the quality of supply, protecting against outages or curfews). The intended use of energy (e.g., thermal process at a specific temperature, compressed air, medical cooling, powering industrial robots) and the available sources are at the core of such effort, as achieving systemic efficiency requires to consider conversion losses, as well as costs, and (critical) raw materials needed to foster a low carbon, accessible, affordable and resilient energy system on the macro-, as well as the micro-levels.

TENTATIVE AGENDA

5 min	Housekeeping	**Igor Litvinyuk** Secretary, UNECE Group of Experts on Energy Efficiency	
10 min	Opening, updates, introduction	**Stefan M. Buettner** Chair, UNECE Group of Experts on Energy Efficiency	
10 min	Information from Initiatives and Facilitators	**Boglarka Kiraly** European Covenant of Companies for Climate and Energy	***Introducing the "Covenant of Companies for Climate and Energy": Small and Medium Enterprises for Net-Zero***
5 min		**Filippo Gasparin** European Climate, Infrastructure and Environment Executive Agency	***Introducing EU LIFE Clean Energy Transition***
10 min	Impulses and Examples	**Lars Jacobsson** European Union Commission on Energy Storage	
10 min		**Prof. Martin Blunt** Imperial College London	***Energy Storage: What Works and What Does Not?***
10 min		**Carsten Walddoerfer** UNECE Group of Experts on Coal Mine Methane and Just Transition	
40 min	Q&A and expert discussion		
10 min	Looking ahead: ongoing sustainable energy activities and insights into 2024-2025		
10 min	Wrap-up, closing remarks, and the way forward	**Stefan M. Buettner** Chair, Group of Experts on Energy Efficiency	

REGISTRATION

https://forms.office.com/e/VYtSFtKxue

Further information: https://unece.org/sustainable-energy/energy-efficiency; To get involved: energy.efficiency@un.org or litvinyuk@un.org