



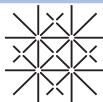
INVITATION to 2nd SCCER CREST Conference

ON THE IMPLEMENTATION OF THE ENERGY TRANSITION: The Impact of Economic, Environmental and Political Action

Tuesday, September 8, 2015 – University of St.Gallen

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University
of Basel



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Welcome

The Competence Center for Research in Energy, Society and Transition (CREST) develops innovative strategies for energy policy and provides in-depth analyses of the drivers of and barriers to energy efficiency. It is one of eight Swiss Competence Centers for Energy Research (SCCER) selected for federal funding by the Commission for Technology and Innovation (CTI) at the end of 2013. Within the SCCER, CREST covers the action area of «economy, environment, law and behaviour.» The 2nd CREST Conference provides an interdisciplinary platform where researchers will present the first results and insights from CREST research to a wider audience. Panel discussions will provide an opportunity for critical reflection on the impact of CREST research and its relevance to industry, policy-makers, researchers as well as the society at large.

We are looking forward to welcoming you in St.Gallen.



Prof. Dr. Karl Frauendorfer
Ordinarius for Operations Research
University of St.Gallen



Prof. Dr. Peter Hettich
Ordinarius for Law of Regulated Markets
University of St.Gallen

Program

- 9h00 Opening Session**
Prof. Dr. Thomas Bieger (President of the University of St.Gallen)
Prof. Dr. Frank Krysiak (Head of SCCER CREST, University of Basel)
- 9h10 Work-Package: Change of Consumer Behaviour**
(chaired by Paul Burger, Stefanie Hille)
- 10h40 Shared Infrastructure**
(chaired by Frank Krysiak)
- 11h45 Lunch Break**
- 12h30 Work-Package: Energy Economics, Markets and Regulation**
(chaired by Lucas Bretschger, Frank Krysiak)
- 14h00 Coffee Break**
- 14h30 Work-Package: Energy Management, Innovation and Governance**
(chaired by Karl Frauendorfer, Claudio Cometta)
- 16h00 Coffee Break**
- 16h15 Critical Reflection of CREST's Research Program**
Panel Discussion (Moderator: Matthias Finger)
- 17h30 Closing Session**
Karl Frauendorfer (ior/cf-HSG)
Peter Hettich (FIR-HSG)



Program Committee

Prof. Dr. **Lucas Bretschger**

Ordinarius for Economics/Resource Economics, ETH Zurich
Leader of Work-Package *Energy Economics, Markets and Regulation*

Prof. Dr. **Paul Burger**

Head of Sustainability Research Group, Department of Social Sciences, University of Basel
Leader of Work-Package *Change of Consumer Behaviour*

Dr. **Claudio Cometta**

Senior Lecturer for Innovation and Entrepreneurship, Zurich University of Applied Sciences (ZHAW)
Co-Leader of Work-Package *Energy Management, Innovation and Governance*

Prof. **Matthias Finger**, PhD

Swiss Post Chair, Management of Network Industries (MIR)
Director, Institute of Technology and Public Policy (ITPP), Ecole Polytechnique Fédérale Lausanne (EPFL)

Prof. Dr. **Karl Frauendorfer**

Ordinarius for Operations Research, University of St.Gallen
Leader of Work-Package *Energy Management, Innovation and Governance*

Prof. Dr. **Bettina Furrer**

Head of the Institute of Sustainable Development, Zurich University of Applied Sciences (ZHAW)
Deputy Head of SCCER CREST

Prof. Dr. **Peter Hettich**

Ordinarius for Law in Regulated Markets, University of St.Gallen

Prof. Dr. **Stefanie Hille**

Assistant Professor for Energy Consumer Behaviour, University of St.Gallen
Co-Leader of Work-Package *Change of Consumer Behaviour*

Prof. Dr. **Frank Krysiak**

Ordinarius for Environmental Economics, University of Basel
Head of SCCER CREST
Co-Leader of Work-Package *Energy Economics, Markets and Regulation*



Work-Package: Change of Consumer Behaviour

Chaired by Paul Burger, Stefanie Hille

In order to deepen the understanding of the current energy consumption patterns, we study relevant social and economic factors that impact individual energy use today, including people's risk attitudes and social norms. We also investigate the effectiveness of mechanisms implemented by governments (e.g. cantonal malus policies and energy labels for vehicles) and energy companies (e.g. new business models by power utilities such as different electricity tariffs) on consumers' energy-related behaviour. Thirdly, as research on individual decisions regarding energy use has hitherto strongly focused on «rational actor» models, we also take into account additional factors such as cognitive heuristics (e.g. mental accounting mechanisms) in order to better understand what is driving individual energy decision-making. Last but not least, we identify the impacts of interventions campaigns implemented by state and NGO actors directed at changing individual energy consumption patterns.



Shared Infrastructure

Chaired by Frank Krysiak

Research in SCCER CREST is supported by a shared infrastructure that provides services to all SCCERs and other interested researchers. The infrastructure consists of the following components:

The **Simulation Lab** creates a shared resource and virtual knowledge platform that ensures access for SCCER-CREST partner institutions to existing modeling tools and competencies. Its importance for analyzing the socio-economic aspects of the Swiss energy transition will be illustrated.

Evidence-based government and business decisions require comprehensive data which help explain the drivers for energy consumption and investments. The **Energy Data Center** will be introduced with its relevance for empirical research.

Knowledge about relevant legislation is fundamental for acceptance and acceleration of Switzerland's energy transition as outlined in the Energy Strategy 2050. The **Data Center on Energy Law and Policy** focusses on making information on energy law and policy strategies available for administrative authorities, enterprises and citizens. The *Comparative Energy Law Data Base* gathers any specific provision on energy law on the cantonal as well as on the federal level in Switzerland. It will also include relevant EU legislation. The **Energy Policy Strategy Data Base** will collect, compare, and visualize policy strategies of Swiss cities, cantons, and international partners.

Finally, the **Knowledge Transfer Unit** promotes the collaboration between energy researchers and implementation partners, policy makers, governmental and non-governmental organizations, and industry, the incumbents and new players with the target of implementing innovation for the Energy Transition.

Work-Package: Energy Economics, Markets and Regulation

Chaired by Lucas Bretschger, Frank Krysiak

With regard to the legal aspects of energy policy, we analyze regulatory frameworks in order to make recommendations for reducing friction and improving the efficacy and efficiency of the law. For example, we have brought forward proposals on how the law needs to change to adapt grid pricing to a growing self-consumption of solar energy.

Using economic models, we investigate new approaches for promoting energy efficiency and supporting renewables. A model of energy efficiency in buildings shows which reductions can be achieved at which costs. A model of the Swiss electricity system and grid is currently used to investigate different policies for promoting renewables and their interactions with electricity market designs.

Finally, we analyze the macroeconomic effects of energy policy. We present multi-region macroeconomic simulation tools that depict Switzerland within a European and global context and that focus on (i) endogenous technical change and international knowledge diffusion, and (ii) integrating a multi-region bottom-up model of electricity production and cross-country trade. These tools help illustrate impacts of European electricity transmission infrastructure policy for Switzerland.



Work-Package: Energy Management, Innovation & Governance

Chaired by Karl Frauendorfer, Claudio Cometta

A multitude of political and corporate decisions is necessary to govern Switzerland's energy transition. Actors pursue their economic and political interests in different markets and on the municipal, cantonal, federal, and international levels. Consequently, stakeholders interact with the social and technical system on multiple levels and spatial scales. The emerging system structure and transition pathway will determine the success and the sustainability of Switzerland's energy transition. Both, governance and corporate processes are analyzed by means of conceptual inquiry, qualitative case studies, statistical analysis, network analysis, and evolutionary computer simulation techniques.

The value chain in the energy industry faces severe changes due to uncertainties in market design and the development of new technologies such as flexible storage capacities. Powerful applications and associated modelling approaches, which allow energy providers to assess the risk-return pattern of their major balance sheet positions and support the creation of new sustainable businesses, will be revealed. We therefore analyze how entrepreneurial initiatives and the strategies of both start-up and incumbent firms effect innovation at the technological and business model levels. We are particularly interested in identifying the drivers of the adoption of new technologies and the ways in which different actor-groups are linked to specific technological solutions in a defined regional context.



Information and Registration

Conference Site

University of St.Gallen, Aula | Dufourstrasse 50 | CH-9000 St.Gallen.

Fees

The conference fee is CHF 150.-.

Members of the SCCERs (funded by CTI) or NFPs (funded by SNF) are free of charge, if they register until June 30, 2015. Participants, who cancel their registrations on September 1, 2015 or later, will have to pay a fee of CHF 150.-.

Registration

Please send in your registration form to Ms. Monika Huber, either by email to energymanagement@unisg.ch | or by Fax +41 (0)71 224 21 02.

In case of questions please contact Anina Angehrn: anina.angehrn@unisg.ch
Phone +41 (0)71 224 20 89 | Fax +41 (0)71 224 21 02.

Organisation

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SCCER CREST Conference 2015

«On the Implementation of the Energy Transition: The Impact of Economic, Environmental and Political Action»

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Registration Form

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Name _____

University/Company _____

Titel _____

Street _____

Postal Code/City _____

Country _____

E-Mail _____

Telephone _____

State memberships (w.r.t. SCCER or NFP), if any:

Place/Date _____

Signature _____

Please send registration form to Monika Huber, either by Email or by Fax:
energymanagement@unisg.ch | Telefax +41 (0)71 224 21 02