Federal Department of the Environment, Transport, Energy and Communications DETEC

Swiss Federal Office of Energy SFOE Market Regulation

EWG Ausschreibung 2014 : Liste der ausgewählten Projekte (in alphabetischer Reihenfolge)

Tobias Brosch (Université de Genève) in Zusammenarbeit mit der Universität St. Gallen: "Leveraging mental accounting mechanisms to promote energy conservation"

Mental accounting refers to symbolic linkages between specific acts of consumption and specific payments, which have large impacts on consumer decisions. Using a combination of online and laboratory experiments, this research project aims at investigating (1) to what extent mental accounting mechanisms are relevant for energy-relevant decisions and (2) how mental accounting mechanisms can be leveraged to promote energy conservation.

Peter De Haan (EBP) in Zusammenarbeit mit der Universität Zürich und Fraunhofer ISI: "Die Effizienzlücke beim Autokauf: Zielgruppenspezifische Gründe und Massnahmen"

Potenzielle Autokäufer stufen Energieeffizienz mehrheitlich als wichtiges Kaufkriterium ein. Die Schweizer Neuwagen haben aber die stärkste Motorisierung und die höchsten g CO2/km-Werte Europas. Das Forschungsprojekt untersucht zielgruppenspezifische Gründe und psychologische Faktoren für diese Diskrepanz zwischen Einstellung und Handeln. Entsprechende Massnahmen und Politikinstrumente werden identifiziert, auch für geschäftliche Autokäufer.

Martin Densing (PSI), in Zusammenarbeit mit der Universität Zürich und der ETHZ: "Oligopolistic capacity expansion with subsequent market-bidding under transmission constraints"

The research goal is to gain insight into the investment behaviour of power producers and their subsequent market bidding. We consider the potential of large companies or of countries to exert market power. The market clearing is limited by transmission constraints, and players face different investment risks. The analysis may allow regulators to better design investment and market rules to ensure acceptable electricity prices for consumers.

Massimo Filippini (CEPE/ETHZ): "Underlying energy efficiency and technological change in the Swiss household sector"

Improving energy efficiency in Swiss homes may yield significant reductions in energy consumption and help meet energy policy goals. In this project, we will estimate econometrically the size of the potential energy saving due to an increase in energy efficiency in the residential sector. Moreover, we will also perform an analysis of the influence of energy policy measures and technological change on energy consumption and energy efficiency.

Bettina Furrer (ZHAW): "How do different residential consumer groups react towards tariff and unconventional non-tariff incentives to reduce their electricity consumption?"

Tariff incentives are seen as an effective tool of energy utilities to promote energy efficiency in households. However, consumer responses may vary between types of incentives and depend



upon point in time of delivery. It is thus the aim of this study to experimentally examine how tariff and unconventional non-tariff incentives (e.g., coupons for public transport) can be used to motivate different consumer groups to engage in energy efficiency.

## Martin Jakob (TEP Energy) in Zusammenarbeit mit der Université de Neuchâtel: "Contracting the Gap: Energy Efficiency Investments and Transaction Costs"

Using data from existing markets and two surveys from the supply and demand sides in Switzerland, this study analyzes the development and potential roles of the Energy Performance Contracting market. The focus is on the impacts on the energy efficiency gap and related transaction costs. The results are used to identify relevant policy measures for promoting the market and possible interactions with other instruments used for energy efficiency.

## Frank Krysiak (Universität Basel): "Electricity market design: Policy coordination and zonal configurations"

Swiss electricity markets are subject to large-scale changes (market liberalization, feed-in tariffs, and potential introduction of capacity markets) that are highly interdependent but have so far not been addressed in conjunction. We will investigate the interrelations between these changes and quantify possible cost savings from coordinating them. Furthermore, we will analyze the potential of zonal configurations for Swiss electricity markets.

## Joelle Noailly (IHEID): "The Impact of Innovation on Sectoral Energy Productivity in Switzerland"

This project aims to investigate how green innovation can contribute to improve the energy productivity of various sectors in Switzerland. The analysis links data on green patent stocks to energy intensity estimates per sector by applying a newly developed concordance table matching patents to their sectors of use. The model estimates a translog cost function to measure the impact of green innovation on energy productivity next to other factors such as input substitution or structural changes.

## Renate Schubert (ETHZ): "Green by Default – Welfare Effects of Green Default Electricity Contracts"

Several Swiss utility companies offer green electricity contracts as a default option. At first glance, these defaults seem to be successful since more households hold green contracts than in the case of grey electricity defaults or no defaults. However, little is known about the welfare effects of green defaults. Defaults may result in a mismatch between preferred and contracted electricity mixes, in undesired distributional effects and even in environmental inefficiencies. Our project aims at assessing these welfare effects.