

New resources for the implementation of Article 7 EED

Lessons learnt about savings calculations and M&V

H2020 session - streamSAVE and ENSMOV

CA EED Lisbon, 23rd March 2022



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Agenda

Duration		Speaker / moderator
11:00-11:05	Welcome and introduction of the H2020 session	Ulrike Nuscheler and Martin Eibl (CINEA)
11:05-11:15	Overview of lessons learnt from streamSAVE about implementing energy savings calculations & related EU-wide indicative values in multiple countries	Nele Renders (VITO) and Christos Tourkolias (CRES)
11:15-11:25	Lessons learnt about M&V practices from ENSMOV	Vlasis Oikonomou (IEECP)
11:25-11:45	Small group discussions about issues encountered with energy savings calculations and M&V	Moderated by Nele Renders, Christos Tourkolias, and Vlasis Oikonomou
11:45-11:50	Sharing main points from each group	1 rapporteur per group
11:50-11:55	Introducing the new selection of Priority Actions under analysis in streamSAVE, and the replication activities	Nele Renders
11:55-12:00	Other recent outputs from ENSMOV and upcoming activities	Ivana Rogulj (IEECP)
12:00-12:15	Small group discussions about enabling and success factors to reach new savings potentials with Article 7 policy measures	Moderated by Nele Renders, Christos Tourkolias, and Vlasis Oikonomou
12:15-12:20	Wrap-up	Ulrike Nuscheler and Martin Eibl

Introduction

Nele Renders, VITO/EnergyVille



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



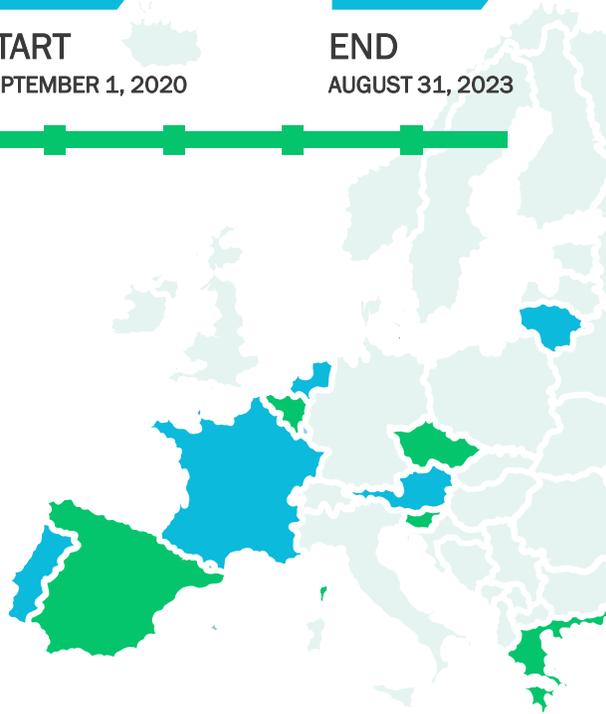
Who are we?

2020

START
SEPTEMBER 1, 2020

2023

END
AUGUST 31, 2023



COORDINATOR



12 PARTNERS
10 COUNTRIES

RESEARCH & POLICY INSTITUTIONS



ENERGY AGENCIES OR RELATED



KAPÉ
CRES

LIETUVOS
ENERGETIKOS
AGENTŪRA



CONNECTORS TO MARKET & TECHNOLOGY ACTORS





What do we aim for?

Address additional efforts in EU Member States in realizing energy savings by 2030 under Article 3 & Article 7 of EED:

*streamSAVE builds capacity through the creation of an **open dialogue** focusing on streamlining **calculation methodologies** to estimate bottom-up savings and cost effectiveness of technical energy savings actions. The project targets **priority actions** i.e., new actions with high energy saving potential and considered as a priority issue by national public authorities.*

 **GUIDANCE ON STANDARDIZED SAVING METHODOLOGIES**



BUILDING
AUTOMATION
& CONTROL
SYSTEMS



REFRIGERATION
SYSTEMS



LIGHTING
SYSTEMS



ELECTRIC
VEHICLES



HEAT
RECOVERY



In short, what do we stand for?

- ❖ Streamlining **energy savings methodologies**, incl. indicative values and cost effectiveness
- ❖ Technical **priority actions**: high energy savings potential and considered as priority by national public authorities
- ❖ **Demand-driven**: being close to and supporting stakeholders' needs within EU Member States
- ❖ Creating **lively community of experts** on priority actions
- ❖ Building **bridges towards existing initiatives** to valorize streamSAVE outcomes.

Lessons learnt on implementing energy savings calculations & related EU-wide indicative values in multiple countries

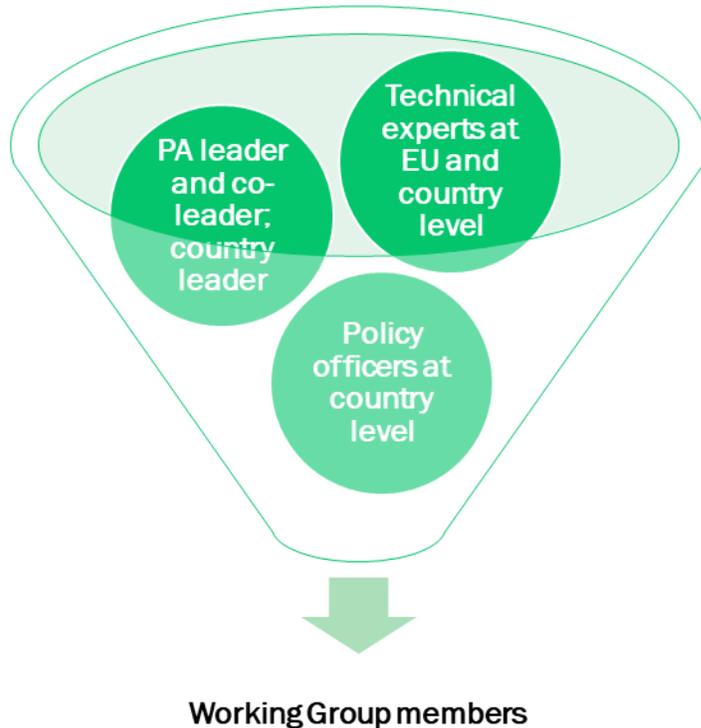
Christos Tourkolias, CRES



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Capacity Support Facility (CSF)



The **Capacity Support Facility (CSF)** focused on technical issues of the energy savings actions providing the capability to each country to apply the savings methodologies for concrete policies or measures, as well as to test Training Module of the streamSAVE platform for the selected Priority Actions in order to improve the implementation and reporting on energy efficiency policy measures under Article 3 and Article 7 of the EED.

Country	Selected PA for the first cycle
Austria (AT)	BACS
Belgium (BE)	Electric Vehicle
Czechia (CZ)	Heat recovery
Croatia (HR)	Heat Recovery
Greece (GR)	Heat recovery
Netherlands (NL)	Electric Vehicle
Lithuania (LT)	BACS
Portugal (PT)	Electric Vehicle
Slovenia (SI)	BACS
Spain (ES)	Electric Vehicle



Addressed technical issues within the CSF

Technical aspect	BACS			Electric vehicles				Heat recovery		
	AT	LT	SI	BE	NL	PT	ES	CZ	HR	GR
Baseline				X	X	X	X	X	X	X
Data collection or assessment of monitored data	X		X	X		X	X	X	X	X
Energy savings based on deemed streamSAVE methods	X	X	X		X	X	X		X	X
Cost effectiveness							X		X	X
CO ₂ savings		X			X		X		X	
Behavioural aspects			X						X	
Calculation of rebound, spill-over and free-rider effects									X	
Article 3					X			X	X	
Article 7	X	X	X	X		X	X	X	X	X
Streamlining between Article 3 and Article 7										
Screening and initial assessment of promising technical savings actions			X	X					X	X
Adapting or improving existing practices from the other MSs on calculation methodologies or indicative values		X	X		X	X	X		X	X
Reviewing existing calculation methodologies					X			X		
Other issues and targets	X		X	X		X	X			



Impacts triggered by 1st round of PAs

26 policy officers have participated into the implemented activities representing 15 public bodies or organizations

14 workshops and 11 meetings were organized

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



Lessons learnt by CSF: BACS

- ❖ 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., BAC 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

- ❧ Compare the resulted savings based on the streamSAVE calculations with the national ones to increase the reliability and accuracy of both savings methodologies.
- ❧ More focus on the compliance with the additionality criterion and the promotion of soft modes of transport should be promoted
- ❧ Examine potential discrepancies of the actual lifetime of vehicles with the theoretical ones as specified in the respective legislative documents.



Lessons learnt by CSF: Heat recovery

- ❖ Apply metered method for energy efficiency interventions in the industrial sector.
- ❖ Focus on the required control and verification procedures and the specifications of the metering systems, in case of metered method.
- ❖ Higher preference for deemed method compared to the metered method in order to minimize the administrative costs and facilitate the calculation of the energy savings.



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
 - Monitoring & Verification procedures and compliance with quality requirements
 - 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.



Lessons learnt about M&V practices from ENSMOV

Issues encountered with energy savings calculations and M&V

Group Discussion



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Questions for discussion I

1. Sharing **experience on streamSAVE's CSF**: what have you learned when estimating your savings for specific actions during the CSF?
2. Defining the **baseline** is often a challenge in terms of **data availability**. How could you improve it? How could the use of indicative or standardized values help here?
3. Deemed savings vs metered savings methodologies:
 - When/why to use standard methods (scaled savings), standardized values (deemed savings) or measurements (metered savings)?
 - How can the reliability of deemed savings methodologies be improved? - Cf. examples BACS & Electric Vehicles, in contrast to Heat Recovery.
 - Calculations for heat recovery rely on metered data, as many EE actions for industry. Is this seen as hurdle to implement the savings action in frame of Article 7? How to quantify the savings in a manageable way?
4. Are deemed savings or **indicative values used for other purposes** (e.g., providing benchmarks for end-users to identify energy savings opportunities, national target setting, ...)?
5. Challenges in relation to **direct rebound effects** to reflect behavioral or systemic responses : good practices to share?



Sharing main points from each group

- Moderator or volunteer to summarize in 1-2' per group

2nd round of Priority Actions and replication activities

Nele Renders, VITO/EnergyVille



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Second round of Priority Actions

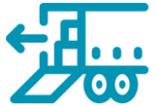
streamSAVE Feedback Survey December 2021-2022



Small-scale RES central space heating (incl. hot water)



Accelerated replacement of inefficient electric motors



Modal shift for freight transport



Providing feedback and tailored advice - behavioral changes households



Measures alleviating (also) energy poverty



Second round of Priority Actions

streamSAVE Feedback Survey December 2021-2022



Small-scale RES central space heating (incl. hot water)

Residential and non-residential
Heat pumps - Solar Thermal - Biomass boiler



Accelerated replacement of inefficient electric motors

Replacement in industry and in non-residential buildings - Upgrade of motor systems with variable speed drives



Modal shift for freight transport

From road to rail



Providing feedback and tailored advice - behavioral changes households



Measures alleviating (also) energy poverty

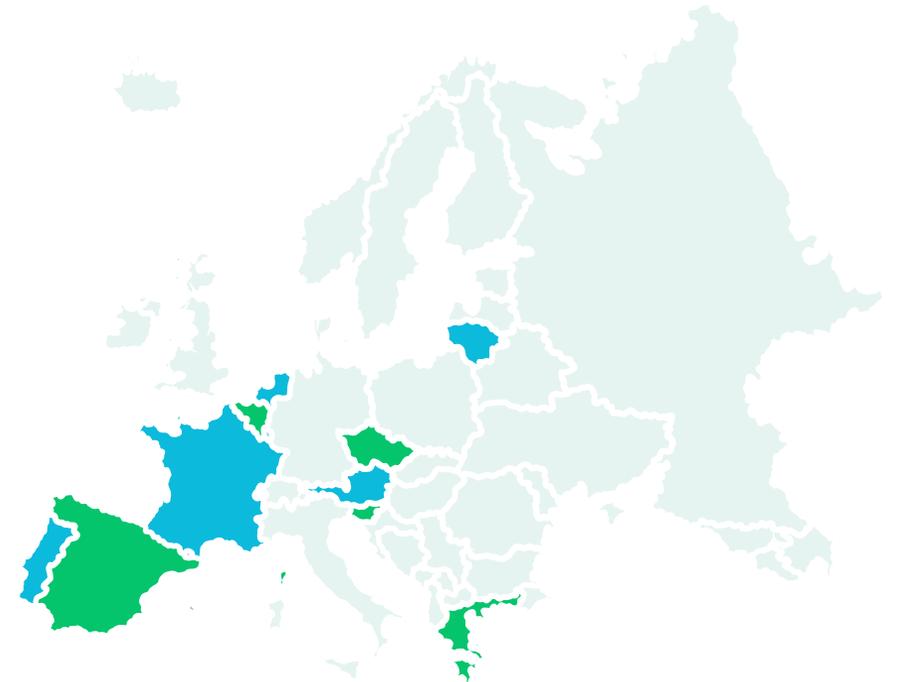


LET US KNOW IF YOU WOULD BE INTERESTED IN PRESENTING YOUR EXPERIENCE WITH ONE OF THESE ACTIONS AT A DIALOGUE MEETING . SEND EMAIL TO CONTACT@STREAMSAVE.EU OR SIGNAL TO US TODAY.



streamSAVE's outcomes in other countries

- ❖ Extension of our capacity support facility CSF to at least three non-consortium Member States.
- ❖ One-day training:
 - Practical introduction to streamSAVE platform, guidance and related templates as well as streamSAVE's lessons from CSF
 - Providing support to specific country cases on savings methodologies of streamSAVE's Priority Actions



LET US KNOW YOUR INTEREST. SEND EMAIL TO CONTACT@STREAMSAVE.EU OR SIGNAL TO US TODAY.

Other recent outputs from ENSMOV

Ivana Rogulj, IEECP



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.

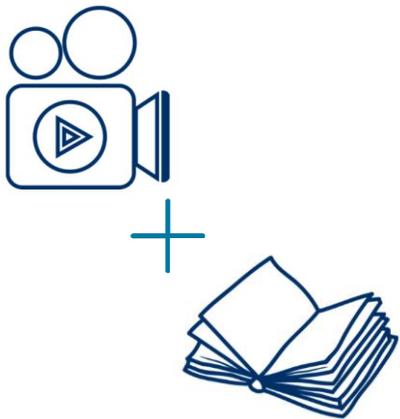


Other recent outputs from ENSMOV



Recent learning materials & exchanges covering policy implementation:

- Effects of COVID 19 on the implementation of Article 7 of the EED
- Dealing with additionality in the context of Article 7 EED
- Financial sustainability and cost effectiveness of policies in the context of Article 7 EED
- Energy efficiency funds
- Information technology (IT) tools in the implementation of energy efficiency policies
- Market mechanisms based on auction schemes
- Energy poverty and EEOS
- + national exchanges



Available @
<https://article7eed.eu/>



ENSMOV upcoming events



Energy efficiency measures to alleviate energy poverty (workshop) – *April*



Article 7 and landlords/tenants' relationship



Overlap between EPBD and EED, ban of fossil fuels and electrification



Energy and CO₂ taxation measures as part of an efficiency policy framework



SMEs and Article 7

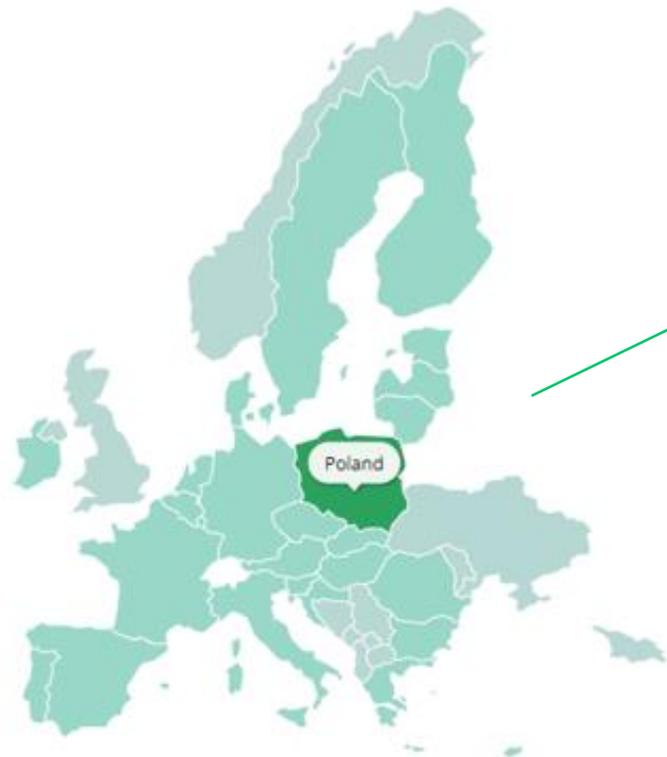


Role of rebound effects in monitoring and verifying energy savings

Subscribe to the Newsletter to receive information on events on time: <https://ensmov.eu/>



Need national information?



Poland

Read more about: [White Certificates Scheme in Poland](#)

Check the figures – savings and projections



Ask the expert:

Wojciech Stańczyk

The Polish National Energy Conservation Agency (KAPE)

wstanczyk@kape.gov.pl

POLICIES for the Art7 EED

List of EEOs or alternative measures for 2014-2020

An energy efficiency obligation scheme (white certificate scheme)

List of EEOs or alternative measures for 2021-2030

An energy efficiency obligation scheme (white certificate scheme)

Thermomodernisation and Renovation Fund

Thermomodernisation bonus

Development of public transport in cities

Status of MRV

Energy Regulatory Office is responsible for the management of the energy efficiency obligation scheme. All projects require an ex ante audit and only projects above 100 ktoe/year require a post-audit. Energy Regulatory Office has the right to organise random controls of the audit to apply penalties in case of false information presented in the audit.

Energy poverty

The introduction of changes to the Act on supporting thermomodernisation and renovation planned to enable inclusion of local governments at the municipality level in the implementation of low-emission projects targeted at the energy poor in their territory. Those could be financed from the Thermomodernisation and Renovation Fund which will make the Thermomodernisation and Renovation Fund a policy measure which takes into account energy poverty. Beneficiaries of State aid will include, in particular, persons who meet certain income and/or property criteria. i.e. State aid for thermomodernisation and renovation projects will also take into account social aspects, such as energy poverty.

https://ec.europa.eu/energy/sites/ener/files/documents/pl_final_necp_part_1_3



Long term policy results

- Development of policy briefs
- Synthesis of policy outcomes reflecting the national contexts
- Replication of the capacity building activities and sustaining the experience sharing

- Recommendations on policy implementation for Article 7 in the new era



Enabling and success factors to reach new savings potentials with Article 7 policy measures

Group Discussion



This project has received funding from the Horizon 2020 programme under grant agreement n°890147. The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Questions for discussion II

1. Looking at the action, what do you consider important to improve on the savings **methodologies and related indicative values**?
2. Would you have **good examples** to share on methodologies and indicative values to report in frame of Article 7 of the EED, for this action?
3. Is in your country the action **already covered by a calculation method** and reported to Article 7 of the EED? Or was the lack of method a barrier for this action type to be monitored and reported to Article 7 EED?
4. What would be the **barriers to overcome and the enablers to include in the design** and implementation of policy measures related to this action?
5. What **data would be essential** to collect either to set deemed savings or to monitor the energy savings from this action?

In case interested as a replication country for streamSAVE, let us know!



Thank you for your feedback

🌿 QR-code or paper version

🌿 Online participants:

https://forms.office.com/pages/responsepage.aspx?id=DqfdQsySsUeHmFHlq3ekaRyud4bS3_xMvMYwEGwDyRxUQ1E4QjMzUU5NSFVaRVFISUpZVFo0TEI5TS4u

Thank you

Get in touch for more information!



Project coordinator - Nele Renders, VITO



All project reports will be available for download on the streamSAVE website www.streamsave.eu



Email the project at contact@streamsave.eu



Follow the project on LinkedIn [@streamSAVEH2020](https://www.linkedin.com/company/streamSAVEH2020)



Follow the project on Twitter [@stream_save](https://twitter.com/stream_save)



Project Partners

