SET-Nav Modelling Forum:
Two-stage decision-making in energy markets

Welcome talk

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The Modelling Forum

- SET-Nav aims at pushing the **state-of-the-art** of energy-economic-engineering modelling.

- Various **different approaches** are present in the project consortium.

- The SET-Nav **Modelling Forum** is a series of workshops on selected current issues in modelling, with the following aims:

Development of holistic models	Overcome modelling limitations	Studying best-practice examples

Transparency and openness in applied modelling (H2020 goal)	Open platform for exchange

OUR PROGRAM

Top-Down Bottom-Up Hybrid Modeling

November 2016 (past)
NTNU Trondheim

Modelling of Risk & Uncertainty in Energy Systems

March 2017 (past)
ETH Zurich

Aggregating load profiles

September 2017 (past)
TU Vienna

Upcoming network challenges

September 2018 (past)
Comillas University

Two-stage decision making and modelling for energy markets

October 2018 (today)
DIW Berlin

SET-Nav
Strategic Energy Roadmap

DIW BERLIN

Agenda

8:30 - 9:00	**REGISTRATION**
9:15– 11:00	**SESSION I:** Multilevel equilibrium modelling – Basics and advances
11:00 – 11:20	**COFFEE BREAK**
11:20 – 13:20	**SESSION II:** Applications for electricity
13:20 – 14:00	**LUNCH BREAK**
14:00 – 16:00	**SESSION III:** Applications for resources
16:00 – 16:20	**COFFEE BREAK**
16:20 – 18:20	**SESSION IV:** The broader frame
18:15	**END OF THE WORKSHOP**
From 18:30	**EVENING RECEPTION**

AGENDA (CONT'D)

8:30 - 9:00	*REGISTRATION*
9:00 – 9:10	**Welcome and introduction** Dawud Ansari (*DIW Berlin / EADP*) & Franziska Holz (*DIW Berlin*)
9:10 – 9:15	**SET-Nav at a glance** Marijke Welisch (*TU Wien / DIW Berlin*)
9:15– 11:00	**SESSION I:** Multilevel equilibrium modelling – Basics and advances
9:15 – 11:00	**An introduction to (multilevel) equilibrium modelling** Sauleh Siddiqui (*Johns Hopkins University*)
11:00 – 11:20	*COFFEE BREAK*
11:20 – 13:20	**SESSION II:** Applications for electricity
11:20 – 12:00	**Modeling coordination between renewables and grid: Policies to mitigate distribution grid requirements using residential PV-battery systems** Paul Neetzow (*Humboldt University Berlin*)
12:00 – 12:40	**Network Expansion to Mitigate Market Power** Alexander Zerrahn (*DIW Berlin*)
12:40 – 13:20	**Least-cost distribution network tariff design in theory and practice** Tim Schittekatte (*Florence School of Regulation / Paris-Sud University*)
13:20 – 14:00	*LUNCH BREAK*

14:00 – 16:00	**SESSION III:** Applications for resources
14:00 – 14:40	**Inconsistent policies in an MPEC framework** Olivier Massol (*ifp School*)
14:40 – 15:20	**A new game theoretical approach for modeling export energy markets equilibria** Ibrahim Abada (*Engie, Center of Expertise in Economic Modeling and Studies*)
15:20 – 16:00	**Multi-objective bi-level optimization problem for the investment in new gas infrastructures** Aurora del Valle Díez (*Comillas Pontifical University*)
16:00 – 16:20	*COFFEE BREAK*
16:20 – 18:20	**SESSION IV:** The broader frame
16:20 – 16:55	**Bargaining power in networks: a cooperative game theory approach** Franz Hubert (*Humboldt University Berlin*)
16:55 – 17:30	**Convex formulations for equilibrium & bi-level problems** Ruud Egging (*NTNU*)

17:30 – 18:15	**Panel discussion:**
	    Which road for applied modelling – scientific excellence or policy communication?
	Moderation:
	    Franziska Holz (*DIW Berlin*)
	Discussants:
	    Rudolf Egging (*NTNU*)
	    Oliver Massol (*ifp School*)
	    Sauleh Siddiqui (*Johns Hopkins University*)
	    Marijke Welisch (*TU Wien / DIW Berlin*)

18:15	**END OF THE WORKSHOP**
From 18:30	*EVENING RECEPTION*

Navigating the Roadmap for Clean, Secure and Efficient Energy Innovation

Thank you!

WP Lead

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