ONE SIZE FITS ALL?

Emerging challenges to harmonising energy efficiency evaluations in a changing policy arena

Energy Evaluation Europe 2020 London, 29.06.2020 (would have been) Virtual Conference, 10.03.2021 (actually is)

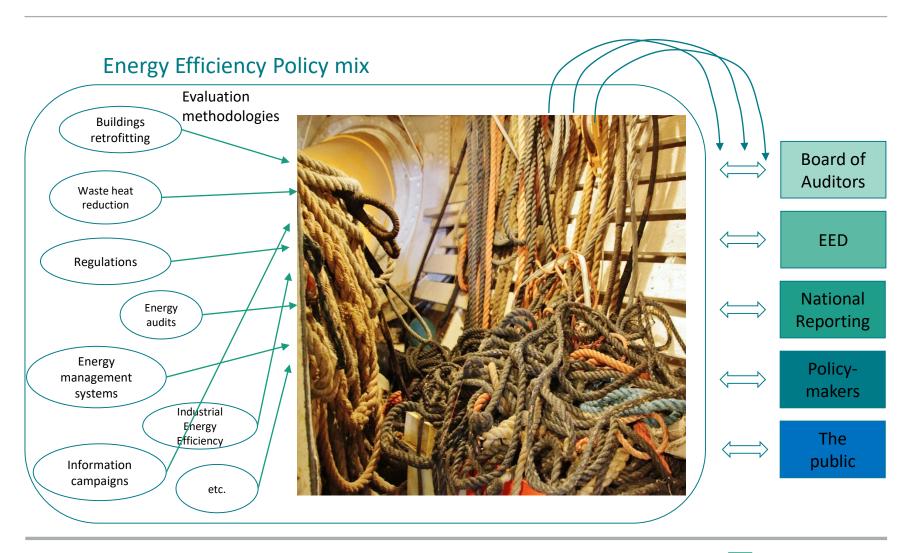


Fabian Voswinkel

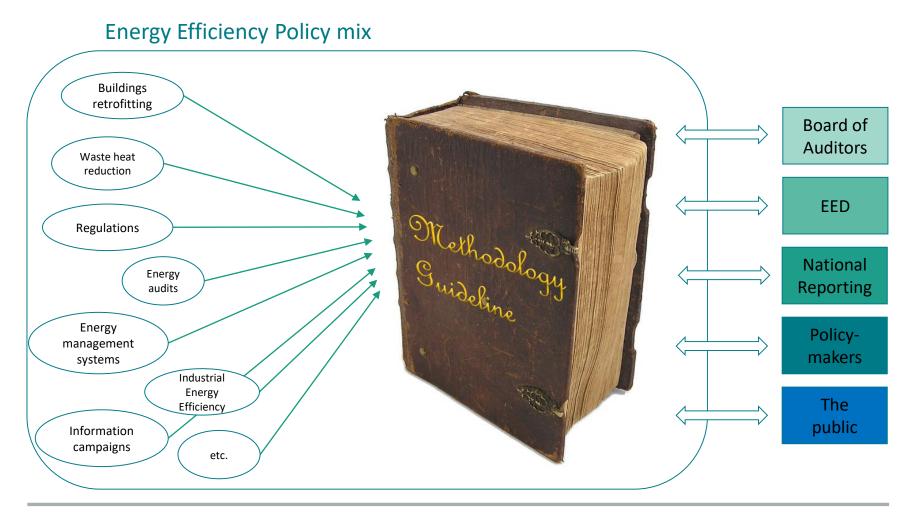
Researcher in Energy Efficiency Fraunhofer Institute for Systems- and Innovation Research ISI Karlsruhe, Germany

fabian.voswinkel@isi.fraunhofer.de

Introduction - Baseline scenario



Introduction - Guideline scenario



What is the Guideline?

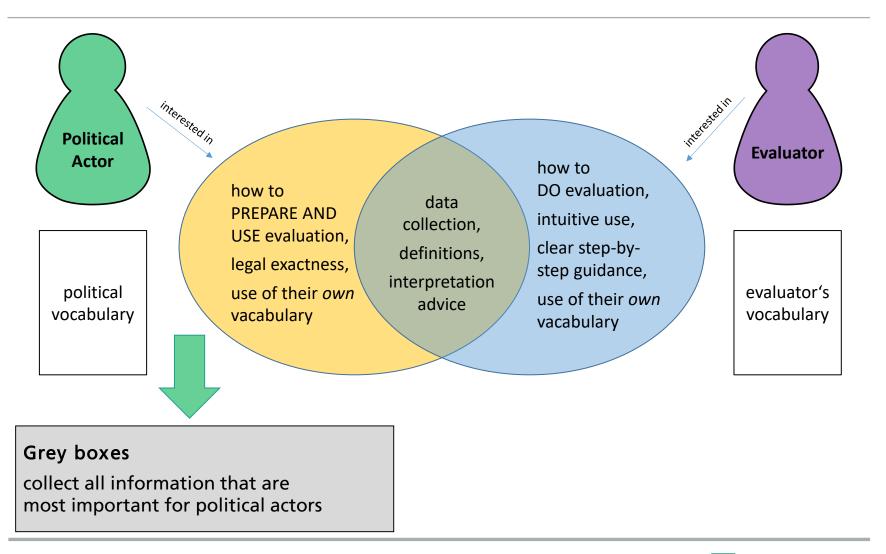
The **Methodology Guideline** is a mandatory guidance document for energy efficiency policy evaluations of the German Ministry of Economic Affairs and Energy (BMWi). It was released in 2020

Here's what it does...

- (1) Make evaluation comparable
- (2) Make methodologies understandable
- (3) Define common methods in three key areas
 - a) Objectives
 - b) Indicators
 - c) Data collection and analysis
- (4) Stay realistic and open for different policy characteristics

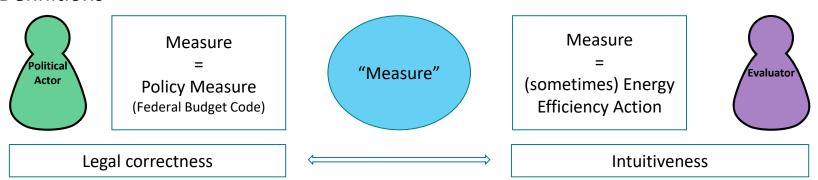


Challenges appeared...

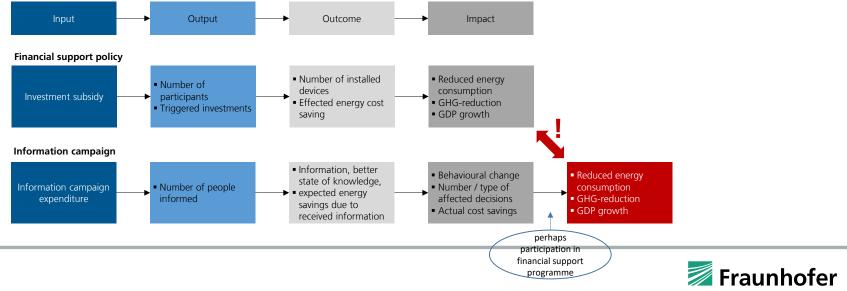


So what's in the Guideline?

Definitions

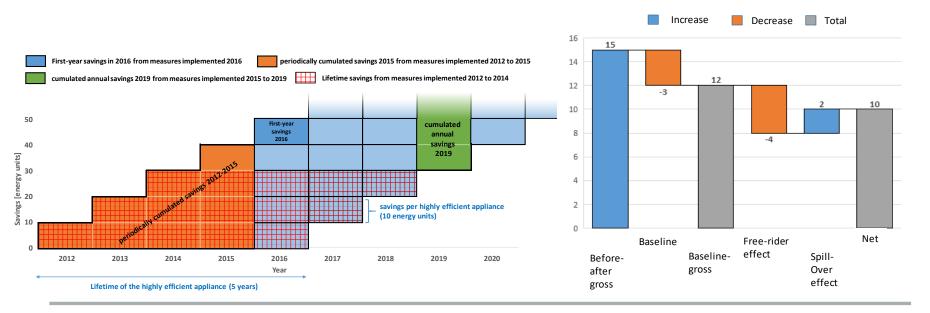


Target System



So what else is in the Guideline?

- Cross-cutting aspects
 - CO₂-factors, primary energy factors, energy prices, participant characteristics
- Indicators
 - Grouped into target achievement, impact assessment, assessment of cost-effectiveness, administrative performance and miscellaneous
 - Recommended indicator set and many additional non-binding suggestions
- Other methodological details





Caution! Pitfalls

- Flexibility in cross-cutting aspects
 - e.g. periodically cumulated savings: Can be done for evaluation cycles or for fixed cycles like the EED (2014 to 2020 and 2021 to 2030)
 - e.g. PE-factors, CO₂-factors, energy prices ... vary over time, place, sector
 - e.g. Definition of SME may be different for different use cases
- Learning effects
 - Evaluators learn...
 - ...and so do other evaluation stakeholders
 - That means priorities change and evaluation methodologies have to adapt
 - Lesson learned: Mostly stick to recommendations and suggestions instead of fixed rules
- Joint effort on data collection
 - Guideline helps policy implementers to know beforehand what evaluators need

Caution! more Pitfalls

- Timeframe attribution
 - attributing (energy / emissions / energy cost) savings by
 - application date?
 - acceptance date?
 - physical implementation date?
- Interpretation
 - Paradox effect of unified methodology
 - suggests that all results can be directly compared and interpreted
 - Advice on interpretation and limits to interpretation given in grey boxes.
- Free-rider effect
 - One of the most critical aspects of evaluation
 - Different methods with different pro's and con's
 - All have uncertainties
 - Interpretation and communication advice is necessary

in a box!



Did I make it in time?

Thank you for your attention!

- Do you have questions?
- What are your experiences with unified methodologies?
- What other challenges are on your mind?
- How would you solve such challenges?

Fabian Voswinkel

Researcher in Energy Efficiency Fraunhofer Institute for Systemsand Innovation Research ISI Karlsruhe, Germany

fabian.voswinkel@isi.fraunhofer.de

