

Energy Systems Integration Conference: Research meets policy

AGENDA

Date June 29 2023
Time 9:00-18:00
Location [TownHall Europe](#)

The *Research meets policy* conference organised by the European Energy Research Alliance (EERA) Joint Programme Energy Systems Integration (JP ESI) takes place in Brussels on June 29, 2023. It brings top scientists and policymakers together to discuss several key long-term challenges for the European energy transition. The conference is free of charge and includes lunch and a networking reception.

1. Agenda

Time	Topic	Speaker
09:00 - 09:20	Registration, coffee	
09:20 - 09:30	Introduction	<i>Laurens de Vries, TUDelft & Joint Programme Coordinator EERA JP ESI</i>
09:30 - 11:00	Session 1: Modelling to support decision making Chair: Juha Kiviluoma	<i>Maxine Tillij, Dutch Ministry of Economic Affairs and Climate David Radu, ENTSO-E Marie Münster, Technical University of Denmark Goran Strbac, Imperial College London</i>
11:00 - 11:30	Coffee break/snacks	
11:30 - 13:00	Session 2: Digitalisation and local electricity market design Chairs: Henrik Madsen, Annette Fagerhaug Stephansen, Peter Breuhaus	<i>Laurent Schmitt, Digital4Grids Andrés Pinto-Bello Gómez, SmartEn George Tsoungloul/Henrik Madsen, Technical University of Denmark</i>
13:00 - 14:00	Walking lunch	
14:00 - 16:00	Session 3: Electricity market design for the long term Chairs: Laurens de Vries, Erik Delarue	<i>Leonardo Meeus, Florence School of Regulation Elmo van Thielen, Elia Charlotte Renaud, Eurelectric Christian Baer, Europex</i>
16:00 - 18:00	Networking, drinks, snacks	



2. Session details

The rapid changes in energy technology, markets and policy pose large challenges for industry and governments. Many uncertainties affect the increasingly integrated energy system. The knowledge institutions that constitute the EERA Joint Program on Energy Systems Integration aim to support decision-makers in industry and government.

The aim of this conference is to create a dialogue between decision-makers and researchers: what insights can research offer for today's problems, what new knowledge do industry and government need, how can research best contribute and how should it be communicated? The conference program is designed to facilitate dialogue between policymakers, administrators and analysts supporting policy-making, energy network operators, market parties, and researchers.

The conference will consist of three plenary sessions:

Modelling to support decision making

As the energy system becomes more integrated and more weather dependent, it becomes more complex. The fundamental changes that will be brought about by the energy transition cannot be understood without the help of computer models. However, as the complexity of these models also is increasing, the interpretation of their results becomes increasingly challenging. In this session, energy modelers and policy analysts will debate this paradox: energy transition policy increasingly needs the support of energy system models, but these models are increasingly difficult to understand for policymakers.

Digitalisation and local electricity market design

Local electricity generation, storage and flexible consumption, as well as energy system integration between electricity and heat networks, create increasingly complex dynamics in the networks that serve prosumers. The goal is to integrate resources at the local level into the energy system at large as best possible. Electricity market design and smart network tariffs and congestion management should provide incentives for prosumers to behave in a system-friendly manner, but not all challenges can be solved with them. Improved forecasting and control methods are needed to maintain local energy networks within safe operational bounds. Digitalisation therefore is an essential feature of future smart, integrated distribution networks, but it also creates new challenges, e.g. with respect to privacy and digital security.

Electricity market design for the long term

What should an all-renewable electricity market design look like? What lessons can be drawn from the current crisis? What will be future challenges and solutions, e.g. with respect to security of supply, how can markets be integrated from the local prosumer to cross-border trades? How can consumers be protected and at the same time be stimulated to be flexible? In this session, these questions will be addressed from the perspectives of science and public policy. The primary goal is to gain a better understanding of future market design, but an important secondary goal is to identify how research can support public policy and, vice versa, to identify the knowledge needs of policymakers.