

Employment effects of a comprehensive support and funding strategy for electric mobility in Germany

The **National Platform for Electric Mobility (NPE)** commissioned the IPE Institute for Policy Evaluation in summer 2015 to determine the employment effects of a comprehensive support strategy for electric mobility in Germany. The main objective of the project was to update the economic assumptions underlying the 'Second NPE Report' from 2011, and to reassess the conclusions regarding the employment effects of a governmental support and funding strategy for electric mobility.

In 2011, electric mobility was still in its infancy. At that time, electric passenger cars were not competitive and the product variety was very limited. As a result, registrations of new electric vehicles were negligible. The aim of the German automotive industry was to achieve a technological lead as a supplier (manufacturer) of electric mobility. The German market was expected to be the global lead market for electric mobility and thus provide the basis for a comprehensive "lead market - lead supplier" strategy.

The 2011 "lead market - lead supplier" strategy was implemented only partially. Today (2016), German automotive manufacturers are indeed among the lead suppliers of electric mobility, but Germany is *not* a lead market. The basic reason for this is, amongst others, that many countries provide greater funding for electro mobility than Germany. Accordingly, the market share of electric vehicles among new passenger car registrations is comparatively low in Germany.

Economic Modeling and Analysis

The economic model underlying the analysis in this project is based on a standard economic production model. The model predictions regarding the employment effects of a comprehensive support and funding strategy for electric mobility are based on a comparison of two scenarios. The first so-called "passive" scenario is a reference one, which describes a situation without additional funding for electric mobility. The second so-called "optimistic" scenario describes a situation in which electric mobility is funded comprehensively. The government strategy is aimed at ensuring that there are about one million electric cars on German roads by 2020. From 2020 onwards, electric mobility will no longer be state supported.

Main result: Germany can still achieve a dominant lead-supplier position on the electric mobility market

The interaction between (1) government funding to foster new electric vehicle registrations on the domestic market, and (2) the export strength of German car manufacturers can indeed create added value and jobs through electric mobility in Germany. A comprehensive support and funding strategy will combine the following regulatory actions:

1. Continuation of the existing extensive support of R&D,
2. Supporting a rollout of the necessary charging infrastructure,
3. Direct support for purchases of electric vehicles.

Through comprehensive support, a dynamic increase in new registrations of electric vehicles and an export boom of electric vehicles manufactured in Germany can be achieved. Thus, Germany can attain a dominant position as a lead supplier for electric mobility and by 2020, create more than 30,000 new, sustainable jobs (thereof approx. 25,000 in the automotive sector and about 6,500 jobs through infrastructure building and fiscal effects).

Electric mobility in Germany still has a very promising future - due in part to the strength of the conventional passenger car sector and government support of R&D. One million electric vehicles on German roads and over 30,000 new, sustainable jobs by 2020 are most certainly possible. To achieve this, however, more and concerted action is needed!

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