



National Peer-Learning Workshop Germany & Austria

Agenda

Workshop "Evaluation von Energieeffizienzpolitiken" bei den Berliner Energietagen

22. Mai 2019, 13:30-16:30

Ort: Ludwig Erhard Haus, IHK zu Berlin, Fasanenstraße 85, 10623 Berlin

13:00-13:30	Registrierung	
13:30-14:00	EPATEE – Austausch zu Evaluationen im europäischen Rahmen	Gregor Thenius Austrian Energy Agency
14:00-14:15	Präsentation der EPATEE Knowledge Base	Fabian Voswinkel Fraunhofer ISI
14:15-14:30	Präsentation der EPATEE Online Toolbox	Elisabeth Böck Austrian Energy Agency
14:30-15:00	Pause	
15:00-15:30	Erfahrungen mit dem Monitoring und der Evaluation des österreichischen Energieeffizienzverpflichtungssystems	Gregor Thenius Austrian Energy Agency
15:30-16:00	Evaluierung der Nationalen Klimaschutzinitiative (NKI) Methodik und Ergebnisse, Evaluierungszeitraum 2008 bis 2017	Katja Schumacher Öko-Institut
16:00-16:20	Evaluation des Energieeffizienzfonds Methodik und Ergebnisse	Fabian Voswinkel Fraunhofer ISI
16:20-16:45	Fragen & Wrap-Up	

Proceedings

13:30 - 14:00 | EPATEE – Project presentation | Gregor Thenius (AEA)

To start the workshop, Gregor Thenius welcomed all participants and gave an overview on the EPATEE project. He explained why evaluation is an important part of policy formulation and how EPATEE tries to include stakeholder's views on this process and facilitate knowledge exchange between different groups of stakeholders. Later on, the tools provided in EPATEE –Case Studies, Knowledge Base and Online Tool box were highlighted. The Knowledge Base and the Online Toolbox were afterwards presented in more detail. The presentation was also used to announce the next European Peer-Learning Workshop in Brussels on June 13th.

14:00 - 14:15 | Presentation of the EPATEE Knowledge Base | Fabian Voswinkel (Fraunhofer ISI)

Fabian Voswinkel presented the EPATEE Knowledge Base. He first explained how to access it via the project website and then focussed on the different types of filters that can be applied both in the “normal” and advanced search. He also gave background information on some of the filters, especially the calculation methods and the savings data presentation. On an example of a study from Germany, he showed the structure of the Knowledge Base entries, how additional information can be found and noted that for all studies which are not available in English language, executive summaries will be prepared in the next months.

14:15 - 14:30 | Presentation of the EPATEE Online Toolbox | Elisabeth Böck (AEA)

Elisabeth Böck presented the Online Toolbox on the basis of two scenarios:

The first scenario featured a policy officer with no previous experience in evaluation searching for general guidance on what evaluation means and to what extent it would be different from the regular monitoring of the policy measure. Using this scenario, the “Evaluation principles & methods” gateway of the toolbox was presented. It was explained what information can be found in “General principles” and how the information provided in “Why evaluate?” and “How to plan and prepare evaluation?” could be useful further on in this case. Additionally, the topical case study “Linkage between monitoring and evaluation” was summarized briefly.

The second scenario featured a policy officer with a minimum of experience with evaluation looking for specific guidance for implementing a new evaluation. This scenario was used to present the “Specific evaluation guidance” gateway. Using the filter combination Legislative/Informative (Type of policy), Household appliances (Sector) and Diffusion indicator (Type of method), PSMC “07 – Evaluating energy savings from mandatory energy labelling for household appliances using diffusion indicators” was presented. The different sections of the PSMC were briefly explained. It was also highlighted that further reading material and concrete examples of similar evaluations – if available – can be found in section 8 and 9 of each PSMC. To go into more detail on specific issues, the topical case study on “Evaluating net energy savings” was discussed at the end of the Online Toolbox presentation.

15:00 - 15:30 | Experiences with the monitoring and evaluation of the Austrian energy efficiency obligation scheme | Gregor Thenius (AEA)

At the beginning of his presentation, Gregor Thenius introduced the Austrian Energy Agency, its focus topics and services which include “klimaaktiv”, a programme for awareness raising on environmental issues and “Monitoringstelle Energieeffizienz”, the monitoring body for the Austrian Energy Efficiency Act. After that, he explained the Austrian implementation of Article 3 and 7 of the EED. The final energy consumption should be reduced to the amount of 1,050 PJ in 2020. To achieve this goal, 310 PJ of savings have to be realised: half of them by energy suppliers, half of them by public authorities. The obligation for energy suppliers to report savings covers all energy sources sold to final customers, however, only suppliers with energy sales higher than 25 GWh per year are included in the obligation scheme. All obligated parties have to report energy savings measures in the amount of 0.6 % of their last year’s final energy sales. Measures can be conducted at their own premises, with their customers or other final energy customers. A minimum of 40 % of the savings have to be generated in households.

In the next part of the presentation, the current status of the implementation of the EED and Austria’s achievement of its savings goals were discussed. Since the implementation of the Austrian Energy Efficiency Act in 2014, final energy consumption has increased by approximately 8 %. However, in the same timeframe, heating degree days have increased by 15 % and both population growth (+ 1 %) and gross domestic product (+ 7 %) have increased. Two graphs in the presentations show that energy intensity is declining in regards to final energy consumption per gross domestic product and increased in regards to energy consumption per capita. Gregor Thenius also gave an overview of the measures per political instrument and sector conducted in the years 2014 to 2017. Even though there is a big over fulfilment in the Austrian EEO, the goal to reduce final energy consumption to 1,050 PJ in 2020 will most likely not be achieved.

At the end of the presentation, Gregor Thenius summarized the experiences made during the monitoring and evaluation of the Energy Efficiency Act. When implementing an EEO, it is important to define beforehand which data will be needed for the monitoring, verification and later on its evaluation. For the evaluation itself, it is important to check for causality of measures triggered. The high number of political instruments used to fulfil Article 7 EED on the one hand minimizes risks in regard to one instrument not being able to achieve its forecasted savings; on the other hand, not all measures implemented can be accounted and reported due to the possibility of double counting. The high number of energy suppliers obligated in the Austrian EEO (454 in 2016) leads to a lot of administrative effort, especially at the beginning of the scheme. It is therefore important to include all relevant stakeholders both at the stage of implementation as well as evaluation of the program. These stakeholders include public bodies like the Federal Provinces, funding agencies, advocacy groups and energy suppliers.

15:30 - 16:00 | Evaluation of the German “Nationale Klimaschutzinitiative (NKI)” (National Climate Initiative) | Katja Schumacher (Öko-Institut)

Katja Schumacher from the German Öko-Institut gave a presentation focusing on the evaluation of the German National Climate Initiative (NCI). The NCI was initiated in 2008 by the German Federal Ministry of Environment and includes policies and measures to reach the German national climate targets. It supports climate action projects and programs across Germany and addresses different target groups (consumers, business, local authorities and educational institutions).

It combines measures on behavioral change and investment incentives by providing subsidy programs, showing best practice activities, providing broad and specific information programs and helping with the creation of energy and climate concepts. Thus, the portfolio of measures was designed to tackle barriers identified beforehand – in a different way compared to market/price based or command-and-control approaches.

The evaluation of the NCI is ex-post. There are three evaluation phases which correspond to the phases for which subsidies are provided:

- Evaluation of the years 2008 – 2011
- Evaluation of the years 2012 – 2014
- Evaluation of the years 2015 – 2017

From a methodological point of view, the first step is to cluster the different programs. Afterwards, existing documents are analyzed and complemented by surveys. After that, the evaluation is performed and recommendations are formulated. The evaluation criteria were divided into the following groups:

- GHG emission reduction
- Model character
- Broad impact
- Continuity
- Economic Effects

For each criterion, sub criteria, indicators, main questions to be addressed, units, data sources and guiding comments are defined. As this is a very large evaluation (many measures included in the NCI portfolio), the definition of clear and relevant evaluation indicators is a major task.

The next part of the presentation focussed on the reduction of GHG emissions. Katja Schumacher explained how the reductions are calculated and what quality of data sources was available. These range from actual measurements up to estimations based on literature reviews. It is also important to define whether the calculated savings are gross or net savings. For the evaluation of NCI, net savings were used. The presentation featured diagrams showing the reduction of GHG emissions arising from financial incentive programs and awareness raising campaigns within NCI since 2008. Each program was also assessed in regards to feasibility, visibility and transferability. In regards to the budget, 715 million € were supplied for the program from 2008 until 2017. Another 1,754 million € were spent by the applicants.

General conclusions of the evaluation so far are:

- The variety of actions prepared by NCI has proven to be successful
 - Municipal measures especially offer a broad variety of tenders
 - For economic measures, experience exchange and coaching on certain measures are very important
 - Campaigns for awareness raising are an important part for long-term changes as consumers need information and motivation to change their behaviour more than once
- Results of the evaluation should be communicated more broadly
- Prominence of NCI and its various programs should be increased
- NCI paves the way for long-term strategies
- NCI offers a lot of flexibility and is well-steered
- NCI verifiably helps to tackle climate protection

16:00 - 16:20 | Evaluation of the German “Energieeffizienzfonds” (Energy Efficiency Funds) | Fabian Voswinkel (Fraunhofer ISI)

Fabian Voswinkel presented the results of the evaluation of the German “Energieeffizienzfonds” (Energy Efficiency Fund). The Energy Efficiency Funds is a special budget provided by the German Ministry for Economic Affairs and Energy (BMWi) to promote energy efficiency. The budget is mostly used by enterprises; however, programs also cover households and public bodies. The various programs within the Energy Efficiency Fund cover both financial incentives and information programs. The methodology used for the evaluation was pre-defined when the Energy Efficiency Fund was created.

The main goal of the evaluation is to determine how much the Energy Efficiency Fund contributes to the “Energiekonzept” (Energy Concept) of the German federal government in terms of GHG emissions reduction. Three different indicator categories are defined:

- Target achievement (via gross GHG savings and energy savings)
- Impact assessment (via net GHG savings and energy savings)
- Profitability (savings achieved compared to investment provided by the program)

Savings are calculated bottom-up in four different ways, either calculating new savings, added annual savings values, savings generated within the recent obligation period or savings calculated with an inclusion of their lifetime. Fabian Voswinkel explained how gross savings are recalculated to net savings by including a baseline and other effects (e.g. free riders and spill-over effects). How much these effects are accounted for is determined by surveys among applicants of the subsidy program both for free-rider and spill-over effects.

About 63 % of the savings (GHG emissions as well as final energy) generated by the Energy Efficiency Fund are achieved in the categories industrial processes, cross-sectoral technologies and labelling of heating systems. The subsidized budget (for quantified measures) per year of 289 million euros triggers investments of 1.9 billion euros. The energy savings generated by those actions lead to energy cost savings of 3.3 billion euros within the measure’s lifetimes.

The general result of the evaluation is that the Energy Efficiency Fund triggers high savings of final energy consumption and GHG emissions. The various programs contribute to the overall success since measures that need a high subsidy amount, measures that only need small subsidies but trigger potentials in other target groups and informative campaigns are included. Identified problems mostly concern that informative campaigns partly lack coverage within the population and that the budget is not fully exploited. The evaluation recommends that programs should be re-structured to avoid different programs targeting the same topic and to enhance the accessibility, for example by a central point of contact. From a methodological point of view, the goal of all programs should be defined according to SMART-criteria (specific, measurable, accepted, realistic and time-bound) and monitoring should be performed consequently and in consultation with the evaluators.

16:20 - 16:45 | Questions & Wrap-Up

The Q&A session included some clarifications regarding details in the calculation of free-rider and spill-over effect and GHG abatement costs.

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