

Experience sharing webinar #3 – How and what can we learn from verifying energy savings first estimated with engineering calculations?

Date: Friday 14 December – 11:00 to 12:15 am CET

How to register:

To register please use this link: <https://attendee.gotowebinar.com/register/1288702789630479362>

Background and objective:

The analysis of the [EPATEE case studies](#) showed that **engineering calculations** (including deemed savings, but also more detailed engineering calculations) are the methods the **most frequently used** to evaluate energy savings **for regular reporting**. This result is similar to the conclusions of Wade and Eyre (2015) and Labanca and Bertoldi (2016). This can be explained because methods based on measured (direct measurements) or metered (billing analysis) data need more time to provide results, as pointed in some case studies (see e.g., case on [Warm Front](#)). Whereas engineering calculations can be applied directly to data collected along the monitoring of the policy measure. Therefore, the need to report annually (or even more frequently) about energy savings often leads to choose to use engineering calculations.

At the opposite, **billing analysis** is the method the most frequently used for ex-post evaluations when the objective is to **verify actual energy savings**. The results from the billing analysis can then be compared to the results from the regular reporting, to improve the data or assumptions used in the engineering calculations. This is for example the approach that has been used in Ireland ([Better Energy Homes](#)), UK ([Supplier Obligations](#)) or in the US ([Weatherization Assistance Program](#)).

This experience sharing webinar aims at providing a **practical feedback** from two ex-post evaluations that compared energy savings based on engineering calculations with energy savings determined from metered energy consumption:

- Case 1: Green Investment Scheme in the Czech Republic
- Case 2: Kirklees Warm Zone Scheme in UK

Both cases were analysed in scientific papers, respectively (Valentova et al. 2018) and (Webber et al. 2015).

The webinar will deal with the following questions:

- **What data could be used for the ex-post evaluations?**
- **What method was used to determine energy savings from metered energy consumption?**
- **How could the “metered” energy savings be compared with the “estimated” energy savings?**
- **What difficulties were encountered?**
- **What can be learnt in terms of evaluation practices for future evaluations?**



Agenda:

11.00	Introduction	Dario Di Santo, EPATEE project
11.05	Resources of the EPATEE project about this topic	Jean-Sébastien Broc, EPATEE project
11.15	Case #1: Czech Green Investment Scheme	Dr. Michaela Valentova , Czech Technical University in Prague
11.35	Q&A on case #1	
11.40	Case #2: Kirklees Warm Zone Scheme (UK)	Pr. Andy Gouldson , Deputy Director of CCCEP (Centre for Climate Change Economics and Policy), Leeds University
12.00	Q&A on case #2	
12.05	Open discussion	
12.15	End of webinar	



References for further readings:

Labanca, Nicola, and Paolo Bertoldi, 2016. Energy Savings Calculation Methods under Article 7 of the Energy Efficiency Directive. Report of the Joint Research Centre for the European Commission. Available at: <https://e3p.jrc.ec.europa.eu/publications/energy-savings-calculation-methods-under-article-7-energy-efficiency-directive>

Valentová M, Karásek J, Knápek J. (2018). Ex post evaluation of energy efficiency programs: Case study of Czech Green Investment Scheme. *WIREs Energy and Environment*, 2018;e323. <https://doi.org/10.1002/wene.323>

Wade, Joanne, and Nick Eyre, 2015. Energy efficiency evaluation: The evidence for real energy savings from energy efficiency programmes in the household sector. London: UK Energy Research Centre. Available at: <http://www.ukerc.ac.uk/programmes/technology-and-policy-assessment/energy-efficiency-evaluation.html>

Webber, P., Gouldson, A., & Kerr, N. (2015). The impacts of household retrofit and domestic energy efficiency schemes: A large scale, ex post evaluation. *Energy Policy*, 84, 35-43. <http://dx.doi.org/10.1016/j.enpol.2015.04.020>

What EPATEE is about

Several barriers limit energy efficiency policy evaluation. This results in a lack of quantitative data, and impedes evidence-based analysis required to distinguish effective from ineffective energy efficiency policies. EPATEE aims at tackling this problem by raising the capacity of policymakers and implementers. The project will provide them both with tools and with practical knowledge to make effective impact evaluation an integral part of the policy cycle. EPATEE makes use of existing evaluation experiences in a range of instruments, such as energy efficiency obligation schemes, regulations, financial incentives and voluntary agreements. Experience sharing is the core of the project. Lessons learnt from other EU initiatives and good practices in how to successfully evaluate the impact and cost-effectiveness of such energy efficiency policies will provide the basis for the development of guidelines and good practice evaluation tools. For further information please visit our website: www.epatee.eu.



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