

Bundesamt für Energie BFE Marktregulierung

Ergebnis der EWG Ausschreibung vom 9.02.2015: Liste der ausgewählten Projekte (in alphabetischer Reihenfolge)

1. Prof. Andrea Baranzini (HEG Genève): Social Contagion in the Adoption of Renewables (SCAR)

<u>Abstract:</u> This project aims at assessing causally the magnitude and dynamics of peer effects in the adoption of solar energy in Switzerland. With respect to the current literature, it focuses not only on households but also on firms, which are a fundamental actor in the transition towards a greener economy. It further aims at measuring the impact on the probability of adopting solar energy by households and firms of the following factors: (1) subsidies of different forms, (2) marketing policies and (3) social marketing interventions leveraging peer effects.

2. Laurent Fournié (Artelys): RES Support Schemes

<u>Abstract:</u> For the Swiss energy transition to be successful, the design of RES support schemes have to integrate a good trade-off between sending relevant price signals to incite virtuous behaviour, and limiting financial risks for project developers. This research project aims at assessing the effectiveness of support schemes (CfD, cap and floor premium, etc.) when risks (volume, price level and volatility, imbalance, etc.) are properly taken into account.

3. Dr. Dogan Keles (KIT), Dr. Martin Densing (PSI): Impact of different market designs in the CWE market area on electricity prices and on the competitiveness of Swiss hydropower

Abstract: This project aims to assess the impact of changes in the neighbouring energy markets on the competitiveness of hydropower and on support schemes for renewable energies (RES) in Switzerland. Therefore, the price effect of changes in the market design and support schemes in Switzerland and neighbouring countries will be analysed. Based on this the profitability of hydropower and the value of RES will be analysed to determine the required support.

4. André Müller (Ecoplan), Prof. Christoph Böhringer, Prof. Thomas Rutherford, Prof. Michael Ferris (Loch Alpine Economics): ElMaR - Electricity Market Design and Renewables Modelling and Evaluation of Electricity Market Design, Instruments to promote Renewables and Macroeconomic Impact

Abstract: EIMaR will combine a dynamic multi-sector multi-region general equilibrium model of the European economy with a dynamic large-scale, technology-based electricity model of the European electricity market. The combined model system stands out for a comprehensive and consistent representation of economic interactions between the electricity market and the other segments of the economy. The Swiss economy and electricity market is integral part of the model system capturing important feedback effects between the Swiss-EU economy and integrated Swiss-EU electricity markets. EIMaR will be particularly suited to assess the economic impacts of Swiss promotion strategies for renewable electricity production thereby taking into account interactions between Swiss policy measures and international energy and climate policy regulations.

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5. Dr. Florentina Paraschiv (Uni St Gallen): Econometric analysis of the determinants of electricity wholesale prices

<u>Abstract:</u> In this study, we will examine the local and cross-border effects of market fundamentals that influence electricity prices in Switzerland, taking into account seasonal effects. In the context of a dynamic fundamental model, we want to investigate the continuous price adaption effect of electricity prices to market fundamentals and how this effect depends on the season of the year and the time of the day. We further disentangle the effect of market fundamentals dependent on different price risk quantiles.

6. Dr. Dominik Schober (ZEW Mannheim): Market integration, renewable energy expansion, interconnector capacity investment and their impact on the Swiss electricity market

<u>Abstract:</u> The proposed research project aims at investigating market integration in European electricity markets with a focus on Switzerland. We identify current market integration empirically based on econometric models. This requires the development of a structural multi-country system model that takes into account unilateral policy decisions and recent developments in market integration such as market coupling. In addition we will provide simulation studies to analyze companies' future price setting and dispatch decisions contingent on Swiss policy making.

7. Dr Tobias Stucki (KOF): Policy Spillovers: How Foreign Energy Policy Affects Green Energy Innovation in Switzerland

<u>Abstract:</u> While there is increasing empirical literature linking environmental policy and the development of new green technologies within the same country, the impact of foreign policy and policy interaction effects (foreign and domestic) on domestic innovation activities has not been analyzed before. The goal of this project is to improve our knowledge about which instruments show an effect and how local policies interact with foreign policies.

8. Prof. Hannes Weigt (Uni Basel) and Dr. Jan Abrell (ETHZ): Modelling the Swiss Gas Market in a European Context

<u>Abstract:</u> The Swiss gas market is currently undergoing a process towards liberalization. At the same time the European markets are impacted by restructuring, global market shifts and security of supply concerns. We will develop a European transmission network model to evaluate different development scenarios and their effect on the Swiss market. Furthermore, we will design a Swiss gas market model to quantify the impact of different liberalization designs.

9. Prof. Rolf Wuestenhagen (Uni St Gallen): Lowering the financing cost of Swiss renewable energy infrastructure: Reducing the policy risk premium and attracting new investor types

<u>Abstract:</u> With decreasing technology cost, the financing cost of renewable energy projects becomes a key concern for scaling up investment. This project (a) quantifies the policy risk premium required by investors, (b) compares expected to realised risk for Swiss investors at home vs. abroad, and (c) investigates the role of institutional investors in reducing capital cost. Based on a unique dataset, we derive recommendations for investment-grade policies.