NAVIGATING THE ROADMAP FOR CLEAN, SECURE AND EFFICIENT ENERGY INNOVATION

Call for papers (Special Issue)

on the topic

"Aggregating load profiles from power sector models towards use in large-scale energy-system and integrated assessment models"

Abstract Deadline: 31st August, 2017

SET-Nav
Strategic Energy Roadmap

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Abstract Deadline: 31st of August, 2017

Final Submission: 30th of September, 2017

The SET-Nav project (www.set-nav.eu), coordinated by the EEG at TU Wien, is announcing a

Call for papers

"Aggregating load profiles from the power sector models towards use in large-scale energy-system and integrated assessment models"

to be published in a special issue in a renowned journal.

Modelling for understanding, building, and optimising a future energy system grid is a crucial requirement for the big energy transition. The topic **"Aggregating load profiles from the power sector models towards use in large-scale energy-system and integrated assessment models"** relates to the desire to better account for the stochastic nature of variable renewable energy sources in large-scale integrated assessment models. Huge challenges arise for large-scale models from the different timescales relevant for distinct aspects of the energy system (for example, second-by-second energy balance in the power sector, while climate and environment models "think" in decades for changes to take effect).

The question is relevant for extending existing load profiles and setting up demand side flexibility interfaces between demand and supply models. One approach is to extract sufficient information from the bottom-up models and the load-profile and demand flexibility interface to allow the energy system and supply models to endogenously account for and optimize the demand shifting options. Therefore, the special issue should include modelling papers as well as applications in model expansion/ integration that may serve to assess future policy pathways up to 2050.

About the SET-Nav Modelling Forum and the IAEE post-conference workshop

The call for papers is connected to the upcoming IAEE post-conference workshop on this topic as part of the SET-Nav Modelling Forum (http://www.set-nav.eu/content/pages/modelling-forum), coordinated by DIW Berlin (http://www.diw.de/en). In five workshops on different modelling challenges, state-of-the-art and innovative modelling approaches and their applications are presented and discussed to disseminate them to a larger audience in energy economics and facilitate knowledge exchange between modellers. One goal of the SET-Nav Modelling Forum is the development of more holistic models that are more capable to answer the research questions of the future, by assessing the caveats of existing approaches and finding strategies to overcome the current limitations. We discuss best-practice examples and, whenever necessary, formulate and test alternative modelling approaches.

For submissions, please contact submissions@set-nav.eu

For any questions please contact contact@set-nav.eu

SET-Nav
Strategic Energy Roadmap

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About the project

SET-Nav aims for supporting strategic decision making in Europe's energy sector, enhancing innovation towards a clean, secure and efficient energy system. Our research will enable the European Commission, national governments and regulators to facilitate the development of optimal technology portfolios by market actors. We will comprehensively address critical uncertainties facing technology developers and investors, and derive appropriate policy and market responses. Our findings will support the further development of the SET-Plan and its implementation by continuous stakeholder engagement.

These contributions of the SET-Nav project rest on three pillars: modelling, policy and pathway analysis, and dissemination. The call for proposals sets out a wide range of objectives and analytical challenges that can only be met by developing a broad and technically-advanced modelling portfolio. Advancing this portfolio is our first pillar. The EU's energy, innovation and climate challenges define the di_rection of a future EU energy system, but the specific technology pathways are policy sensitive and need careful comparative evaluation. This is our second pillar. Ensuring our research is policy-relevant while meeting the needs of diverse actors with their particular perspectives requires continuous engagement with stakeholder community. This is our third pillar.

Who we are?

The project is coordinated by Technische Universität Wien (TU Wien) and being implemented by a multinational consortium of European organisations, with partners from Austria, Germany, Norway, Greece, France, Switzerland, the United Kingdom, France, Hungary, Spain and Belgium.

The project partners come from both the research and the industrial sectors. They represent the wide range of expertise necessary for the implementation of the project: policy research, energy technology, systems modelling, and simulation.