

SPRU Wednesday Seminar

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Speaker Karoline Rogge (SPRU)

Title Towards an enhanced understanding of the policy mix within technological innovation systems: the case of offshore wind in Germany

Abstract

In the field of sustainability transitions one key approach for studying emerging technologies is the analysis of technological innovation systems (TIS), with the energy sector being an important application area. While most of these studies aim at deriving policy recommendations – typically by performing a structural and functional analysis identifying system barriers – we argue that the analytical power of the TIS approach would benefit from the application of a more comprehensive and uniform policy terminology. To address this shortcoming, we integrate the recent literature on policy mixes into the TIS approach which differentiates between policy strategy, instrument mix and the processes of policy making and implementation. In this paper we illustrate the explanatory power of such an enhanced TIS approach using the case of the TIS of offshore wind in Germany, which we chose for its potentially great role within the energy transition and its comprehensive policy mix. Our qualitative analysis enables insights into the actors and mechanisms shaping the formation and evolution of the TIS and its policy mix, which ultimately contributes to a better understanding of TIS performance. We conclude that our enhanced approach does not only allow for a more systematic consideration of the role of the policy mix within the evolution of technological innovation systems, but also extends our understanding of the mechanisms behind this evolution.

Bio

Karoline Rogge joined SPRU as Lecturer in Energy Policy and Sustainability in November 2013 from the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer ISI) in Karlsruhe, Germany, where she continues to work as Senior Researcher in the Competence Center for Energy Policy and Energy Markets. Karoline's interdisciplinary research combines insights from environmental economics, innovation studies and policy analysis to study the link between policy and innovation in the energy sector. It ranges from evaluating the innovation impact of single policy instruments, such as the EU emissions trading system – the topic of her PhD at ETH Zurich – to analyzing the effects of comprehensive policy mixes for promoting the low carbon transition of the energy system. Regarding the latter, Karoline is currently leading the GRETCHEN project investigating the influence of the policy mix for renewables on technological and structural change in Germany (www.project-gretchen.de). She is also Fraunhofer ISI's principal investigator of the European project PATHWAYS, in which she performs a multi-level analysis for the electricity sector in Germany. Karoline has advised the German government for the last ten years, including as a member of the scientific secretariat of the German

Emissions Trading Stakeholder Group, and prior to that has acted as a consultant to the OECD and World Bank.