

Empowerment through openness: the future of energy modelling

Monday, 8 December 2025, 15:00–16:30 (CET)

online

For decades, energy system planning has relied on commercial software. However, such tools can result in lock-in, high costs and reduced transparency. At the same time, for many low- and medium-income countries, increasing license fees and declining financial support from international partners have made continued access to these tools increasingly challenging, potentially slowing Paris-aligned energy transitions.

Open-source modelling frameworks such as PyPSA and OSeMOSYS have now reached a high-level of maturity and are used by leading institutions beyond academia, including ACER, Elia Group, ENTSO-E and TenneT. These models offer a cost-effective, transparent approach to policymaking and benefit from a vibrant global community that fosters innovation and collaboration.

To advance the use of open-source modelling for energy system planning, Agora Energiewende is hosting this event to discuss how open-source tools can strengthen science-based, transparent and robust energy planning. The discussion will be accompanied by the launch of our open-source model builder – PyPSA-SPICE (PyPSA-based Scenario Planning and Integrated Capacity Expansion).

Join us to hear from different high-level representatives on the needs and impact of open-source modelling. Leaders from a range of organisations – from governments, think tanks, academia and philanthropic organisations – will share how the community can best cooperate to build a stronger open-source modelling ecosystem. Building on Agora's long-standing experience connecting modelling with policymaking, this event will explore practical ways to connect the open-source modelling community with policy action.

Registration

Participation at this event is free of charge. You can register by https://www.agora-energiewende.org/news-events/empowerment-through-openness-the-future-of-energy-modelling

Recording

We are going to record the event and publish it on our website.



Programme

15:00	Welcome & Introduction
	Dimitri Pescia, Director Power System Transformation, Agora Energiewende
15:05	Key-Note: What are open energy models and what can they contribute
	Prof. Dr. Tom Brown , Professor of "Digital Transformation in Energy Systems", Technical University of Berlin
15:20	Panel 1: The need and impact of open-source modelling
	Moderation : Rena Kuwahata , Programme Lead Power Grid Modernisation and Electrification, Agora Think Tanks
	Prof. Dr. Tom Brown , Professor of "Digital Transformation in Energy Systems", Technical University of Berlin
	Antonio Lopez-Nicolas, Head of Unit, Unit A.4, DG Energy, European Commission
	David Paolella, Research and Analytics, Breakthrough Energy
	Tharinya Supasa, Head of Sustainable and Renewable Energy, ASEAN Center for Energy
15:45	Presentation: Introduction to PyPSA-SPICE (Scenario Planning and Integrated Capacity Expansion) model builder
	Samarth Kumar, Project Lead Int. Energy Data and Modelling, Agora Think Tanks
16:00	Panel 2: Building an open source modelling eco-system
	Moderation: Rena Kuwahata , Programme Lead Power Grid Modernisation and Electrification, Agora Think Tanks
	Vautrin Anthony, Energy Modeller, International Energy Agency
	Dr. Martha Maria Frysztacki , Co-founder & Head of Energy System Modelling, Open Energy Transition
	Matt Grey, CEO & Co-Founder, TransitionZero
	Roberto Emilio Hernandez , Director for Energy Policy, Institute for Climate and Sustainable Cities (ICSC)
16:25	Wrap-up and closing remarks
	Dimitri Pescia, Director Power System Transformation, Agora Energiewende
16:30	End of event