# streamSAVE+ Dialogue Meeting #04

*Streamlining Energy Savings Calculations*

# Local energy savings in national monitoring: can standardised methods help?

## MINUTES OF THE MEETING

**Date:** 9 April 2025 **Duration:** 11.00 – 12.15 CEST
**Online**

## Short summary:

The new Energy Efficiency Directive (EED) has strengthened the provisions about the exemplary role of the public sector. Article 5 sets the overall objective of reducing the total final energy consumption of all public bodies by at least 1,9 % each year, when compared to 2021. This implies a monitoring of energy consumption and savings from regional and local public bodies, as Member States will need these data to complement their reporting to the EED. This fourth dialogue meeting of streamSAVE Plus discussed tools and resources that can help harmonize monitoring practices and centralize data about energy consumption and energy savings in municipalities.

The meeting was opened by Ms. Gabriele Brandl from the Austrian Energy Agency, who moderated this Dialogue meeting and in the introductory section presented the StreamSAVE+ project and the methods developed within it to support the calculation of energy savings, as well as the timeline for public bodies to begin meeting their EED obligations.

The first speaker was Mr. Martin Schaber from the Salzburg Institute for Regional Planning and Housing (SIR). He presented the measures and actions they provide to support local communities in EED reporting, as well as the methodology for collecting and analysing energy data in the Salzburg region. The next presenter was Mr. Tom Capiau from the Flemish Energy Company (VEB), who introduced the Terra platform, which has been chosen by the Flemish government to monitor energy consumption and savings in public buildings under the EED in Belgium-Flanders. He provided an overview of the platform's features and gave actual examples of data collection and analysis. The third presenter was Mr. Adam Soussana from the Action of Local Authorities for Energy Efficiency (ACTEE). He highlighted how they assist municipalities across France with energy saving measures and building repairs. He also introduced the IPPER tool that they are developing to monitor energy use and savings at the local level, which is essential for EED reporting.

All presenting organisations have been working on the topic for a long time, both in terms of calculations and the development of platforms for collecting and analysing data. They gave an excellent example of approaches and tools that can serve as inspiration for other MS that are not as advanced in preparation to report local energy savings under the EED. The meeting closed with a panel discussion over practical challenges related to implementation of the monitoring.

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# Contents



# Agenda

| | |
|---|---|
| 11:00 – 11:10 | Monitoring energy savings in the public sector: what will the streamSAVE Plus project provide in this field? \| **Gabriele Brandl** (Austrian Energy Agency) |
| 11:10 – 11:20 | Experience from the Austrian Province of Salzburg \| **Martin Schaber** (Salzburger Institut für Raumordnung und Wohnen - SIR) |
| 11:20 – 11:25 | Q&A |
| 11:25 – 11:35 | Flemish experience with the Terra tool: a data platform to monitor energy consumption and savings in public buildings \| **Tom Capiau** (Flemish Energy Company - VEB) |
| 11:35 – 11:40 | Q&A |
| 11:40 – 11:50 | French experience with the ACTEE programme in the white certificates scheme \| **Adam Soussana** (ACTEE programme, FNCCR) |
| 11:50 – 11:55 | Q&A |
| 11:55 – 12:10 | Roundtable about multi-level monitoring |
| 12:10 – 12:15 | Wrap-up and next steps |

# Introduction

- **Monitoring energy savings in the public sector: what will the streamSAVE Plus project provide in this field?** | Gabriele Brandl (Austrian Energy Agency)

(see also presentation file available on the streamSAVE+ website)

Gabriele opened the Dialogue discussion by providing an overview of the StreamSAVE Plus project and the methodologies that have been established to assess and calculate estimated energy savings. She then focused on Art 5 of the EED and the goals that the public sector must achieve, which include reducing total final energy consumption by at least 1.9% per year when compared to 2021. Gabriele further emphasized the importance of Art 6 exemplary role of public bodies' buildings and Art 7 public procurement, both of which are related to this reduction target.

Gabriele concluded her presentation with an overview figure that showed the timeline for public bodies to begin fulfilling their EED obligations. This is characterized by the size of the population: i) public bodies with a population of more than 50,000; ii) public bodies with a population of less than 50,000 but more than 5,000; and iii) public bodies with local administrative units of less than 5,000.

# Experiences from Austria, Belgium (Flanders) and France

- **Experience from the Austrian Province of Salzburg** | Martin Schaber (Salzburger Institut für Raumordnung und Wohnen - SIR)

(see also presentation file available on the streamSAVE+ website)

Before he started his presentation, Martin specified that his presentation will only cover experiences from the province of Salzburg, not all of Austria. The Institute for Regional Planning and Housing he works for assists communities in plans for renovation and how determine their EED obligations.

Martin began his presentation by describing the Salzburg province, including its location and area, population, and number of public buildings. He pointed out that this province has a low population density and number of buildings. The third group of small municipalities with fewer than 5,000 residents, which includes approximately 100 communities, has the highest number of public buildings. The city of Salzburg is the only community in the group with a population of more than 50,000.

The province has an initiative called e5, which is a voluntary energy efficiency program that provides awards for energy efficiency measures in public buildings, energy supply, and mobility among others. It is equivalent to the European Energy Award. At the moment, one-third of the communities participate in the program.

In the second part of his presentation, Martin described the concrete measures and actions they provide for the EED. During the first phase, they provide the essential information via a series of presentations on EED, on the national energy inventory, and energy performance certifications. In the second phase, they collect data. Martin highlighted some of the challenges, such as the lack of national implementation system, coordination, and that the responsibility lays on each community. The collected data includes building and process energy use, streetlights, water pumps, and recycling stations.

Communities can report data in different ways, including excel sheets, commercial software, or the Energy Accounting Tool ZEUS-EBU provided by the Salzburg Province for its 119 municipalities. In the third phase, the SIR will carry out data analysis. The Energy accounting tool is free and includes

information on heat pumps, PV systems, energy collectives, charging stations, electronic data delivery, and plans to establish an EED standard. The results from the e5 excel sheets will also be introduced into the tool. The finishing of the first phase will be the release of the national inventory.

### Q&A

— *Is the term "community" used in your presentation synonymous with "municipality" or may it refer to a group of municipalities?*

Yes, the community is equivalent to a municipality.

— *Are any differences between the data collected for e5 and the EED?*

The e5 program (the European Energy Awards in Austria) began 25 years ago, therefore it has its own definition. They update the system each year, the next adjustments include the EED to satisfy the same requirements. As a result, it will deliver to the same standard in the future. Moreover, the e5 will probably exceed the EED requirements.

### Flemish experience with the Terra tool: a data platform to monitor energy consumption and savings in public buildings | Tom Capiau (Flemish Energy Company - VEB)

(see also presentation file available on the streamSAVE+ website)

Tom first introduced his organization, the Flemish Energy Company, which is an independent externalized agency wholly owned by the Flemish government. Their work is twofold. They act as an energy supplier to the public sector and also, they take on the role of a central purchasing body. . Through framework contracts for energy-saving measures, VEB supports public organisations in their transition toward a carbon-neutral building stock. This way, the individual organizations – such as local authorities, health care facilities and schools – don't all need to have in-house energy efficiency expertise and they don't need to manage complex procurement processes themselves.

Tom then demonstrated the Terra platform, which has been selected by the Flemish government to report under Art. 5 of EED and is a tool for tracking energy use and savings in public buildings. He gave a brief overview of the platform's features and the procedure for public entities to add data. Later, he opened the platform and demonstrated several data collecting and analysis examples.

Data can be collected for each individual building, as well as for the various energy carriers and meters, and then analysed and reported on each building or the entire organization. The reporting can include energy audits or identified energy measures. The tool allows to assess how much energy has been saved, the reductions in $CO_2$, the annual cost savings, and the return on investment. These can be viewed per one specific measure or trough all plans and measures. This enables public institutions to simulate and develop an energy master plan for the complete building portfolio until 2050. In this plan they can analyse investments, energy savings and $CO_2$ reductions. The public entity can also view data on energy usage by energy carrier, a heat map, or benchmark the various buildings in the portfolio to determine which are the most energy efficient.

The Terra tool will be used for mandatory reporting; however, in order to avoid being perceived as a burden on public organizations, the platform will offer an additional value to users and is intended to serve as a single platform for public entities to analyse and plan their energy transition.

### Q&A

— *What outcomes are made public?*

Only the organisation itself has access to the detailed data. Additionally, there will be publicly available data restricted to the yearly consumption per organisation/building/metering point. The objective is not to establish a benchmark by comparing the organisations. Only the organisation can review the benchmark within its own buildings or meters.

— *Who uses the Terra Tool? How many local authorities (users) are already using the platform?*

Local authorities are among the main users of the platform. They used to utilize a software offered by the distribution service provider but since this service was being terminated by the end of last year, most local authorities transferred their data to the Terra tool. Currently, it is being used by more than 270 local administrations. However, the tool is intended for the entire public sector, so public organizations in healthcare, education, culture, sports etc. also have access to the tool. . In total, more than 200 000 meters are currently included in the Terra tool and more are expected to be added in the near future. The size can therefore be counted and will serve as the primary tool for reporting under EED Art. 5.

### French experience with the ACTEE programme in the white certificates scheme | Adam Soussana (ACTEE programme, FNCCR)

(see also presentation file available on the streamSAVE+ website)

Adam works for ACTEE, France's national energy efficiency program, which is operated by a federation of local authorities under the management of the Ministry of Environment. Through direct finance, expertise, peer-to-peer exchange, and the development of local skills, the program assists local authorities with energy efficiency measures and building renovations.

Adam started his presentation by introducing the White Scheme certificate, which is an energy efficiency financial instrument in France. 90–95% of its total cost is allocated to standardised certification (e.g., BACS, wall insulation), and 5–10% is allocated to programs like ACTEE that facilitate the use of standardised operations certificates and promote energy efficiency across various sectors.

Then Adam discussed the several layers of public authorities in France, which are rather complex. In total, there are 36 000 local authorities, where buildings account accounts for 75% of energy use. 11% is streetlights, 6% is car fuel, and 8% is water and waste. The majority of local authorities (around 95%) have a population of 500 or less habitants and falls into the 3rd group for the EED monitoring. It accounts for around 40% of the French population.

For the local authorities, there are two main concerns. That they lack automated methods to track their energy consumption and the skills to monitor it. Therefore, ACTEE supports local authorities through funding to hire a professional engineers, offers network coordination, peer-to-peer exchange, and develops a national energy monitoring. ACTEE provided funding to 6,000 local governments and 380 engineers between 2020 and 2024. By 2025, the objective is to employ 500 engineers and assist 12,000 communities in order to advance towards Art. 5 of EED.

Adam concluded his presentation by introducing IPPER, the tool they are developing for national monitoring. The platform consolidates information from funding agencies, EMS, energy grids, land registry, and energy supplies. As a result, local authorities can access this data and proceed further. This tool will be used for national monitoring and as the basis for EED reporting. Additionally, the platform offers a service that encourages local authorities to use it.

### Q&A

— *Does the IPPER platform also monitor energy savings? (In addition to energy consumption)*

Yes, it does.

— *Is the IPPER tool linked to the European Energy Awards in France?*

Yes, the IPPER platform was developed in collaboration with ADEME, the French organisation for ecological transformation that manages the European Energy Awards in France. So, certainly, there will be synergies, and cities who participate in the European Energy Awards program can easily use the IPPER platform.

## Roundtable about multi-level monitoring

The speakers came to the conclusion that taking part in the dialogue was very beneficial to them. They could learn from one another and identified several synergies among the different countries that were presented. Commonly, their organisations provide local authorities with tools and services to make reporting less of an administrative burden and they struggle with quite comparable challenges.

In the last part of the Dialogue, a round table of questions for all speakers was held.

*What are the primary issues related to reporting the 1.9% energy savings under the EED in your country?*

The presenters agreed that one of the primary challenges is defining what to disclose under Article 5 of the EED. The public entities have a large portfolio of several buildings with varied characteristics. For example, the public building can have various ownership types. This is the case for social housing, where the local authority owns the building but cannot report publicly provide annual energy consumption data of the occupants. The same is true for public facilities that are rented out for commercial purposes or that are shared. There is no clear guidance on how to report these buildings or who is responsible for the reporting. Legal authorities should make the necessary clarification.

Moreover, it is unclear if the organisation or the building is subject to the 1.9% savings requirement. Maintaining a 1.9% yearly savings rate over a number of years is difficult. A building can usually be renovated in a year, saving a substantial amount of energy. The annual savings should therefore be taken into account when evaluating the real estate portfolio as a whole. However, this will be extremely challenging in a small community with few buildings. One building will be renovated, which will provide an instant savings in the first year, but there won't be any more advancements or savings in the years that follow.

Anyway, the goal for energy reduction is very ambitious as the rate of energy savings has been slower up to now. Local authorities should be given more financial support to be able to invest in energy

efficiency measures in order to meet this goal. This raises the question of how much money needs to be invested into these policy requirements and who will pay for it. Additionally, it might be difficult convince the local authorities and forcing them to report if they do not see an economic benefit in it. As a result, effective communication is essential.

The common concern of the speakers is how to obtain structured data from local authorities. Mostly in small communities that lack reporting skills. To conclusion on this question, speakers agreed that there is a need for providing skills and knowledge regarding energy efficiency initiatives, particularly to small communities that lack professional capacity.

*Do you think it is possible to integrate/cover all energy savings in a single tool? Or is there a possibility of having several monitoring and reporting frameworks?*

Usually, large organisations use their own proprietary commercial products. Maybe more detailed and tailored to their need, such as real-time or submeter monitoring. However, the tools discussed today concentrate on the data required for EED reporting. The benefit of these tools is that they provide additional services and support to local authorities, making reporting less administratively burdensome. They will be complex in terms of data collection and detail, but they should be easy to use. Anyway, there should always be communication between the tools described here and the commercial ones, as the data will be monitored together for national accounting purposes.

It would be great to have European harmonisation. However, it is challenging because each country needs to adapt the reporting to its local context.

*Do you foresee more automation when collecting energy use data in the future?*

All data imports should ideally be automated. In fact, the majority of data is expected to be gathered automatically in the future. EMS and gas and electricity consumption data are already automatically collected. Car fuel monitoring may be the most difficult, but it should be rather easy to set up. Both automated monitoring and software development are developing quickly.

## List of participants:

55 participants

| Name | First name | Organisation | Country |
|---|---|---|---|
| Adam | Soussana | ACTEE programme, FNCCR | FR |
| Agnė | Stonienė | Lithuanian energy agency | LT |
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