

SAVE THE DATE

June 4th 2024, Lithuanian Energy Institute, Kaunas (Lithuania)

Joint e3s-ESI Workshop on "Sustainability in Energy Systems: Considering Multiple Perspectives in Design and Assessment"

Background

A central aim of the energy transition is not only to achieve climate-neutrality, but also that the future energy system is sustainable. Today, energy systems models (ESMs) are the dominant tool used for the model-based construction of energy scenarios aimed at providing policy advice to achieve climate-neutrality typically by the middle of the century. However, in most cases the models used minimise total system costs under different decarbonisation constraints and, more generally, focus on techno-economic aspects, i.e. they fall short in considering sustainability aspects in a wider sense. A comprehensive sustainability assessment of the resulting scenarios and energy systems is typically missing and, in the few cases where it is carried out, the scenarios typically perform poorly with respect to sustainability criteria beyond global warming potential since these criteria are not taken into account in the scenario construction. As a result, the produced scenarios and systems lack practical feasibility.

Objectives

This one-day workshop is aimed at discussing the methodological challenges and possible solutions to provide the required pre-conditions to develop sustainable energy systems and transition scenarios from a holistic perspective. Therefore, the focus will be on multidisciplinary approaches, which are suitable for considering environmental, economic and social aspects as well as their cross-impacts and for dealing with the target conflicts that arise inevitably. The aim is to summarise the possible solutions and research requirements discussed in a white paper.

Format

This is a roll-up-your-sleeves workshop. The morning session will be also streamed online. Lunchtime and afternoon sessions can only be joined onsite. Participants are encouraged to present a poster at lunchtime, which should focus on possible contributions to the topic of the workshop (solutions for constructing transition scenarios towards sustainable energy systems more holistically). Potential posters should ideally address at least two of the following topics:

- Energy Systems Modelling
- Life Cycle Sustainability Analysis of Energy Systems
- Multi-Criteria Decision Analysis
- Macro-Economic Modelling

Poster presentation & registration

Participants interested to **present a poster** should send a poster title to m.menon@eera-set.eu and g.botton@eera-set.eu by April 30th 2024 at the latest.
General **registration** to the workshop [here](#) by 20th May.