

**Session:** Modelling Pathways to Sustainable Energy

**Organizers:** Fraunhofer, IIASA, PNNL, UNECE

**Target group:** Open to all participants; “Pathways to Sustainable Energy” Project community

UNECE together with IIASA, Fraunhofer, PNNL is implementing the “Pathways to Sustainable Energy” Project. The project seeks to provide answers on how the UNECE region can attain sustainable energy. It combines sub-regional modelling of energy scenarios with policy dialogue, research on technology options and the development of an early-warning system.<sup>1</sup>

The modeling of pathways to sustainable energy will provide insights on the gaps towards achieving sustainable energy targets based on current strategies and ambitions in place. Building on this analysis, the models will assess different technology and policy options that countries can choose from to overcome these gaps and move towards sustainable energy systems.

In this session, the modeling institutions will present results including climate, technology and policy scenarios that could help to achieve the set targets. The scenarios will account for country’s different starting points, national priorities, and natural resource base, to propose solutions that are adapted to different circumstances in the various UNECE sub-regions from Central Asia over Europe to North America. Panelists and participants are invited to provide reactions to the preliminary results and hereby shape the formulation of policy pathways in the context of the Pathways project.

**Guiding questions:**

- *What scenarios can be derived in a world with either low or high cooperation to achieve sustainable development, and low or high levels of innovation (in terms of business models and technologies)?*
- *What are the technology and policy options and the business models that help to achieve sustainable energy in the various scenarios?*
- *How to adapt policy scenarios to regional circumstances?*
- *How big is the gap between the globally agreed targets and the approved strategies currently in place?*

Time	Content	Resource person
11.00-11.10	Welcome Introduction: UNECE Project “Pathways to Sustainable Energy”	Moderator: Stefanie Held, Section Chief, Sustainable Energy Division, UNECE Lisa Tinschert, Project Manager, UNECE
11.10-11.55	<b>Presentation: Modelling of Pathways to Sustainable Energy</b> - Global and UNECE Results from MESSAGE and GCAM models - Policy Scenarios and related Policy Options - Selected sub-regional results	Holger Rogner, Senior Research Scholar and Behnam Zakeri, Researcher, International Institute for Applied System Analysis (IIASA), <i>also on behalf of the Pacific-Northwest (PNNL)</i>
11.55-12.25	<b>Panel Discussion: Policies, Technologies and Business Models to achieve Sustainable Energy in the UNECE Region</b> - Reactions to modeling results - Game changers: innovative technologies and business models - Policy Scenarios and related Policy Options - Sub-regional aspects and particularities - Formulation of adaptive policy pathways	Stephan Singer, Senior Advisor Global Energy Policy, Climate Action Network Nurzat Abdyrasulova, CEO, Unison Group, Kyrgyzstan Mark Radka, Chief, Energy and Climate Branch, Economy Division, UN Environment
12.25-12.30	Wrap-Up / Conclusion	UNECE

<sup>1</sup> See more details about the project approach here: <https://www.unece.org/energy/pathwaystose.html>