



# ENSMOV insights on MRV schemes

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# ENSMOV

## objective



To facilitate and expand sharing of knowledge and experience amongst Member States for the implementation of policies under Article 7 EED



To develop a suite of tailored resources and tools for the implementation of Article 7 EED to address the specific needs of Member States



To assist national authorities' in-house monitoring, reporting and verification (MRV) schemes with a view to ensuring they have robust data and insight to inform the (re)design of policies towards 2030

# An MRV scheme must

The automation of the monitoring process through IT platforms is a success factor in many EU countries.

- In Austria the Austrian Energy Agency owns its e-Government online application for the Energy Efficiency Act.
- In Croatia we can see the SMiV (System for Monitoring and Verification of Energy Savings), platform in force since 2015 and frequently updated during the years. All the steps for an effective MRV are provided through the platform.
- In Ireland the Energy Credit Management System (ECMS) manages the MRV process from uploading data to credit validation.
- In Italy, a platform has been implemented to collect White Certificates projects, updated due to changes in the regulatory framework.

- Simplify data collection (OP & administrative)
- Reduce costs (administrative burden)
- Data security
- Possibility of analysis
- Automate the monitoring process

Use IT tools when:

- High number of reporting parties
- Lack of expertise from market players and administration
- Need for analysis of data (quantitative and qualitative)
- Need for automation for monitoring



# Cost drivers for MRV

- Number of participants
- Eligibility criteria
- Documentation and reporting requirements
- Calculation of energy savings
- Data collection process
- Verification and evaluation

Clear and transparent rules in relation to MRV need to be adequately communicated to all actors. This is a prerequisite for lowering the administrative burden of MRV in all kinds of energy efficiency schemes. Including the actors in the process of defining the last four drivers is advisable. It is equally important to provide actors with sufficient information in a timely way when starting a new policy in order to avoid confusion, poor data quality and ultimately, less solid energy savings

# Number of participants

- **Balance the additional costs** of involving more participants in a scheme against the value added of involving them to come to a cost-effective solution. This recommendation mainly applies to EEOS, e.g. in subsidy schemes, the aim would be to have at least enough applicants to distribute the budget available.
- For an EEOS, **avoid obligating too many small companies**, as they will face and trigger administrative costs, which will not be compensated by the additional savings of these companies.

## Topics for consideration

- How many participants should participate in the scheme?
- How many of them have to be involved in MRV?
- What would the effect be if this number were reduced?
- If necessary, how can the number of participants be decreased/increased?

# Eligibility criteria

**Evaluate all eligibility criteria** against their added value to the scheme and assess the possibility to control them and the cost of monitoring them.  
Ensure good **communication of the eligibility criteria** to participants.  
Empirically, a majority of the scheme participants struggle with this topic.

## Topics for consideration

What are the eligibility criteria for the scheme?

For each criterion: is this criterion indeed necessary to secure the effectiveness of the scheme?

For each criterion: how will the criterion be controlled?

For each criterion that cannot be controlled or only be controlled at a very high cost: what are the alternatives?

# Documentation and reporting requirements

- **Avoid requiring redundant documentation:** the documentation requirements should prove that the actions were delivered to the quality standard intended by the underlying policy measure.
- Anticipate the data needed by the public authority to **verify and report savings before defining the reporting requirements** for participants.
- Provide **standardised reporting procedures** and templates.
- Consider if it is possible for participants to collect the requested documentation and the **level of effort** it will require.
- Ensure good and clear communication of the documentation and reporting requirements to participants.

## Topics to consider

- What documentation is necessary to prove the implementation of actions and to secure the quality of the scheme?
- What documentation needs to be submitted to the authority and what part can be kept for in-depth audits?
- What amount of energy savings can be attributed to the policy measure?

# Data collection process

Install an online tool/platform for the reporting and monitoring of implemented actions.  
Define the data collection process and the monitoring and verification process before implementing an IT solution.

Topics to consider:

- Is an automated system/reporting platform feasible for the scheme?
- Is an automated system/reporting platform cost-efficient for the scheme?
- What are the detailed requirements for an automated system/reporting platform?
- Who should be involved in the development of the automated system/reporting platform?



# Verification procedures

## Three step-approach

- Automated plausibility checks of the data submitted to identify actions that do not meet the required standards
- In-depth desktop checks of a representative sample of actions – the sample should be representative with respect to the types of measures, the savings volume of actions, sectors, etc.
- On-site checks of implemented actions are recommended. It is advised merely to visit actions that do meet the quality requirements. The reasoning behind that is that actions that do not meet the quality requirements after an in-depth desktop check should not be rewarded with an additional chance of correcting during the on-site check. The check sample of the energy efficiency actions that do meet the quality requirements could be completely random. However, some requirements with respect to e.g. regional distribution of on-site checks could be made.

## Examples

Comparisons with former reporting periods

Analyses of unrealistic deviations from typical or average values

Example: The typical power consumption of a LED (800 lumen) lies in a range of 6 to 9 Watt.

Cross-checks within a data set or reporting form to identify inconsistencies

Cross-checks between data sets or reporting forms to identify double counting (finding energy-saving actions with same attributes)

Example: two identical energy-saving actions at the same address

Cross-checks with aggregated information of all data sets or with market information

Example: The thermal output of reported heat pumps substantially exceeds the average thermal output of heat pumps sold on the market.

# ENSMOV related resources

An MRV system in the course of the implementation of Article 7 means the demonstrable tracking of additional implemented individual energy saving actions to reduce final energy consumption.

- ✓ An overview of the contents to be considered when setting up a Monitoring, Reporting and Verification (MRV) system for Article 7 of the Energy Efficiency Directive (2012/27/EU – EED).
- ✓ A report on how to set up MRV scheme: [https://article7eed.eu/wp-content/uploads/2022/03/MRVGuide\\_AEA\\_Final20211108.pdf](https://article7eed.eu/wp-content/uploads/2022/03/MRVGuide_AEA_Final20211108.pdf)
- ✓ [www.article7eed.eu](http://www.article7eed.eu)



- ✓ A workshop on the topic: <https://youtu.be/zwYCzXyZZj8>





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