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The future of the EEG – small reform or revolution? ¹

Abstract

The German Renewable Support Act (EEG) has proven to be a very effective instrument to achieve the renewable electricity targets in Germany. However, the recent increase of the EEG levy from 3.6 €/kWh in 2012 to 5.3 €/kWh in 2013 has sparked the discussion about the future of design of the German renewable support scheme. Our simulations show that without reforms the EEG levy will further increase by 1.7 €/kWh until 2022. To reduce the costs while keeping the ambitious renewable targets we analyse two types of interventions: first, we consider reforms within the current EEG framework and second complete revision of the EEG. We find that significant savings can be achieved within in the current EEG framework. Our simulation results show that technology neutral feed-in tariffs can lower the EEG levy by 0.6€/kWh until 2022. We furthermore discuss the switch from feed-in tariffs to direct marketing of renewables in a quota or premium system. An efficient power market design requires that renewable generation face competition by conventional generation. At the same time further savings of at least 0.1€/kWh can be obtained. In the long run the question arises whether investment incentives into renewable generation will come from the European trading scheme (EU ETS).

All quantitative results in our study are derived by an intertemporal optimisation model which determines future capacity development of renewables in Germany until 2035.

Personal details

Michael Zähringer is Consultant in Frontier's Energy Practice and works in Frontier's Cologne office. Michael joined Frontier Economics in 2008 from the Bonn Graduate School of Economics where he was enrolled as a Ph.D. student. Prior to that he gained a 'Diplom in Volkswirtschaftslehre' (equivalent to MSc in economics) at the University of Mannheim. Since joining the firm he has focussed on regulation and competition in energy markets.

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Michael has advised various European energy companies and regulators, with special focus on electricity markets. He has gained particular expertise in power market modelling and the promotion and integration of renewables. This work included several modelling projects of European power markets for the assessment of investments into power plants, pumped hydro storages and wind parks in different European countries. Michael also advised a number of regulators and market participants on the modelling of opportunity costs of secondary and tertiary power reserve.

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