

INVITATION

SET-Nav Modeling Workshop *Two-stage decision making and modelling for energy markets*

11th of October 2018

Venue: DIW Berlin (Germany)

The SET-Nav (www.set-nav.eu) project supports strategic decision making in Europe's energy sector, enhancing innovation towards a clean, secure and efficient energy system, and is financed by the European Commission's EU Horizon 2020 programme.

The SET-Nav project aims to enable the European Commission, national governments and regulators to facilitate the development of optimal technology portfolios by market actors. It will comprehensively address critical uncertainties and derive appropriate policy and market responses. The findings will support the further development of the Strategic Energy Technology Plan (SET Plan¹) and its implementation by continuous stakeholder involvement.

Contributions of SET-Nav:

1. Expanding the technically-advanced modelling portfolio and enabling knowledge exchange.
2. Evaluation of the impact of multiple policy-sensitive technology pathways.
3. Stakeholder dialogue and dissemination to ensure that actors can effectively choose and implement the available energy innovation and system transformation options.

Modelling Workshops

In the SET-Nav project, we push the state-of-the-art of energy-economic-engineering models. Several work packages within the project are dedicated to improve, extend and customize models to better reflect relevant energy system aspects to address the research questions arising from the SET Plan. Models are linked and data is exchanged between them. However, today's computational limitations effectively restrict the scope, scale and detail of all models. Future computational power and smarter solution algorithms will allow solving larger models that can provide a more holistic picture. In five different modelling workshops we investigate and discuss with the broader research community what should be prioritized when faced with the possibility to enlarge models' scope, scale or detail given the research questions arising from the SET Plan challenges.

The workshops are open to interested energy modellers, also beyond the project members. As such, our workshops serve as an open exchange platform and also serve the goal of the Horizon 2020 programme of transparency and openness in applied modelling.

On **October 11, 2018**, we will organize the last one of our workshop series. Its topic is
“Two-stage decision making and modelling for energy markets”,
at DIW Berlin (Germany).

Two-stage decision modeling shall enable us to better describe complex situations and interactions in energy markets (e.g. between infrastructure decisions and operational decisions). The workshop shall be a combination of a seminar style lecture on the basics of multi-level modeling in the complementarity format and shorter conference style presentations of applications. It will focus on the equilibrium modeling framework and include modern solution techniques.

Confirmed key speaker: Prof. Sauleh Siddiqui, Johns Hopkins University

Until September 1st, 2018, we are inviting contributions to the workshop. If you are interested in presenting your modeling approach and/or application of multi-level modeling, please contact Dr. Franziska Holz at DIW Berlin (fholz@diw.de).

Participation is free of charge, but seats are limited and participants have to cover their own travel and accommodation costs. Registration for participation is possible until October 1st, 2018. An up-to date program and location details will be made available on the website of DIW Berlin (“Events”).

We are looking forward to a fruitful exchange of ideas and experiences in the workshop. Welcome to Berlin!

The workshop is organized one day prior to the Berlin Conference on Energy and Electricity Economics (BELEC) which will take place at DIW Berlin on October 12, 2018. We will also organize one session in the BELEC conference. For more information on the BELEC conference, please visit www.diw.de

SET-Nav at a glance

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

These contributions of the SET-Nav project rest on three pillars:

The wide range of objectives and analytical challenges set out by the call for proposals can only be met by developing a broad and technically-advanced **modelling portfolio**. Advancing this portfolio and enabling knowledge exchange via a modelling forum is our first pillar.

The EU's energy, innovation and climate challenges define the direction of a future EU

energy system, but the specific **technology pathways** are policy sensitive and need careful comparative evaluation. This is our second pillar. Using our strengthened **modelling capabilities** in an integrated modelling hierarchy, we will analyse multiple dimensions of impact of future pathways: **sustainability, reliability and supply security, global competitiveness and efficiency**. This analysis will combine bottom-up 'case studies' linked to the full range of SET-Plan themes with holistic 'transformation pathways'.

Stakeholder dialogue and dissemination is the third pillar of SET-Nav. We have prepared for a lively stakeholder dialogue through a series of events on critical SET-Plan themes. The **active involvement** of stakeholders in a two-way feedback process will provide a reality check on our modelling assumptions and approaches, and ensure high policy relevance. Our aim is to ensure policy and market actors alike can navigate effectively through the diverse options available on energy innovation and system transformation.

SET-Nav partners

No	Participant Name	Country Code
1	Vienna University of Technology, Energy Economics Group (<i>TU Wien</i>)	AT
2	Fraunhofer-Institut für System- und Innovationsforschung (<i>Fraunhofer ISI</i>)	DE
3	Deutsches Institut für Wirtschaftsforschung (<i>DIW Berlin</i>)	DE
4	Norges teknisk-naturvitenskapelige universitet i Trondheim (<i>NTNU</i>)	NO
5	Stiftelsen SINTEF (<i>SINTEF</i>)	NO
6	Société Européenne d'ECONomie (<i>Seureco</i>)	FR
7	Universidad Pontificia Comillas (<i>Comillas</i>)	ES
8	National Technical University of Athens (<i>NTUA</i>)	GR
9	Regional Center for Energy Policy Research (<i>REKK</i>)	HU
10	Centre for European Policy Studies (<i>CEPS</i>)	BE
11	University of East Anglia (<i>UEA</i>)	UK
12	Eidgenössische Technische Hochschule Zürich (<i>ETH</i>)	CH
13	Axpo Services AG (<i>Axpo</i>)	CH
14	International Institute for Applied Systems Analysis (<i>IIASA</i>)	AT
15	M-Five GmbH Mobility, Futures, Innovation, Economics (<i>M-Five</i>)	DE