Lessons learnt from applying the streamSAVE methodologies in 10 countries

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streamSAVE final Dialogue meeting
'More energy savings? Yes, we can!'
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Capacity Support Facility

- **Objective:** Provide actual support to partner MS for:
  - **Assessing the streamlined calculation methods and the defined indicative values** through their application in concrete cases.
  - **Testing the use and the contents of the stream SAVE platform** in priority action working groups.

The consortium supported on average 2 cases per MS, MS with less experience and lack of resources have more requests.

Austria Belgium Croatia Czech Greece Lithuania Netherlands Portugal Slovenia Spain

Capacity Support Facility

- Focus on **technical issues of the energy savings actions** providing the capability to each country to improve the **implementation** and **reporting** on energy efficiency **policy measures under Article 3 and Article 7 of the EED.**

BUILDING AUTOMATION & CONTROL SYSTEMS

REFRIGERATION SYSTEMS

LIGHTING SYSTEMS

ELECTRIC VEHICLES

HEAT RECOVERY

SMALL-SCALE RENEWABLE CENTRAL HEATING

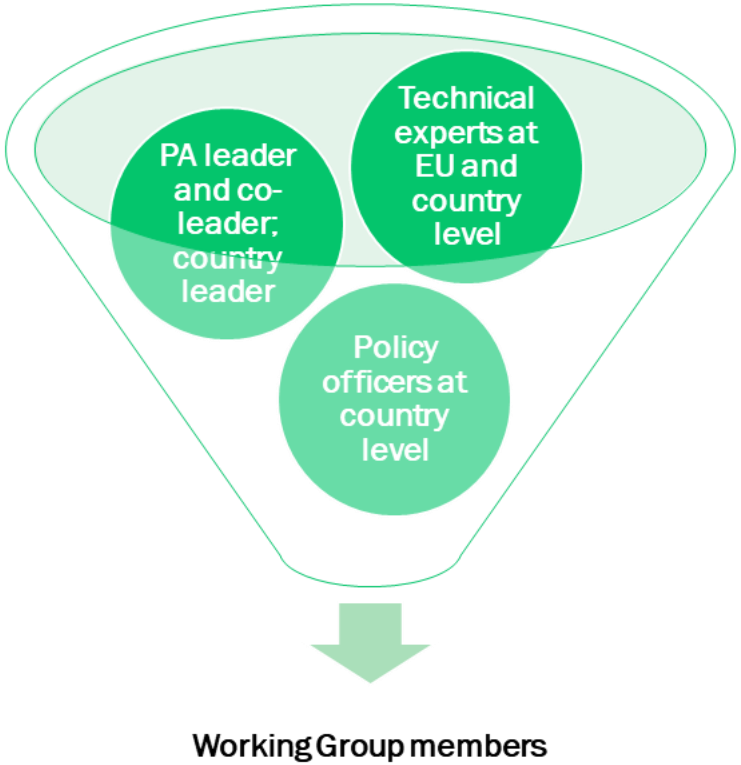
ACTIONS TO ALLEVIATE ENERGY POVERTY

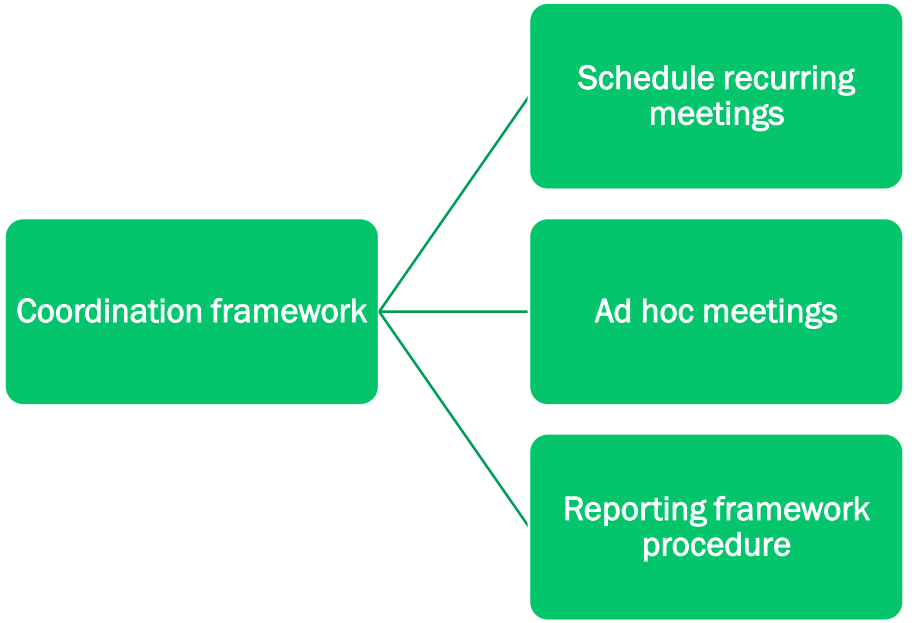
REPLACEMENT OF ELECTRIC MOTORS

BEHAVIOURAL CHANGES

MODAL SHIFT FOR FREIGHT TRANSPORT

The working groups





Impacts triggered

30 policy officers have participated into the implemented activities

18 public bodies or organizations were involved

31 workshops

14 meetings were organized

30 energy efficiency policies will be affected potentially related to the priority actions

Lessons learnt by CSF: Building Automation and Control Systems

- **Difficulties in applying** the developed BACS methodology to the **national circumstances** for the case of **non-residential buildings** due to the **lack of non-standardized calculation values** on the total floor area and final energy demand of the different types of the buildings in the tertiary sector.
- Considerable **usefulness of BACS method**, e.g., BACS factors before and after implementation of an action, both for new installation and upgrades of BACS, while the provisions of Art. 14 and 15 of the EPBD are also considered.
- Focus on the **development of specialized data collection procedures** to collect national reference values for the implementation of the developed methodology.
- Facilitate the **access to existing data sources**, which are not easily accessible.

Lessons learnt by CSF: Electric vehicles

- There is **non uniform practice** among MS in relation to evaluate energy savings, in particular:
  - **concerning practicalities,** such as conversion to soft modes, hypotheses of scrapping and import percentages;
  - **compliance with the additionality criteria**;
  - discrepancies of the **actual lifetime of vehicles** with the theoretical ones as specified in the respective legislative documents.
- **Lack of a standardized and robust data exchange procedure** is transversal among the countries and the **existing data sources are not easily accessible**.
- There is a need to establish a **standardised data collection mechanism** based on a **robust and independent monitoring and verification structure**.

Lessons learnt by CSF: Heat recovery

- **Higher preference on deemed method** compared to the metered method in order to **minimize the administrative burden** and **facilitate the calculation of the energy savings**.
- The implementation of deemed methods is not easy due to the **difficulty to specify indicative values** for the different types of industrial units and the **application of metered method** for energy efficiency interventions in the industrial sector is suggested.
- There is a need for more **information on the required control and verification procedures** focusing on the **specifications of the metering systems** for the case of metered method.

Lessons learnt by CSF: Modal Shift for freight transport

- A **deemed method is acceptable** to **minimize administrative costs** and **facilitate the calculation of the energy savings**. But the developed streamSAVE methodology is more a top-down than a BU method.
- There is a **lack of national data** hindering the actual evaluation of the developed methodology.
- More support was requested about **the required control and verification procedures** focusing mainly on the **determination and approval of the shifted tonne-kilometres**.
- Need to **establish a procedure to collect data for assessing the delivered energy savings**, such as the consumed energy, the type and quantity of goods transported, the tonne kilometres travelled and other factors which may affect consumption.

Lessons learnt by CSF: Modal Shift for freight transport

- The **energy saving potential delivered is rather competitive** taking into consideration the required costs and the foreseen energy savings.
- It is recommended to take into consideration **various parameters** (e.g., by means of a multi-criteria analysis), such as **various restrictions** (route of the rail network) and the **destination country and region** in the country since these parameters may influence the economic viability of modal shifting.
- Need to **understand what are the drivers and barriers** for modal shift for freight through the conduction of a **targeted survey** to assess why logistic operators do not use rail or combine different means of transport and keep using mainly trucks.

Lessons learnt by CSF: Early motor replacement

- The **adaptation of the existing national methodologies** can be achieved by **improving slightly** both the **calculation formula and the indicative values** of the streamSAVE calculation methodology.
- The **proposed indicative values are useful for the cost-benefit analysis** of early motor replacement using a more sophisticated methodology (ROI) calculation instead of using another conventional approach (e.g. payback period).
- It is recommended to **extend the scope of the interventions** beyond the replacement of the motor alone and include careful consideration and analysis of **other parts of the drivetrain** (e.g. variable speed drives, etc.).

Lessons learnt by CSF: Behavioural measures

- The **comparison of the streamSAVE calculation methodology** with an existing methodology revealed **minor differences**.
- There is a **vast list of behavioural measures** and therefore a BU methodology is difficult to apply if there is no standardization of the type of measures.
- Need to **standardise the type of the educational and counselling measures** to be able to uniform parameters for the calculation of the delivered energy savings using a BU methodology.
- Mainly **discrepancies were found in the assumed lifetime** of the measures, highlighting the need to provide common values for all MS.

Lessons learnt by CSF: Energy Poverty

- The **developed streamSAVE calculation methodology** can be used to **assess the energy savings for different types of measures** (such as interventions in the building envelope and awareness-raising measures), which will be implemented in buildings occupied by energy poor households.
- The streamSAVE calculation methodology requires the **collection of data, which are not easily accessible and available** for the case of energy poor households highlighting the need to **establish appropriate data collection procedures**
  - The collection of specific data is problematic for the area of the improved building component, the space heating and hot water demand, the conversion efficiency of the reference heating systems and the U-values of the building components.
- The **definition of energy poverty** needs to be analysed to **include other parameters** than the income though energy poverty indicators so as to facilitate the **targeted monitoring** of the involved energy poor households.

Lessons learnt by CSF: Small-scale renewable energy technologies

- The streamSAVE calculation methodology facilitates the **comparative analysis of the different small-scale RES technologies**.
- The **European average indicative values** provided by streamSAVE constitute a **solid basis for comparing the obtained results with the existing methodologies at national level**. However, to obtain more accurate results it is **recommended to use national values** for the parameters in the savings calculations.
- Need to **expand the streamSAVE calculation methodology** using typical values for the **cooling demand** and the efficiency of existing and new cooling technologies.
- **Lack of data on cooling demand**.

Lessons learnt by CSF: Horizontal issues

- The methodologies can improve the **coordination of required MRV procedures**, by streamlining **cooperation of the different bodies** being responsible for monitoring the implemented energy efficiency measures **in different units**.
- The **development of a bottom-up methodologies** and related, indicative values, will contribute to improvements on:
  - Determination of the **national calculation values**
  - Collection of the **required data**
  - Conduction of **monitoring & verification procedures** and compliance with **quality requirements**.
  - Fulfilment of **EED reporting obligations**
- The potential integration of the developed bottom-up methodologies will **motivate** both the obligated parties and the responsible authorities of alternative measures to **design and implement energy efficiency measures**.

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Thank you

Get in touch for more information!

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