



Practical experiences with evaluations and lessons learned

Jean-Sébastien Broc



Lovorko Maric



This project has received funding from the European Union's Horizon 2020 Research and innovation programme under grant agreement No 746265.





-
- Objectives and overview of EPATEE case studies
 - Key messages / issues & discussions
 - Discussions about synthesis crossing insights from Knowledge Base and case studies



- Making information easily **accessible** & providing data as **transparent** as possible
- Analysing **concrete examples** about
 - **why** evaluation is used
 - **how** it is performed

NO INTENTION TO BE EXHAUSTIVE OR REPRESENTATIVE

Objective = covering a **diversity** of situations to produce **materials for experience sharing**



US

- > New England Capacity Market
- > Weatherization Assistance Program

Netherlands (Amsterdam)

- > Subsidy scheme for housing corporations
- > Multi-year agreements in the industry

Nordic Countries

- > Nordsyn (market surveillance)

Finland

- > EE agreements in Industries
- > Energy audits in municipalities

UK

- > Supplier Obligation
- > Warm Front

Denmark

- > EEO scheme

Lithuania

- > Renovation programme for apartment blocks

Ireland

- > Better Energy Homes

Belgium (Wallonia)

- > Primes Energie

Germany

- > Energy Efficiency Fund
- > Energy Efficiency Networks Initiative

Austria

- > Environmental Support Programme for companies
- > City EE Programmes of Vienna

France

- > "Future Investments" programme
- > Voluntary agreement for freight companies

Croatia

- > Energy renovation programme for public sector buildings
- > Individual heat metering in multifamily buildings

Italy

- > White Certificates scheme
- > Tax credit scheme



- Content of the case studies:

Short description of the measure

Key data about means and outputs

Data on energy savings

Details about the evaluation method(s)

Insights about other aspects monitored or evaluated

Focus on key evaluation issue(s) or practice(s)

+ interview(s) with the evaluation customer and/or evaluator

→ direct experience feedback

+ references

14 cases already available at: <https://epatee.eu/results>

(more coming soon)

(one case may correspond to several categories)

SECTOR	Nb. of cases
Residential	12
Transversal	5
Services	5
Industry	4
Energy sector	1
Transport	1

Policy instrument	Nb. of cases
Financial	14
Voluntary agreements	3
EEO	3
Information/Education/Training	3
Regulation	1
Policy mix	1
Capacity market	1

Evaluation method	Nb. of cases
Deemed savings	9
Scaled savings	11
Metered savings	4
Stock modelling	1
Comparisons	6

Examples of evaluations easier to find for policies including financial incentives.
 More cases about residential sector as main target of EE policies



Evaluation is not a burden, but an opportunity

“One may have fear to do an ex-post impact evaluation, because it may show smaller results than based on the engineering estimates. However this increases the robustness of the results and therefore the confidence funders can have in them” (quote from the Irish case)

Examples of outputs/outcomes from the evaluation	Cases
Improving data collection and verification processes	EEO scheme (UK)
Updating the list of eligible actions	Primes Energie (BE), EEO scheme (DK)
Improved technical recommendations/requirements	Warm Front (England)
Improving the application process	Primes Energie (BE)
Redesign of the incentives	Energy renovation of public sector buildings (CR)
Reinforcing support from policymakers and other stakeholders	Better Energy Homes (IE), Voluntary agreements (FI)
Evidences/accountability for decision-making (particularly about funding)	Better Energy Homes (IE), Energy Efficiency Fund (DE)



Good data is well-documented data

“In reality, if two persons carry out impact evaluation of the same policy measure, they get different results. Even if I make the same calculation in successive years without proper documentation of the calculation method and definitions, the calculation can be different. This highlights the needs for good logic and documentation.”

(quote from the case on Energy Efficiency Agreements in Finland)

Guiding questions:

✓ Is the documentation sufficient for all readers to understand the figures in the same way?

✓ Is the documentation sufficient to keep the memory of the results?

“The policy made possible to save 10 PJ” → final/primary energy?
annual/lifetime savings? from actions implemented over which period?

“From its start, the policy triggered 100 M€ of investments.” → up to when? VAT included? total/marginal costs?



Good data is well-documented data

Issues for discussions:

- ✓ Are there in your organisation / country guidelines or recommendations about how data should be documented?
- ✓ Do you think **guidelines about documentation of data** could be a useful tool (to be developed by EPATEE)?



Evaluation method = f(evaluation objectives ; constraints)

Example 1: objective = providing visibility to actors about how energy savings will be accounted for



Engineering calculations easier to implement/monitor

Example 2: objective = assessing net impacts (is the policy efficient?)



Statistical methods or surveys often needed

Examples of issues depending on the evaluation objectives:

- Use of “conventional” or “actual” energy consumption
 - What would be a “reliable enough” result
- + practical factors/constraints : data availability, timeline, budget



Evaluation method = f(evaluation objectives ; constraints)

“It is important to distinguish M&V and evaluation. M&V provides data and feedback as a regular basis for managing the scheme. Evaluation provides an independent and in-depth analysis of the scheme and its impacts, in order to draw recommendations.”

“The call for tenders for an evaluation has a major influence on what can be done in the evaluation. A good call for tenders can pave the way for a good evaluation and vice versa.”

*“Our experience is that when preparing a tender for an evaluation, the specifications for the evaluation should be focused on **defining clear evaluation questions**. The choice of the evaluation methods to answer these questions should be up to the bidders. This makes possible to compare offers with different methodologies.”*

Quotes from the case on the Danish EEO scheme



Evaluation method = f(evaluation objectives ; constraints)

Issues for discussions:

- ✓ Statistical methods (e.g., comparing participants and control group) often recommended as best practices, but not frequently used in the cases analysed + many difficulties encountered (data access, sample size, matching samples, ...):
→ did you experience the same?
- ✓ Based on your experience, are evaluation methods mostly chosen based on evaluation objectives? or on practical constraints? (or iterative process?)



- ✓ “Reliable” does not mean 100% accurate, but clear and accurate enough to set the basis for decision making / stakeholders’ confidence
- ✓ Identifying the most relevant data for collection is a continuous process
- ✓ Regular monitoring and ex-post evaluations are complementary
- ✓ No method is the silver bullet or gold standard: compare to validate
- ✓ Assessing net impacts (when appropriate) can be challenging
- ✓ Communication about evaluation results/conclusions can be as important as the evaluation itself

→ Key messages to be further refined and complemented with the upcoming case studies, then summarized in a report

Comments and suggestions are welcome !



- Geographical coverage & applicability from lessons learnt from one country to another
- Role of indicators: definition and documentation issues (with focus on energy savings)
- Adjustment effects (coverage and frequency)
- Comparison between the Knowledge Base conclusions and the summary of the Case Studies
- „Checklist” for evaluators
- How do evaluators choose evaluation methods, based on type and availability of data?

→ What issue(s) would you be interested in? (what would be your priorities?)