

DISTRIBUTIONAL EFFECTS OF THE SPECIAL EQUALISATION SCHEME FOR ELECTRICITY-INTENSIVE ENTERPRISES AND RAIL OPERATORS WITHIN THE SCOPE OF THE RENEWABLE ENERGY SOURCES ACT IN GERMANY

Juri Horst, IZES gGmbH, Phone +49 681 9762 840, horst@izes.de
Alexander Zipp, IZES gGmbH, Phone +49 681 9762 840, zipp@izes.de

Overview

The expansion of renewable electricity generation is one of the main pillars of Germany's energy transition. The Renewable Energy Sources Act (EEG) regulates the financial incentives as well as the cost allocation to consumers. Herein the special equalisation scheme has the intention to protect electricity-intensive manufacturing enterprises with high electricity consumption and rail operators which could be at risk in their international and intermodal competitiveness if they bore the full costs of the EEG levy. Enterprises, whose competitiveness could be threatened by the EEG levy, can get back some of the levy by request. This exemption has to be borne by all other end-consumers. The previous scientific research for the EEG progress report could not prove that the special equalisation scheme has not done its job. However, the frameworks of the scheme combined with rising costs for the expansion of renewable energy has caused an annual increase of the redistributive effects until today. The European Commission had therefore brought a notification procedure on the way to examine whether this scheme is contrary to Community law or not. The federal government was able to obtain large approval with the European Commission on redesigning the special equalization scheme in this context. The recent amendment of the EEG in 2014 set a limit of the exempted sectors that are defined by the Commission. Nevertheless the quantity of the privileged amount of electricity consumption and herewith the sum of the redistributed levy is still rising. Therefore a method was developed to measure the redistributive effects of costs and benefits for the main electricity consumer groups.

Methodology

To assess the financial worth of privilege of a party an 'equipartitioned' EEG-levy without the equalisation scheme was calculated. If there are no advantages for industries and railways, thus increasing the base to which the costs of the expansion of renewable energy sources can be allocated. Thus, the EEG-levy decreases. The difference between the individual limited EEG-levy of each privileged enterprise to the equipartitioned EEG-levy describes the worth of the privilege. For this, ex-post consumption data of the consumers in total, revenues from the levy, the electricity consumption of privileged enterprises as well as levy paid by these enterprises were evaluated. Revenues divided by total electricity consumption result in the equipartitioned EEG-levy. The consumption of the enterprises multiplied with the equipartitioned levy, minus the levy paid in total by the enterprises is the financial worth of the redistribution.

Results

Compared to an equal distribution the special equalisation scheme results in an increasing redistribution from approximately 0.7 billion Euros in 2009 to almost 5 billion Euros in 2014. Also for 2015 an amount of almost 4.8 billion Euros is expected.

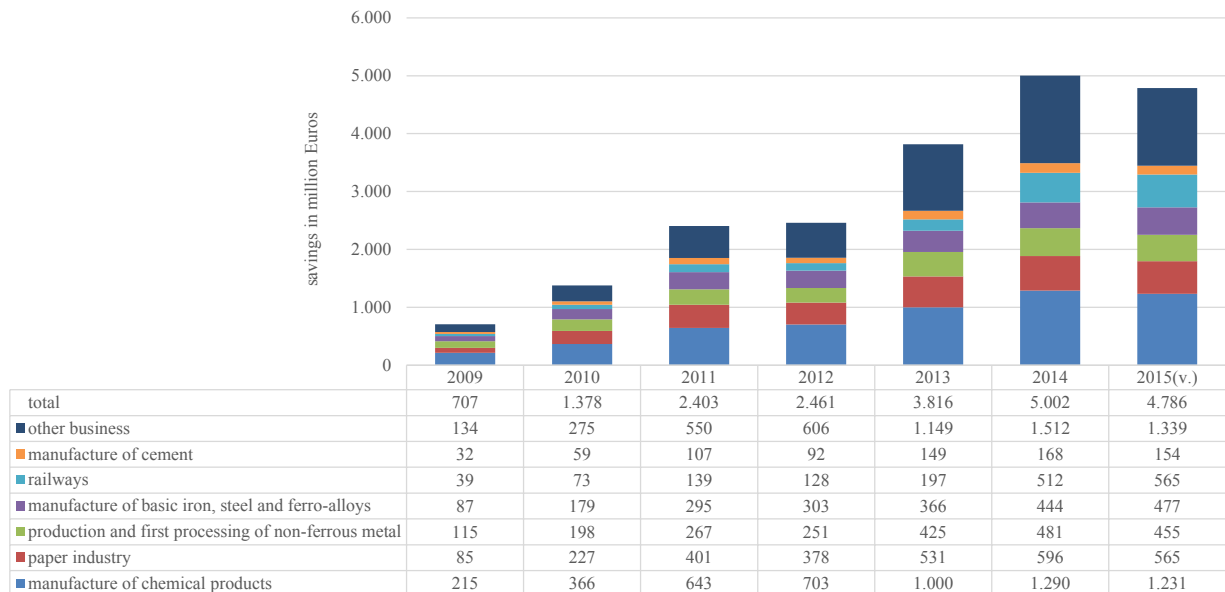


Table 1: savings in the manufacturing business due to the special equalisation scheme within the German Renewable Energy Sources Act between 2009 to 2015.

Especially the total of the non-privileged industry bears with around 2.2 billion Euros respectively in 2014 and 2015 a greater share of the redistribution. Also households were affected by redistribution with almost 1.3 billion Euros in 2014 and 2015. Per household with an average consume of electricity of 3,500 kWh/a that are just additional costs of almost 50 Euros per year. Nevertheless that could become an increasing financial problem in the following years for households with low income.

The limitation of the sectors in combination with an interim arrangement for not further more privileged enterprises in Germany has not caused a significant reduction of privilege until 2014. The year 2015 can currently only be estimated based on the assumptions of the TSOs. Further adjustments of the special equalisation scheme may be needed. International traded bulk commodities, where just prices and not quality or services are relevant, could be a basis to further limit privileged sectors.

Conclusions

The developed method is capable of determining the amount of the national redistributive effect and to differ it from the total sum of individual costs respectively benefits.

In fact the Commission limited the exempted sectors. Nevertheless the redistribution effect is furthermore high and regards more and more the private households. Therefore further threshold values of the scheme have to be adapted.

References

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