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Replication guidance

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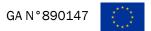
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Abbreviations and acronyms

Acronym	Description
CSF	Capacity Support Facility
EED	Energy Efficiency Directive
ENEA	Italian Innovation and Development Agency [orig: Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile] (Italy)
EWA	The Energy & Water Agency (Malta)
GA	Grant Agreement
MECI	Ministry of Energy, Commerce and Industry (Cyprus)
MS	Member State
NECP	National Energy and Climate Plan
PA	Priority Action
SIEA	Slovak Innovation and Energy Agency
WP	Work Package



Summary

This guidance is intended for policy makers involved in the design and implementation of energy saving policies linked to Article 3 and Article 7 of the Energy Efficiency Directive. It supports EU Member States in applying the streamSAVE standardized saving methodologies, without active support from project partners or any third party. The guidance draws from experiences gained when replicating the streamSAVE's outputs to 3 non-consortium Member States, namely Cyprus, Italy and Slovakia. During this replication, both the materials and the process for adopting the streamSAVE energy saving calculation methodologies were developed and tested in these countries.



Keywords

Energy Efficiency Directive, Training, Capacity Support, Replication, Priority Actions, standardized saving estimations, Guidance



Introduction

About streamSAVE

Energy efficiency is one of the five key dimensions of the Energy Union, and consequently of the Member States' National Energy and Climate Plans. The Energy Efficiency Directive sets the 2020 and 2030 energy efficiency targets and a series of measures that contribute to their achievement within the Union. The streamSAVE project streamlines energy savings calculations and provides the support needed to increase Member States' chances of successfully and consistently meeting their energy efficiency targets. The streamSAVE project specifically focuses on Article 3 and 7 of the EED which are devoted to energy efficiency targets and national energy savings obligations, respectively.

Given the importance of deemed savings approaches in Member States' EED reporting, streamSAVE focuses on streamlining bottom-up calculation methodologies of standardized technical actions. streamSAVE offers these savings methodologies in a transparent and streamlined way, not only to improve the comparability of savings and related costs between Member States (MS), but also between both EED articles. The savings actions are targeted at measures with high energy saving potential and considered as priority issues by Member States, the so-called *Priority Actions*.

More broadly, the project aims at fostering transnational knowledge and dialogue between public authorities, technology experts, and market actors. The key stakeholders will improve their energy savings calculation skills and ensure thus the sustainability and replicability of the streamSAVE results towards all European Member States.

Replication to other Member States

streamSAVE aims to ensure the long-term sustainability of its support beyond the project timeline and its replicability across Europe, extending beyond the partner Member States involved in the project. To achieve this, streamSAVE provides the necessary resources and conditions for scaling up the use of the streamSAVE platform, which serves as both a working instrument and an integrator of the streamSAVE outputs.

The resources dedicated to supporting replicability include:

- Training: Member States outside the consortium are introduced to the main outcomes
 of streamSAVE through a comprehensive presentation. This presentation covers the
 Knowledge Facility, the Knowledge Exchange via the dialogues, and the Capacity
 Support offered in the ten partner countries.
- Replication guidance [this document]: A guide is developed that assists Member States
 in implementing the streamSAVE methodologies into their own energy efficiency
 policies, thereby promoting increased energy savings for Priority Actions.

This report includes the replication guidance, which serves as a valuable resource for facilitating the replication of streamSAVE's initiatives.

What can you find in this report?

Between 2020 and 2023, ten countries involved directly in the project activities, were supported via the Capacity Support Facility (CSF) to improve calculation methodologies, and related indicative values for specific Priority Actions. The outcomes of these activities are presented in the CSF Activity Report (Deliverable D4.3). In 2023, three more countries





took part in the replication activity. For these Member States, a summary of all the streamSAVE outputs was made and basic advice was provided on how to adopt the methodologies in their country. These replication activities are described in Chapter 1.

Chapter 2 is a guidance for any MS that intends to adopt streamSAVE methodologies to enhance EED reporting and implementation of energy savings measures. It summarizes all essential resources and assists the Member State in navigating through the materials associated with the methodologies and indicative values. The chapter outlines the process of applying these resources to adopt deemed savings methods without requiring third-party assistance. Finally, the concrete policy improvements resulting from these replication activities are outlined.



Chapter 1 Training to three non-consortium Member States

1.1 Training development and countries selection

Based on the assignment described in the Grant Agreement, three-part training was considered at first (by June 2022), consisting of: (1) A one-day training in conjunction with peer-to-peer dialogue workshops; (2) an educational module and; (3) a module to work on example cases (similar to the Capacity Support Facility (CSF) done previously with project partner countries).

However, after deliberations with involved partners and first communications with possible replication countries, the structure of the training evolved. It was key to utilize to the utmost the extensive knowledge base gathered in streamSAVE and, at the same time, to offer the replication countries a content as tailored to their needs as possible. This requirement resulted mainly in focusing on a limited number of Priority Actions (PAs) and connecting the replication activities to the ongoing activities of a receiving country. At this stage (i.e., midsummer 2022), two options were considered: either to split the trainings to two or three parts for each country individually or having one joint session for all countries and one follow up session per country individually.

Regarding the selection of replication Member States, existing links with target countries and relevant institutions were to be exploited. It was decided that each country would be assigned to one single, involved partner being responsible for all communication and the foreseen activities. Thus, a separate option was selected where each target country worked with the consortium in parallel. At first, Slovakia, Croatia, Malta, Hungary, Romania, Cyprus and Italy were considered and addressed based on their participation in the Dialogue Meetings series (cf. WP3 on Knowledge Exchange), submitting a letter of intent at the start of streamSAVE and/or other links with consortium members. When contacting these countries, three countries could be shortlisted – Slovakia, Cyprus and Italy – as these showed high and specific interest into the project's support. A fourth country could also be selected, Malta, given their interests. Romania applied for assistance by the time the replication activities were concluded and, therefore, all the relevant streamSAVE resources were shared with them.

Table 1: Selected replication countries and responsible streamSAVE partners.

Country	Recipient organisation	Responsible partner
Slovakia	Slovak Innovation and Energy Agency (SIEA)	SEVEn
Cyprus	Ministry of Energy, Commerce and Industry (MECI)	AEA
Italy	Italian Innovation and Development Agency (ENEA)	CIRCE
Malta (intro)	The Energy & Water Agency (EWA)	CIRCE
Romania (resources shared)	Energy Ministry, Energy Efficiency Department	SEVEn

Cyprus

The replication activity supported the Ministry of Energy, Commerce and Industry (MECI). MECI was especially interested in using streamSAVE's Training Module. The focus on a concrete PA was decided later on in the process. At the end, MECI was supported by giving detailed insights on the developed methodologies on Electric Vehicles, Industrial and Commercial Refrigeration and Building Automation and Control Systems (BACS). Special





attention was given to the indicative calculation values and how they could be adapted in order to fit to Cyprus' national circumstances.

Italy

Again, the Training Module was of main interest for ENEA, as was the case for Cyprus. The replication activities assisted ENEA by creating a methodology quantifying the energy savings resulting from two Priority Actions: promotion of Small-scale Renewable Energy Sources for central space heating and hot water, and measures tackling energy poverty in residential buildings. Furthermore, an assessment was carried out to determine the alignment between the existing methodologies and the newly proposed ones. This evaluation also encompassed the feasibility of implementing these approaches at a national level, while identifying any necessary adjustments.

Slovakia

Slovakia's position in the replication activities was slightly different than that of other countries because the Innovation and Energy Agency (SIEA) was already a close observer of the project and participated actively in the Dialogue Meetings, Workshops and other events. Therefore, SIEA had a very good understanding of available resources. SIEA wanted to get detailed insights into the developed methodologies of Electric Vehicles, Small-scale RES and Modal shift for freight transport. Special attention was given to the indicative calculation values and calculation formulas and how they could be used in order to improve national catalogue of energy efficiency measures and to update the National Energy and Climate Plan (NECP) for 2024.

Malta

The replication in Malta consisted of a sole meeting. Though the PA Small-scale Renewable Energy Sources for central space heating and hot water was the main concern of the EWA representatives, the significance of energy poverty issues was also stressed. Similar to Italy, the assumptions of European and national indicative values, next to a broader understanding of the potential gap that may exist between the results using national values and indicative European values, were discussed.

Romania

Romania was not part of the replication process receiving support from the project team. However, the Romanian Ministry of Energy, Dept. of Energy Savings asked the consortium formally to forward all resources with the purpose of enhancing their efforts in energy savings reporting. The Training presentation and links to the Training module (see description in section 2.1) were forwarded and accepted. Romania can therefore be labelled as the first true replication country beyond the original scope of the project (where 10 full-fledged support cases and 3 replications were foreseen).

Based on this initial exchange with target countries and taking into account the experience of the Capacity Support Facility (CSF), a structure emerged of roles, content and activities that would altogether form the replication activity. This structure is presented in Figure 1.



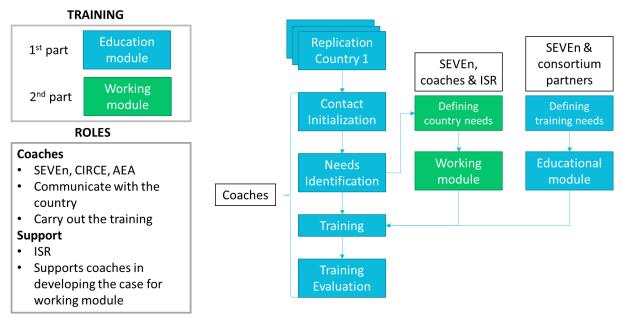


Figure 1: Training structure to upscale streamSAVE to 3 replication countries.

First, the roles and responsibilities were assigned to partners active in the replication activities. Coaches were assigned to each country - AEA, CIRCE and SEVEn. They contacted the relevant stakeholders within the Member States to identify their specific needs, perform the training and report on the process. Other partners supported the training, mainly ISR next to other partners, who, under the lead of SEVEn, established general training requirements. The Training consisted of two training modules: an Educational module with a general introduction to the streamSAVE outcomes, and a Working module tackling countries' specific needs. The resulting structure and content of the trainings and course of actions is described in the following section.

1.2 Organisation of the training

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The replication training consisted of four main meetings: (1) The introductory meeting served as the initial formal gathering, where the project was presented and collaboration with the replication country was established. During this meeting, the replication countries were also asked about their preferences and current activities related to energy efficiency calculations. Following the introductory meeting, (2) an Educational module meeting took place. A dedicated Training presentation provided a detailed explanation of the methodologies for specific Priority Actions upon request. The third meeting, called the (3) Working module, was an interactive session where participants discussed specific questions concerning the selected PAs. The online Training Module on the streamSAVE platform, equipped with ready-to-use calculations and Excel templates, played a key role in facilitating these discussions. To conclude the training, a (4) follow-up questionnaire was distributed to address any remaining issues and gather feedback on the organized activities. Additionally, an optional teleconference was offered, although none of the participating countries took advantage of this opportunity, citing time constraints. It was observed that the topic had reached a certain level of saturation after the first three meetings. The full process is explained in more detail in the box below.





BOX: ORGANISATION PROCESS OF THE TRAINING

(0) Contact relevant policy makers & stakeholder in the replication/recipient country

(1) Introductory meeting

- Objective: Establish an agreement on collaboration, and schedule the next meeting.
- Outcome: The recipient replication country agrees on participation, and identifies participants

(2) Educational module

- The scope of the project is presented: The Priority Actions and consortium expertise on the matter are described. In addition, the recipient country representatives are asked to select a PA for receiving support, and formulate their interests and expectations.
- Objective: Present the project scope; understand the recipient country's expectations and interests
- Outcome: The recipient country gets an understanding of the project content. The actual topic
 of the support given in the working module is defined.
- Supportive tools: Training Presentation¹ which consists of: (1) Introduction and basic information on the project and its resources; (2) Overview of the general streamSAVE approach to energy savings methodologies; (3) For each PA: short explanation on the PA, its standardized savings methodology & indicative values, next to the lessons learnt from the streamSAVE activities.
- Format: Online meeting of 1-2 hours, or face to face, if convenient
- Reporting: country coach prepares meetings notes, incl. how the recipient country experienced the educational module, and what was agreed regarding the working module (i.e., selected PA(s), questions/enquiries/interests by recipient country).

(3) Working module:

- Objective: Hands-on workshop carried out by coach to discuss and apply streamSAVE methodology & related indicative values for a selected PA. Identifying barriers and opportunities to replicate to other Member States is vital.
- Outcome: Recipient country gets support on how to estimate/report savings for the selected PA within the EED compliance.
- Supportive tools: Detailed materials on selected PA:
 - o D2.2 Guidance on standardized savings estimations².
 - o Materials from the dialogues included on streamSAVE platform³,
 - streamSAVE Training Module⁴ to practice the streamSAVE methodologies
- Format: Online meeting of 1-2 hours or face to face, if convenient.
- Reporting: The coach prepares meeting notes, incl. how the recipient country experienced the working module, and barriers and opportunities to replicate to other Member States.

(4) Follow up meeting and feedback questionnaire

- Objective: Follow up on the support given & obtain feedback
- Outcome: Support has been concluded. Feedback questionnaire filled by recipient country' representative.
- Supportive tools: Any material from previous meetings, next to the evaluation questionnaire.
- Format: Online meeting of up to 1 hour and follow-up email on feedback questionnaire
- Reporting: Coach prepares the country report summarizing all meetings: description of support, potential policy improvements, lessons learnt on replication process and recommendations.

⁴ https://streamsave.flexx.camp/training



¹ https://streamsave.eu/wp-content/uploads/2022/09/D4.5-Training-Presentation_ALL.pdf

² https://streamsave.eu/wp-content/uploads/2022/09/D2-2 PracticalGuidance final June23.pdf

³ https://streamsave.flexx.camp/support



1.3 Actual and expected outcomes

The 3+2 replication countries participating in the streamSAVE activities achieved similar outcomes. This illustrates to high degree of willingness, also thanks to the participation of the countries in the Dialogue Meetings, Workshops and other project activities.

Cyprus

In Cyprus, replication activities supported the Ministry of Energy, Commerce and Industry (MECI) in quantifying the delivered energy savings from three policy measures (covered by 3 PAs): Electric Vehicles and Related Infrastructure, Industrial & Commercial Refrigeration and Building Automation and Control Systems (BACS). Deemed savings methodologies were discussed and a list of possible data sources to create the national values was compiled. This improved their understanding of the presented methodologies, including indicative values and their data sources. This way, MECI gained an understanding of data gaps regarding the adaption of indicative calculation values to national circumstances.

Italy

In Italy, the replication has supported the Italian agency, ENEA, to improve the quantification of energy savings resulting from the use of small-scale RES and measures tackling energy poverty in residential buildings by streamlining the procedures of their calculations. During the testing of the calculations, the need emerged for **mixing the use of both national and EU indicative values** for different parameters. Furthermore, ENEA representatives stressed that the assumption of the parameters necessary to approximate costs in each of the methodologies needs to be discussed and validated before implementing the methodologies.

Slovakia

Small-scale RES, Modal shift for freight transport and Electric Vehicles have been presented and tested with the Slovak Innovation and Energy Agency (SIEA). Two departments were involved in the replication, the International Unit and EED reporting Unit, both having some relation to the topic. Especially the reporting unit took direct benefit in the form of an **improved understanding of the three policy measures, facilitating improved reporting**. Primary and final energy savings have been estimated during the collaboration. SIEA also mentioned an increased **understanding of data gaps** regarding the application of the additionality criterion.

1.4 Feedback and lessons learnt

Overall, the **replication activities were well-received** by the participating countries. Drawing from experiences with the CSF and other activities, the coaches employed established procedures (as referenced in the box above). Key policy makers responsible for EED reporting were involved, and the countries' interests were clearly defined, alongside the Training structure. The selected countries had prior engagements with the streamSAVE consortium during Dialogue Meetings. This prior interaction paved the way for smoother collaboration, as these countries already had a clear understanding of the scope, content, and potential benefits of the upcoming activities.

All countries reported in the feedback questionnaire that **they tested & used the energy savings calculation methodologies**; the activity "helped us to understand the concept of developing methodologies". Similar to the CSF, recipient countries did use the calculation methodology as a kind of template to compare their current practices with streamSAVE's suggestions. In one country, the replication activity helped with the "determination of





assumptions on the equipment lifetime (or other factors that need to be taken into account) and gave a better understanding of the requirements (i.e., factors that need to be taken into consideration) when calculating energy savings". As a result, concrete energy policies or official tasks were supported, such as "an update of the energy savings obligation scheme" in Cyprus. Slovakia and Cyprus also reported that they "will use the outputs in the National Energy and Climate Plan by the end of June 2024".

Due to the close proximity of the project partners to the involved policy makers, the approach and collaboration were appraised as smooth and effective. All involved countries downloaded and used the streamSAVE deliverables (chiefly, the Practical Guidance on Standardized Calculation Methodologies²), and all but one used the Training Module on their own, beyond the joint sessions.



Chapter 2 Guidance to replicate to other EU countries - "How to improve energy savings estimations in your country?"

Building on the replication activities in non-partner countries, and on the Capacity Support Facility earlier in the project, a step-by-step guide is proposed. This guidance navigates the user through the project's resources, grasp its replication potential, and explains step-by-step how to implement and/or improve savings estimations for Priority Actions. Finally, the resulting, potential improvements to policy implementation under Article 3 and 7 of the EED are outlined.

2.1 streamSAVE resources

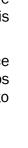
streamSAVE has produced many outputs containing a wide array of themes. It is the task of this section to guide the reader through these resources, and avoid being overwhelmed by the sheer volume of formulas, values and supportive text. streamSAVE outputs are well structured and follow relatively straightforward processes. It is therefore easy to find what one is looking for, after getting acquainted with the structure.

In order to replicate the streamSAVE achievements in other countries, it's important to understand first the project objectives and key activities. The streamSAVE project streamlines energy savings calculations and provides the support needed to increase Member States' chances of successfully and consistently meeting their energy efficiency targets. The streamSAVE project specifically focuses on Article 3 and 7 of the EED which are devoted to energy efficiency targets and national energy savings obligations, respectively.

Given the importance of deemed savings approaches in Member States' EED reporting streamSAVE focuses on streamlining bottom-up calculation methodologies of standardized technical actions. streamSAVE offers these savings methodologies in a transparent and streamlined way, not only to improve the comparability of savings and related costs between Member States, but also between both EED articles. The savings actions are targeted to those measures with high energy saving potential and considered as priority issues by Member States, the so-called Priority Actions. Two rounds of Priority Actions (PA) are running during streamSAVE: the first round covers five actions, namely: heat recovery; building automation and control systems (BACS); commercial and industrial refrigeration systems; electric vehicles; and, public lighting systems. The second round of actions comprise: accelerated motor replacement; providing feedback about energy use and tailored advice towards households: behavioural changes; energy efficiency actions alleviating energy poverty; modal shift in freight transport (from road to rail); and, small-scale renewable central heating technologies.

This translated to three distinct activities carried out throughout the project:

- (1) Knowledge Facility gathering existing approaches, definitions and available calculation methods on the selected PAs. Next to existing practices, the Facility is developing streamlined calculation methodologies for the 10 Priority savings Actions.
- In parallel, a (2) Peer-to-peer Dialogues have been established to foster experience sharing, to check and validate the proposed methodologies. Hereto, dialogue groups gathering experts and policy officers from various EU Member States are organized to





share experiences and discuss technical and economic issues related to the 10 Priority Actions.

Finally, when the knowledge base had been partially completed, a (3) Capacity Support
Facility took place as a tailored support for consortium countries to apply the
streamlined methodologies, values and gather feedback.

The streamSAVE platform facilitates the exchange of knowledge and experiences among all EU Member States for the three activities described above. The overall structure of activities as well as the 10 PAs are illustrated in Figure 2.

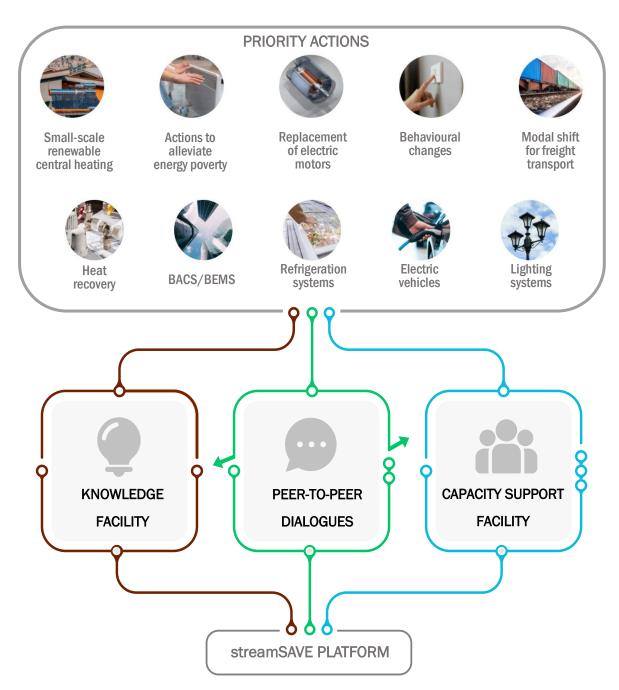


Figure 2: Overall structure of the streamSAVE activities and PAs.



The activities have been carried out for over three years and were thoroughly recorded. Outcomes were published in several deliverables and other types of outputs. The information can be found at the following online sites:

- To start, it is advisable to look at the on-line streamSAVE platform⁵. The platform has been an interactive dashboard to communicate the events (e.g., dialogue meetings and workshops), to post presentations and dialogue meeting minutes, deliverables and news, disseminate results and learnings. The *Training module* to practice the streamSAVE methodologies,)is also accessible via the platform (registration required). Learnings from dialogue meetings and workshops can be found in the *Knowledge and support facility* section of the platform.
- Another way to access the streamSAVE outcomes is by consulting the deliverables. These are comprehensive and more formal documents containing the details and can be found in the resources section of the project website⁶. The research of existing measures on the selected 10 PAs, as covered by the Knowledge Facility, can be found in the Status of energy savings calculations for Priority Actions in European countries⁷. Methodologies developed within streamSAVE are compiled in the Guidance on Standardized saving methodologies⁸. Experience and lessons learnt from the Dialogue Meetings and Capacity Support Facility are concluded in the Overall synthesis of peerto-peer dialogue activities⁹ and CSF Activity Report¹⁰.
- In order to offer the calculation formulas in an approachable way, the Training Module¹¹ has been created. It offers the possibility to make savings calculations in an easy and intuitive way, both online and by downloading an easy-to-use excel template. The user can discover and practice the methodologies for each Priority Action in the Training Module. In order to access this module, it is necessary to register on the streamSAVE platform.

2.2 Step-by-step improving energy savings estimations

Step 1: Identifying and engaging the right person(s)

The first step in improving energy savings estimations of specific actions proposed by streamSAVE is to engage the right people within the right organisations. Each MS has a different structure of organisations being **responsible or involved in the reporting of savings under the EED**. Following type of organisations may be involved, such as:

- Public authority: Ministry/Member State Officials
- Energy Agency
- Regulatory body
- Obligated party

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⁵ streamSAVE online forum https://streamsave.flexx.camp/forum

⁶ streamSAVE website: https://streamsave.eu/resources/

⁷ Report on Existing calculation methodologies and identified gaps in the EU-27 for identified Priority Actions, available at: https://streamsave.eu/wp-

content/uploads/2021/01/D2.1 StatusSavingsCalculationsEU-2ndRound v3.pdf

⁸ Practical guidance on standardized saving methodologies, complemented with indicative values, available at: https://streamsave.eu/wp-content/uploads/2022/09/D2-

² PracticalGuidance final June23.pdf

⁹ https://streamsave.eu/resources/#1605777757513-31d27860-2134

¹⁰ https://streamsave.eu/wp-content/uploads/2022/08/D4.3-Activity-Report.pdf

¹¹ https://streamsave.flexx.camp/training



- Energy distributors
- Retail energy sales companies
- Transport fuel distributors or transport fuel retailers
- Technical associations
- University/Research Institutions, etc.

The identification can mean tracking a specific department or unit within a Ministry, Energy Agency, or similar organisation that is as close to energy savings and EED of the action(s) as possible. Some remarks can be made: (1) Firstly, beware that energy efficiency might be divided between multiple actors. For example in Slovakia, the replication activities involved the participation of the Energy Agency SEIA. They held the responsibility for managing energy savings statistics and reporting. Additionally, there was another team involved focusing on international relations, overseeing communication with the European Commission regarding the EED. In the Czech Republic, within the framework of CSF activities, a specific unit took part in the streamSAVE activities, namely the unit defining the parameters for public support programs. These programs were designed to ensure that energy-saving measures, co-financed by public funds, are eligible for EED reporting. Another distinct unit was involved, namely the unit responsible for shaping energy efficiency policies, which also encompassed the preparation of EED reports.(2) Moreover, deciding on ownership among the involved people, as to ensure a proper dissemination of the streamSAVE methodologies is necessary. (3) Thirdly, it might be good to involve organisations who are either very familiar with the technology or action, or with the data(bases) that are available/can be collected (part), such as statistical offices, technology suppliers.

Step 2: Comparison of existing measures with streamSAVE: gap analysis

streamSAVE has identified 10 PAs with regard to their saving potential and deemed relevant by policymakers. Reviews of current practices in the monitoring and evaluation of energy savings have shown that even if general methodologies have similarities, the details of their implementation might vary significantly from one country to the other, and sometimes from one scheme to the other in the same country (Labanca and Bertoldi, 2016; Broc et al., 2018). Therefore, the existing actions covered by the policy measures (e.g., catalogue of actions), their saving methodologies and indicative values - in the case of bottom-up methodologies - should be compared with the streamSAVE Guidance on standardized savings methodologies. This comparison will narrow down the interest of a replicating MS, and indicate a selection of PAs, for which (improved) deemed savings methods are considered relevant.

When the PAs were presented in the replication countries, policy makers had usually been aware of the gaps in their countries' catalogues and practices. This way, they could easily identify two to four PAs of the imminent interest. It is therefore advisable for a replication country to start from current practice, identify the gaps, and **choose a limited number of PAs** for improving the savings methodologies.

Step 3: Exploring the Priority Actions more in-depth

When the PAs are selected, it is time to check the resources (see section 2.1) and learn about the PA. First step is to look into the PA as described in the **Training module** that is integrated within the online streamSAVE Platform. The Training Module includes all methodologies prepared by the project and offers an easy-to-use way to **calculate online** the savings according to Article 3 and 7 EED, as well as CO₂ savings. Additionally,



information on the typical costs of implementing an action is prepared. Once the calculation form is accessed, the main information on the methodology, main characteristics, the formulas and data to be entered are visualized. All the calculations are saved within the streamSAVE platform and accessible via the user account. Alternatively, **Excel templates** for each methodology are available for download in each methodology form. The Training module offers a user-friendly interface and also includes a brief manual.

Overview of all the PAs including the calculation formulas and a sneak-peek of the values is also summarized in the **Training presentation**. The Training presentation was used for introductory meetings with the three replication countries during the project. When there is need for detailed specifications per PA, these can be found in the **Practical guidance**.

Finally, the streamSAVE **Forum** contains additional information and might serve as a complementary knowledge resource. All the public meetings and presentations that took place during the project are available in a user-friendly manner, including the filtering option that allows selecting the PA and searching by keyword. Many of the meetings have also been recorded and recordings along with presentations are here available.

Step 4: Communicate and collaborate

Sharing knowledge and experience between countries can help the dissemination of existing evaluation practices and improve the overall coverage of the calculation methods (Renders et. al, 2021). streamSAVE clearly indicates that cross-country exchanges are helpful in improving calculation methods of energy efficiency policies. In streamSAVE, a dialogue group is formed for each action, gathering experts from various countries and types of organisations (ministries, energy agencies, technical institutes, trade organisations, standardization bodies, etc.). The focus on a given Priority Action allows to discuss the details of the calculation methods and the main issues that are specific to the action. The sharing of experiences and knowledge across countries improves the development and streamlining of the standardized calculation methods, and addresses specific questions raised by stakeholders to help them overcome difficulties they might face.

Based on the experiences from the Capacity Support Facility (cf. CSF Activity Report D4.3¹²) and the upscaling to non-consortium countries, it is advisable for a replication country to **seek an exchange** with its peers, within or across countries. There are many existing channels for this, such as the Concerted Action EED (CA EED). The key success factor of this collaboration is to find the right counterpart in the other partner organisation, as similarly explained in Step 1 above. The collaboration and dissemination are vital for improving the calculation methodologies and related indicative values in frame of the EED. It is of great benefit if the Replication Guidance is shared and discussed with the **related**, **neighbouring departments**.

2.3 Improvements to policy implementation, and related monitoring & reporting, under Article 3 and 7 of the EED

Applying the knowledge and resources gathered in streamSAVE can bring tangible improvements to the receiving countries, as illustrated by the CSF outcomes and the more limited support given during the replication activities. Following improvements can be



¹² Available at: https://streamsave.eu/wp-content/uploads/2022/08/D4.3-Activity-Report.pdf



achieved or initiated by applying the streamSAVE resources to national EED policies and related monitoring & reporting:

- Reviewed and refined methodologies to quantify energy savings more accurately from policy measures covering various Priority Actions;
- Methodologies and, more specifically the indicative values, adapted to country's specific circumstances;
- Review of data sources and identification of data gaps, allowing to define national values to estimate energy savings of specific actions;
- Deciding when to use European data and when there is a need for tailoring national values;
- Improved implementation of energy efficiency policies by applying the streamlined methodologies, which can be integrated into national catalogues of energy saving calculations;
- Promotion of cross-country collaboration & sharing of experiences, due to the project's streamlined saving methodologies. For example, the collaboration between countries, such as Czech Republic and Slovakia during the replication activities, and participation of the replication countries in the dialogue meetings and workshops has led to shared insights and methodologies, fostering a sense of learning from each other's experiences and challenges.



Conclusions

Replication in the 3+2 countries, namely Cyprus, Italy, Slovakia and to a smaller extent in Malta and Romania, has proven feasible. The most appreciated tool is the Training Module, an online platform offering the energy-saving calculation methodologies in the form of an easily accessible online calculator with standalone Excel sheets. Representatives of replicating countries found the content easily accessible and after a brief familiarization with the available materials, they quickly proceeded to select Priority Actions fitting their needs.

Any Member State trying to use streamSAVE outputs should not be too much worry about the width and breadth of the materials available. The key success factor is to identify the right people, or department, responsible for energy savings reporting under the EED. By using the streamSAVE Guidance and Training Module, they can effectively identify gaps in reporting, data collection, energy saving measure definition and methodologies. In the next steps, these gaps for specific Priority Actions can be improved based on the streamSAVE resources made available.



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