



# Lessons from Implementation of the Energy Efficiency Obligations (Art. 7 EED) and the role of evaluations

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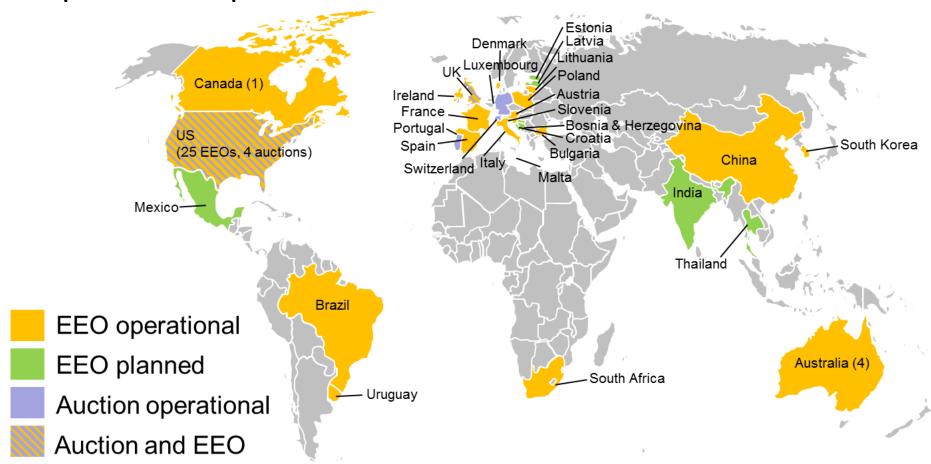




## **Global status**



#### 48 operational and 6 planned

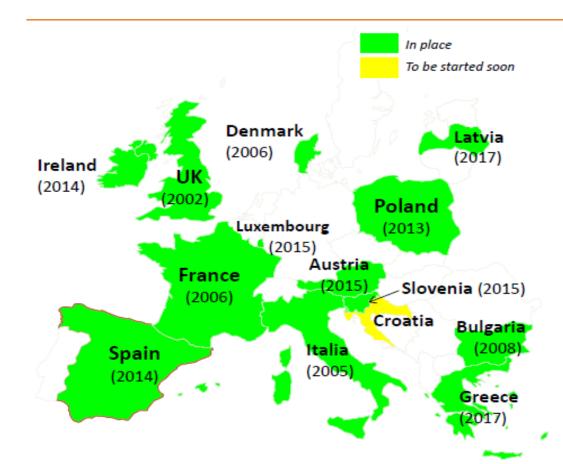


Source: RAP 2016, Rosenow 2016



## Status in the EU





Source: Broc 2017

- Trading only in 3 MS
- Obligations on suppliers (2 MS distributors)
- All EEOs use buy-out options
- Penalties differ

Compliance with Article 7 requirements is proposed through either:

- EEO scheme (4 countries: Bulgaria, Denmark, Luxembourg, Poland)
- Combination of EEO schemes & Alternative measures (Austria, Belgium, Croatia, Estonia, France, Ireland, Italy, Latvia, Lithuania, Malta, Slovenia, Spain, UK, Greece)
- Alternative measures (10 countries: Chez Rep., Cyprus, Finland, Germany, Netherlands, Portugal, Romania, Slovakia, Sweden).
- 58% of the EU 28 final consumption

#### **NEWS...**

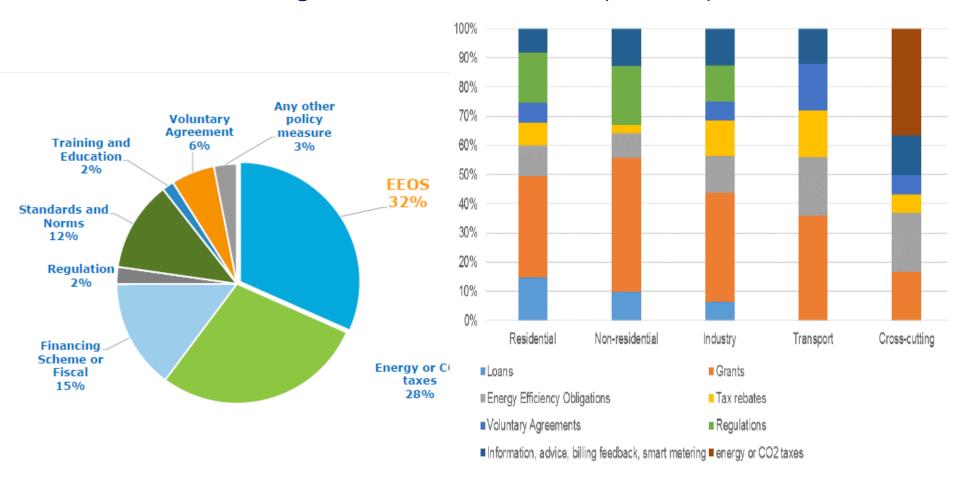
- Estonia: alternative measures only
- Lithuania: Voluntary agreements (new EE law 2016)
- Malta: Scheme under revision



## **Early evaluation findings (2015)**



28.5 Mtoe reported savings / 15 MS reported more savings than plan/ 5
 MS close to the target/ 8 MS underachieved (EC 2017)





## **Lessons from EEOs**



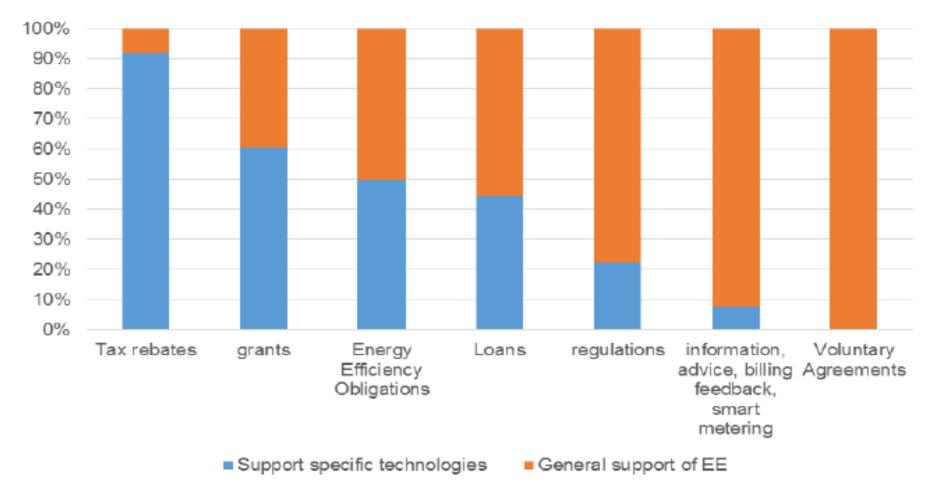
- No two EEOs are the same!
- ⇒ Number and type of obliged parties (distributors or retailers; type of energy supplied), eligible sectors/projects, monitoring, fund raising mechanism, metrics for target setting...
- EEO delivered substantial improvements in energy efficiency
- ⇒ Now important components of the national policy mix.
- EEOs developed incrementally: start with low target, and growing targets over the years, allowing a "learning" period for subject under the obligation.
- Majority of savings from cost effective savings reaching large numbers of beneficiaries.
  - ⇒ Flexibility of EEO as a policy instrument,
  - ⇒ Adaptability to national circumstances and policy priorities.



## **Shift towards EEOs**



Uncertainty in achieving targets with existing instruments





## **Effectiveness**



- The deemed savings can be applied mainly to homogeneous target groups (for instance household appliances, highly standardized and replicable technologies)
- Use autonomous improvements (estimated in number of years and compared to market and technologies autonomous developments) and update baselines periodically (for instance with energy price effects, disposable income, technology costs, penetration rate, awareness trends)
- Technology list to be technologically neutral and to avoid producing deemed savings that my favour very few technologies manufacturers
- Verification needs update with free-riders and rebound effects
- Eliminate competition to ESCO development



## **Efficiency**



- Start with modest levels of savings, increasing in ambition level over time, learning from early phases and re-designing the EEOS to be more efficient and effective
- Trial period with low savings targets, so that obligated parties can get used to the target idea
- majority of savings will originate from low cost energy measures in the residential sector, no retrofitting
- Opening the scope (as for instance Industry for Denmark, or fuel suppliers in France) can help achieving a more ambitious objective
- introducing tools and incentives to support third party financing, among which there is the guaranteed fund introduced in the transposition of the EED directive



## Hints on additionality



- Focus on those measures that are most robust in terms of monitoring, reporting and verification, like subsidies, voluntary agreements
- Mixture of instruments is often used to realize savings in the building sector.
   Double counting can be managed by assigning all savings to one particular instrument.
- In a business-as-usual scenario (without article 7), less savings than the EPBD are expected.
- Article 7 measures could generate savings that fill the EPBD compliance gap.
- Assuming that the savings of behavioural measures last only for 3 to 5 years, it
  is not likely that the savings still count by 2020. Therefore, use only
  behavioural measures, if really needed.
- Strong need for harmonized, simple accounting rules & uniform process to estimate savings from valid measures.



## **Cost recovery options and costs**



Figures out of early evaluation (capital and administrative costs)...

- France: 0.4 Eurocent / kWh
- Denmark: 0.45 Eurocent / kWh
- Italy: 1.7 Eurocent / kWh
- UK: 0.7 Eurocent / kWh

(Lees 2012, Rosenow and Galvin 2013)

Country	Administrative Costs (% of overall programme costs)
UK	0.2%
Denmark	0.3%
France	0.4%
Italy	1.4%

BELOW energy price so highly cost effective!

#### **NO BLUEPRINT**

**Key Factors:** Enough time for learning!! Involve stakeholders right from the beginning!!



## **NEED FOR EVALUATION!!! WHY?**



"Policies are living creatures and need to be adjusted periodically to take into account changes in context, markets, policy priorities, etc. A timely evaluation can provide the necessary basis for this"

"The success factors of this well-working policy measure have been good monitoring and evaluation, strong results and communication of results."

"One may have **fear** to do an expost 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"

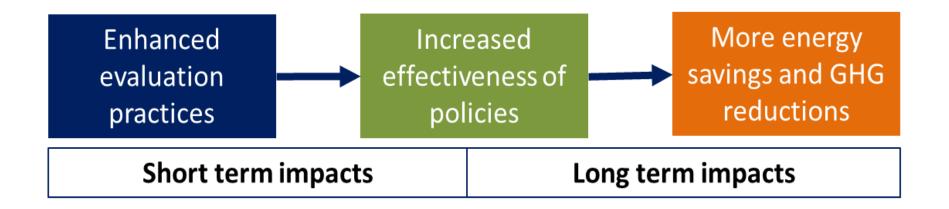
"There were no more questions about the rationale or interest to implement this scheme. At the opposite, the questions were about how to make the scheme grow."

Quotes from interviews with policy makers and evaluators



## WHAT FOR?





## **EPATEE's main concept:**

Improving evaluation practices help bridging the gap between the need for effective policy making and the lack of data and analysis about the impacts.



## **EVALUATION & ARTICLE 7**



# Examples of evaluation uses (for EEO schemes and/or alternative measures):

- ✓ Providing an evidence base for revision/update of policies
- ✓ Assessing cost-effectiveness (both at policy and action level)
- ✓ Better understanding of additionality
- ✓ Improving EEO's targeting (eligible action types; prioritization factors)
- ✓ Identifying needs for quality insurance/requirements
- ✓ Assessing stakeholders' satisfaction/getting feedback
- ✓ And much more!
  - → But for an evaluation to be successful (= used), it needs legitimacy/trust = good enough data & methods + transparency

EPATEE provides support for results to be documented, and for evaluations to be as effective as possible



## **EVALUATION & ARTICLE 7**



### **Concrete examples:**

- ✓ **Denmark**: new rule from 2012 that actions with a payback time of less than 1 year cannot receive a grant; use from 2010 of prioritization factors to favour actions with longer lifetime
- ✓ UK: the National Energy Efficiency Data-Framework provides a strong basis to evaluate the impacts of EE actions in dwellings, and gives a better understanding of how policy options will impact on the different households' categories
- ✓ **Finland**: identification of the sub-sectors where the commitments of stakeholders were lower (voluntary agreements), and how this could be improved (e.g., specific support for SMEs)
- ✓ Italy: Thermal Account scheme had a difficult start and is now performing better after it was revised based on an evaluation
  - Think about what would it cost not to make evaluations?

## **EPATE** Challenges for Article 7 policies ahead



- Continue to deliver savings (...2030) and impacts of changing rules on energy savings calculations
- Move focus from the building sector
- Ensure a proper communication towards potential beneficiaries
- Limit impacts on energy prices while removing risk from obligated parties
- Increase the scheme efficiency
- Achieve balance between rules and procedures
   Especially through minimizing administrative burder on MRV procedures..

Issues of energy poverty...



Event and date 1





#### Thank you for your attention!

More information at:

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