

Social Simulation for the Energy Transition

5th-6th September 2016, Wuppertal, Germany

International workshop associated to IST 2016 (www.ist2016.org)

Call for participation

The energy transition - a socio-technical transition

As the Energy Transition unfolds it becomes more and more apparent that technological changes have been and have to be accompanied by institutional and actor-related changes. For example:

- Increasing shares of wind power and extensions of the power grid raise issues of acceptance
- Renewable energy associations and „prosumers“ on the household scale arise as new players in the field
- Renewables that produce power at almost no variable costs change the functioning of the market and business models
- Demand-side management becomes an important aspect, but needs to take into consideration consumers' and firms' behavioural constraints and social practices
- Rebound-effects counteract efficiency gains
- The diffusion of all kinds of innovations is strongly influenced by interpersonal contacts and networks

The energy transition is a socio-technical transition, and the „transition“ perspective and in particular the „social“ aspects it involves demand new methods and thinking in the energy field. Social simulation is a strand of research that uses agent-based modeling to analyse behaviour of complex social systems from a bottom-up perspective. As such, social simulation is well suited to approach the new questions that arise in the energy field.

Objective and concept of the workshop

Based on agent-based models that have recently been developed and used in the energy field, the workshop is a forum to explore and discuss the potential of social simulation for understanding and governing the energy transition. It shall bring together experts with a deep understanding of the energy system with such having a dedicated transitions perspective and social simulation experts. This composition of participants shall facilitate a discussion of social simulation for the energy transitions including a long-term and radical change perspective while ensuring the discussion is grounded in deep methodical understanding and thematic insight .

The workshop shall be an event to meet inspiring people, to establish network contacts and working collaborations, and to identify and discuss future opportunities for social simulation to contribute to understanding and steering the energy transition.

To achieve this goal the workshop will include short presentations of participants, extensive room for discussions in the plenum, group work, as well as time for informal exchange during breaks.

Organisational information

The workshop will be hosted by the Research Group *Future Energy and Mobility Structures* of the Wuppertal Institute and take place on Monday 5th and Tuesday 6th September 2016 at the Bergische Universität Wuppertal, Germany, just prior to the IST2016 conference of the Sustainability Transitions Research Network (STRN) that takes place at the same location from 6th - 9th September.

There is no fee for participation in the workshop, but participants have to cover their travel and accomodation costs themselves. Lunches and coffee will be provided for free. The workshop will be financially supported by the German Federal Ministry of Education and Research through the project *The German "Energiewende" - Development of an Integrative and Transformative Research Design in the Case of the Energy Transition of the Ruhr Area and North Rhine-Westphalia (EnerTransRuhr)*.

Application procedure

We have space for a limited number of participants only (around 25 people), and aim to select a set of contributions that best facilitates the discussion. Therefore, if you are interested to participate, we kindly ask you to provide some information about you and your potential contribution to the workshop. Please send us a short application including a short biography, and a brief expression of your interest to participate. If you want to present your work, please also send a short abstract (1/2 page).

Please send your application until April 8th to georg.holtz@wupperinst.org

Dr. Georg Holtz, Wuppertal Institut

Dr. Peter Viebahn, Wuppertal Institut

Dr.ir. Émile J.L. Chappin, Wuppertal Institut / Delft University of Technology