Breaking the gridlock: grid development, power system operations, and integrated planning for the energy transition

May 2024 || Bangkok

Agora Energiewende will be hosting a 3-day training aimed at preparing participants with the foundations to understand and propose solutions to the challenges associated with integrating increasing amounts of wind and solar power into the grid. Participants will learn about how grids operate and best-practices for modern grid planning, while also exploring strategies and activities that ensure that power system operations and planning align with the goals and needs of the energy transition. This training is targeted towards early-to-mid career staff who are currently or are planning to work on grid and power system-related issues (e.g., policy or campaigns) as part of their roles.

BACKGROUND & PURPOSE

Traditionally, power systems have been designed around a paradigm of large, dispatchable, and centralized power generation with one-way energy flow to demand centers via the grid. The large-scale deployment of renewable energy, notably solar and wind, shifts the paradigm to a system of modular, variable, and decentralized power generation with bidirectional flows. As the share of variable renewables in generation increases, power grid operations and planning must evolve to deal with new challenges and leverage new opportunities - otherwise power grids risk becoming bottlenecks of the energy transition. Informed experts will play a crucial role in tackling and accelerating this shift in the coming years.

Agora Energiewende will host a 3-day training workshop focused on sharing Agora’s expertise on grids and renewable integration for Asia’s energy transitions. The introductory training programme is designed to grow participant’s ability to shift narratives in public discourses around power system reliability and the role of power grids (transmission and distribution) and grid-supporting technologies like storage in transforming energy systems. The training will lay out what is needed for grids and power systems to drive the energy transition forward in a way that can be more affordable and more reliable than today and empower participants to actively shape policy debates.

For the energy transition to be successful, policy makers, businesses and wider society need to be well-informed of the opportunities and challenges facing the transformation of their energy and power systems. As an evidence-based think-tank, Agora focuses on providing expert analyses that can accurately describe the various elements of the energy system (technical, economic, regulatory, political) and illustrate how they must change to realise ambitious climate targets.

OBJECTIVES

On completion of the 3-day training, participants will be able to:

- explain the integration challenges linked to the large-scale deployment of variable renewable energy into the power grid,
- identify gaps between government plans and those of other actors in updating their power system operations and planning practices to meet the requirements of the energy transition, and
- devise strategies and priority actions to close these gaps.
METHODS

The training programme is designed to be a mixture between theoretical lectures, hands-on exercises, group work and inclusive discussions. We strive to create a healthy and safe, informal learning environment, where collaboration is encouraged and where mistakes are celebrated as part of the learning process. Best practices indicate that people learn a lot with and from each other too!

Participants

The training programme is open to applicants currently employed by or affiliated with a think-tank, non-governmental or civil society organisation working on energy transitions in the following geographies: Japan, South Korea, Taiwan, Philippines, Indonesia, Thailand, Vietnam, Malaysia, Pakistan, and Bangladesh. The training is targeted towards early-to-mid career professionals who work on renewable energy or energy transitions and are looking to build new knowledge and capacities relating to grids and system integration of renewable energy.

As we seek to improve participant’s knowledge and skills to expand their institution’s energy transition advocacy, we ask that participants:

- work on power systems, renewables or grid related topics as part of their job, or plan to soon;
- have a foundational knowledge of energy and power systems; and
- are planning to develop future activities (e.g., policy, advocacy or campaigns) relating to grids as a potential blocker or enabler for your country’s energy transition.

LOCATION & TRAINING DATES

The 3-day training programme will take place in Bangkok, Thailand. The precise venue will be announced later. The training will be held on two occasions in May, limited to 20 participants per cohort:

- 21-23 May 2024
- 28-30 May 2024

COSTS

Participation in the training is free of charge. Participants will receive:

- Access to the 3 days training with no fee
- 3-4 nights’ accommodation
- Breakfast and lunches during the trainings

Participants will be expected to cover:

- International travel to Bangkok and all local transport
- Dinners
- Visa costs (an invitation letter can be shared upon request)
- Any incidental expenses outside of the trainings.
HOW TO APPLY – DEADLINE: 10 MARCH 2024

We ask interested participants to submit their current CV and a short (max 600 words) letter of motivation. In the letter of motivation, we ask that you:

- introduce yourself, your institution, and how your work addresses the role of renewables, including if you are (or plan to) address grid related challenges.
- describe some of the challenges you currently face when engaging with power system operations and planning (e.g., interpreting policies and reports, communicating with stakeholders, advocating for wind and solar deployment, etc.),
- describe your vision for how the knowledge and skills you expect to gain in this training could feed into your institution’s current or future activities.
- indicate your preferred training dates.

Applications will be assessed on a rolling basis – early applications will benefit.

For any questions, please contact grids_training@agora-energiewende.de