

Workshop

Modeling of Ukraine's Power Sector Recovery and Rebuild

Location: Krakow, Poland

Date: June 1, 2026, 12:00 PM – June 2, 2026, 2:00 PM

Since the full-scale Russian invasion, Ukraine has been experiencing systemic attacks on its energy sector. During this period, about $\frac{2}{3}$ of prewar generation capacity was destroyed, damaged, or occupied. As a result, despite a considerable drop in electricity consumption during wartime and an increase in imports from ENTSO-E countries, constant electricity shortages forced system operators to implement scheduled load shedding and outages for Ukrainian consumers to balance the system. Additionally, internal network constraints limit the transmission of electricity from the western to the central and eastern parts of the country.

Amid such adverse circumstances, Ukraine remained committed to its European integration course and related reforms of the electricity market. Thus, in the near and long-term future, Ukraine needs to solve a trilemma of how to recover and rebuild the power system, ensuring 1) its energy security and resilience, 2) decarbonization, and 3) affordability. This requires the country to have significant knowledge and capabilities in both planning the development of its energy sector. The workshop aims to discuss and contribute to enhancing such capacity by helping Ukrainian stakeholders to learn and use the models for power sector recovery and rebuild. Also, present and share latest research on the Ukrainian Energy system from different modelling teams and research institutions.

Workshop overview

The workshop is bringing together key Ukrainian policy- and decision-makers, operators in the energy sector, modeling teams, and other stakeholders with contextual expertise. It will function as a discussion platform to match existing research and modelling tools with stakeholders' needs in energy planning, policymaking, and regulation in current adverse circumstances and uncertainty. One of the workshop's primary objectives is to identify gaps that could be addressed by developing new open-source models or new research studies. Such models can empower not only public authorities and system operators but also wider stakeholders, such as think tanks, CSOs, and experts, to fuel informed policy debates in the energy domain and to elaborate robust, balanced policies for short-term energy recovery and long-term rebuilding in Ukraine.



The Recovery Trilemma

Rebuilding must simultaneously solve for energy security, decarbonization, and affordability.



Open-Source

Identifying Modeling Gaps

Matching existing tools with stakeholder needs to develop essential new open-source models.



Robust Policy

Data-Driven Policy Debates

Empowering think tanks and authorities with models to fuel robust energy recovery policies.

Workshop Objectives and expected outcomes:

- Showcase existing modelling efforts analysing the Ukrainian power system, including long-term scenarios, reconstruction and investment pathways, policy recommendations from the research community, and evidence from energy system models that inform planning and the broader implications of Ukraine's energy transition.
- Identification of available tools for modeling Ukraine's power sector recovery and rebuilding vs. specific stakeholders' needs and issues in energy planning and policy-making that can be supported by the modeling.
- Outlining gaps that could be addressed by new open-source models aimed to better inform the decision-making by Ukrainian public authorities and network operators, and support wider and educated public policy dialog.
- Develop or discuss short-term scenarios for the planning of the Ukrainian power system

The workshop is organized by the [iDesignRES project](#) funded by the European Commission. In addition, the workshop is supported and organized by the following institutions:



iDesignRES



For questions and details, get in touch to: Prof. Dr. Pedro Crespo del Granado (pedro@ntnu.no) or/and Bohdan Serebrennikov (serebrennikov@dixigroup.org)

The workshop has a limited capacity, please indicate your interest to join the workshop in the following registration form ([Energy System Outlook for Ukraine – Fill out form](#)):

