# Own Your SECAP

# Advancing climate and energy actions: tools, insights, and lessons learned from SECAP implementation

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| Deliverable number | OwnYourSECAP D3.4 |
| Author | Emanuele Cosenza (SOGESCA)<br>Caterina Volpe (SOGESCA)<br>Marco Devetta (SOGESCA)<br>Marika Rošā (Ekodoma) |
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# Introduction

In the current landscape, most municipalities develop their Sustainable Energy and Climate Action Plans (SECAPs) with the assistance of external consultants. While this approach ensures technical precision, it often excludes municipal staff from direct involvement in the planning process. This disconnect can lead to a lack of ownership over the plans, which, in turn, impacts the motivation and capacity to implement the measures outlined in the SECAP effectively.

Although there are municipalities with significant expertise in energy and climate planning, their numbers remain limited. Efforts must be intensified to elevate the capabilities of other municipalities, particularly small and medium-sized ones, to the same level of proficiency. These municipalities often face unique challenges, including limited resources in terms of staff and budget. Common issues include the absence of a dedicated energy manager or project coordinator to oversee climate initiatives, insufficient targeted funding for energy and climate action, low political commitment to achieving climate neutrality, and technical barriers such as the lack of heat meters in public buildings or inadequate support and competencies among stakeholders.

The *OwnYourSECAP* project addresses these challenges by providing tailored support and tools to municipalities across Europe. The project's aim is to enable municipalities to systematically plan and implement measures included in their SECAPs, fostering a sense of ownership and ensuring long-term success. Over the past two years, the project has engaged 22 experienced and 22 less experienced municipalities from 11 participating countries. Together, they have successfully identified and implemented more than 200 different type and size of energy and climate measures, demonstrating the potential for progress when provided with the right resources and guidance.

This report synthesizes the key lessons learned from the project, gathered through surveys and direct feedback from partners and participating municipalities. These insights highlight the challenges faced, strategies adopted, and successes achieved, offering valuable guidance for future SECAP development and implementation.

# 1. Methodology and tools for measure identification and implementation

## 1.1. Overall approach and methodology

To facilitate the implementation of SECAP measures, the *OwnYourSECAP* consortium developed an accessible four-step methodology designed specifically for municipalities. This straightforward approach provides a clear roadmap for prioritising, selecting, planning, and executing actions, ensuring that municipalities can effectively translate their climate and energy goals into tangible outcomes (refer to the simple infographic on the left).

It begins with the prioritisation of actions (Step 1), where municipalities are encouraged to assess the actions included in their SECAP using a pre-developed support tool (see chapter 1.2). This step ensures that a clear list of priority actions is established, with each action assigned a specific score to reflect its importance and impact.

The second step focuses on selecting the actions that will be implemented. A working group needs to be formed to review the priority actions identified in the previous step and to determine which ones will be carried out. If any actions are deemed outdated or impractical, alternative actions are identified. By the end of this step, at least three actions annually should be selected for implementation, laying the groundwork for the next phase.

In the third step, municipalities are tasked with creating a detailed roadmap for each of the selected actions (see chapter 1.3). Using a standardised template, municipalities prepare specific implementation plans. These plans outline the responsibilities of involved parties, main activities, timelines, and expected outcomes. This phase ensures that all actions are well-structured and ready for execution.

The final step involves the actual implementation of the selected actions. Municipalities follow the prepared roadmaps to execute the actions, monitor progress, and assess outcomes. After completing

the implementation, municipalities are encouraged to share their accomplishments with stakeholders and other interested parties.

## 1.2. Tool #1: Identifying SECAP measures

The first tool is designed to assist municipalities in identifying and evaluating various actions included in their SECAPs. Its primary goal is to simplify the process of assessing and comparing measures, enabling municipalities to more easily determine which actions to prioritise and implement.

This user-friendly tool is developed in Excel and allows users to work across five key sectors: Municipal Infrastructure, Housing, Mobility, Energy Production, and Climate Adaptation. These sectors align with the core areas usually defined in SECAPs. For each sector, municipalities can analyse a minimum of four actions. Users can either select measures from a predefined list or define their own, providing flexibility and adaptability to local contexts.

| | |
|---|---|
| **Municipality:** | x |
| **Date:** | January 2024 |
| **Filled out by:** | energy manager |

Own Your SECAP

| 1. | Basic information | Action #1 | Notes | P | Σ |
|---|---|---|---|---|---|
| 1 | Name of the selected action | Development and implementation of an energy management system | *Choose an action from the list or define your own* | | |
| 2 | Field of the selected action | Climate mitigation action | *Select the fields relevant to the action* | 1 | 1 |
| 3 | Affected sectors | Municipal buildings, equipment<br>Street lighting<br>Municipal fleet<br>Public transport | *Select the sectors from the list that will be affected by the introduction of this action.*<br>*If you select "Other", write down which sector* | | |
| **2.** | **Criteria** | | | | |
| 4 | Is there the necessary political support to implement the measure in the coming months? | yes, definitely | *Please choose an answer from the list* | 2 | 6 |
| 5 | Has a department/person in the municipality been selected to be responsible for planning and organising the measure? | identified | *Please choose.*<br>*If no, please explain here why* | 1 | 2 |
| 6 | Has a department/person in the municipality been selected to be responsible for the implementation of the measure? | Select | *Please choose.*<br>*If no, please explain here why* | - | |
| 7 | Are there other stakeholders that have already been identified? | Select | *If yes, please explain here* | - | |
| 8 | Is the level of investment known and is the funding available? | Select | *If yes, what are the investments?*<br>*If no, please explain here why* | - | |
| 9 | What is the timetable for the event? (how many months) | Select | *Please select the relevant time period* | - | |
| 10 | Are there any savings from the measure? | Select | *If yes, what are the savings in €, MWh/year and/or tCO2/year or other benefits, e.g. RES energy produced?* | - | |
| 11 | Is the payback period known? | Select | *Please select the relevant time period* | - | |
| 12 | Are there any obstacles to launching this measure in the coming months? | Select | *If yes, please write down the 3 main obstacles here* | - | |
| 13 | Can the measure be replicated on a larger scale in your municipality and/or in other municipalities? | Select | *If yes, please define the scale in energy units and/or %* | - | |
| 14 | How important is it to implement this measure in the municipality in the next 1-2 years? | Select | *Please choose* | - | |
| 15 | Are there also social benefits to the measure? | Select | *If yes, write down some of the most important benefits* | - | |

The tool incorporates 11 simple criteria for analysing each measure, each weighted according to its importance. A range of predefined answer options is provided for each criterion, with each option assigned a specific point value. This scoring system allows for a structured and objective evaluation process. Once all measures have been assessed, the tool automatically generates a summary report, displaying the measures along with their respective scores to facilitate decision-making.

Tool is available for download here: https://www.ownyoursecap.eu/resources/resources-secap/

*Example #1: Implementing a SECAP Identification Event in the Municipality of Saldus, Latvia*

*As part of the OwnYourSECAP methodology, the energy manager of Saldus, in collaboration with the technical partner Ekodoma, organized a dedicated event for the local working group. The event, held on 28 March 2023, incorporated a design thinking approach to foster creativity and collaboration. Seven working group members participated.*

*The first part of the meeting focused on brainstorming ideas across the five SECAP sectors. Following this, participants voted on the proposed measures and engaged in discussions to evaluate the most popular options. The most promising measures were then analysed using the OwnYourSECAP prioritisation tool, ensuring a structured and data-driven approach to decision-making. In the table are summarised the results from the discussion.*

| Actions | Key sectors | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Municipal Infrastructure | Points | Housing | Points | Mobility | Points | Energy production | Points | Climate change adaptation | Points |
| Action #1 | Optimising municipal buildings for their effective use | 21 | Creation of an energy efficiency competence center / one-stop agency for educating citizens | 28 | Evaluating and planning connections between bicycle infrastructure and Saldus | 17 | Defining priority RES zones in territorial planning for the district | 24 | | |
| Action #2 | Establishing bicycle storage facilities at municipal institutions | 13 | | | | | | | | |
| Action #3 | Procuring energy certificates for public buildings | 31 | | | | | | | | |
| Action #4 | | | | | | | | | | |

*This structured approach highlights how prioritisation and evaluation can effectively guide municipalities in selecting and implementing impactful SECAP measures.*

## 1.3. Tool #2: Creating roadmap of each SECAP measures

Creating a roadmap for SECAP measures implementation is crucial for effectively achieving your local authority's sustainability goals.

The project provided a template for the creation the roadmap for each identified energy and climate measure (see the identification of the measures in the chapter 1.1). The approach is based on the following criteria and steps:

**Title of the measure**

- Clearly state the name of the measure being described

**Sector**

- Indicate the sector where the measure applies (e.g., energy efficiency, renewable energy, transport, housing, other.).

**Measure description**

- Provide a concise overview of what the measure entails, including its goals and relevance to SECAP objectives.

**Objectives**

- Outline the specific objectives the measure aims to achieve, such as reducing energy consumption or increasing renewable energy use.

**Implementation steps and milestones**

- Describe the sequence of activities required to implement the measure, step by step.

**Timeline**

- Define the duration and key milestones for implementing the measure.

**Expected results**

- Quantify or describe the anticipated outcomes, such as energy savings, $CO_2$ emissions reductions, or increased stakeholder engagement.

**Indicators**

- List key performance indicators (KPIs) that will be used to monitor the progress and success of the measure.

**Budget**

- Provide an estimate of the financial resources needed to implement the measure.

**Responsible parties**

- Specify who will be responsible for executing and overseeing the measure (e.g., municipal departments, external consultants, or other stakeholders).

The standard template of the roadmap for any energy or climate action is available here: https://www.ownyoursecap.eu/wp-content/uploads/2023/09/Template_for_describing_selected_measures.docx.

Even though the *OwnYourSECAP* methodology was developed to guide municipalities, the results and application of its tools and criteria have varied significantly across the 11 partner countries. Survey responses from partners revealed that support for municipalities was tailored to their specific needs, expertise levels, and the most effective pathways for implementing measures.

The measure identification tool has been particularly valued by energy managers in municipalities where they were not involved in the creation of the SECAP. This tool allowed them to conduct a comprehensive screening of potential measures and present the results to their working groups or engage stakeholders in the initial discussions. Notable examples include the experiences of Riga and Kuldīga (Latvia).

The creation of roadmaps, however, has proven to be the most challenging step, as it requires collaboration and strategic discussions among various stakeholders. While design-thinking approaches have been helpful, there is still room for improvement. In many cases, only one person from the municipality created the roadmaps. However, by sharing these roadmaps with technical partners, they were refined and enhanced.

For example, the municipality of Bauska (Latvia) identified procuring space for electric vehicle (EV) charging as one of its measures. The municipality included a requirement in the procurement process for the EV chargers to use renewable energy sources and to provide annual monitoring data. This thoughtful addition ensures that the action aligns with broader sustainability and monitoring goals.

**Example #2 – Austria**

| Municipality | Ottensheim (Upper Austria) |
|---|---|
| Year of the Action implementation | 2024 |
| Selected measure | Installation of e-charging stations |
| Short measure description | The municipality of Ottensheim installed 2 additional e-charging stations (with 2 charging points each). With these e-charging stations there are now 5 public spots for charging electric cars distributed all over the municipality. |

| | |
|---|---|
| **Type of measure (mitigation/ adaptation/poverty or combined effect)** | Mitigation |
| **Main milestones** | Selection of spots.<br>Selection of provider. |
| **Action status** | Completed |
| **Investments (EUR)** | 25,961 |
| **Energy savings (MWh)** | 25 |
| **$tCO_2e$ reduced** | 1 |

**Example #3 – Czech Republic**

| **Municipality** | **Tábor** |
|---|---|
| **Year of the Action implementation** | 2023 |
| **Selected measure** | Thermal insulation + green roof of an apartment building |
| **Short measure description** | Walls insulation by styrene foam 160 mm thick, roof insulation by 240 mm thick panels. Green roof included with all-year plants and low maintenance regime. This particular measure is an action typical of enhancing building renovations with an adaptation aspect which is now becoming a standard in Tábor Municipality. |
| **Type of measure (mitigation/ adaptation/poverty or combined effect)** | Mitigation/Adaptation |
| **Action status** | Completed |
| **Investments (EUR)** | 340,000 |
| **Energy savings (MWh)** | 34.7 |
| **$tCO_2e$ reduced** | 14 |

# 2. Key insights and lessons learned

## 2.1. Support provided

To support *OwnYourSECAP* target municipalities in implementing their SECAPs, the project partners adopted diverse approaches. Recognising varying levels of existing expertise and local contexts, tailored support strategies were employed, ranging from technical analysis and strategic advice to capacity building and motivational support. This report summarizes the main support mechanisms used across the 11 partner countries, highlighting the adaptability of the project's interventions.

***Portuguese municipalities*** of Cascais and Guimarães demonstrated in-depth knowledge and clearly defined ideas and priorities; therefore, support based on previous technical analyses was preferred in their case. Conversely, ***Latvian and Italian municipalities*** (with the exception of Saldus and Abano Terme) required consistent support. SOGESCA and Ekodoma played a key role in motivating and encouraging the municipalities' representatives to actively participate through monthly coordination meetings. In the Italian case, these meetings often included external stakeholders for the implementation of actions involving public-private partnerships.

The participating ***Swedish municipalities*** chose to develop actions internally with project technical support through periodic meetings between the SECAP group members and the technical partner ESS.

***In Austria***, all municipalities received support in selecting actions based on previous measures in their respective areas, prioritizing a high cost/benefit ratio.

***In the Czech Republic***, municipalities received support through regular online and in-person meetings with SECAP teams. ***In Poland***, the selection of actions was influenced by priorities already established by the beneficiary municipalities' administrations. The Polish partner, PNEC, supported the municipalities in implementing the measures and updating the SECAP, with particular attention to defining ambitious targets for 2050. The experience of the ***Spanish municipalities***, particularly Lorquí, supported by EuroVértice, introduced an innovative aspect: the involvement of citizens and external stakeholders in the action selection and prioritisation process. In the project's second year, Lorquí experimented with expanding local actor involvement in the decision-making process for selecting and implementing SECAP actions, a successful approach replicated in Jumilla.

The experience of the ***Irish municipalities***, supported by TEA, focused on technical support for developing actions strongly linked to energy efficiency, the development of high-efficiency district heating networks, and nature-based building retrofitting.

***Slovak municipalities*** have not yet proceeded with action implementation. For them, the technical partner, ECB, focused on technical training and thematic workshops. For Považská Bystrica, technical support was also provided for the EUCF candidacy.

***French municipalities*** of Lorient, Brest Métropole, CA de Rochefort, CA Tarbes Lourdes Pyrénées, and Châtellerault received differentiated support. Lorient required a greater focus on technical training and strategic consultancy, mainly focused on ISO 50001 implementation. Brest Métropole received a strategic consultancy approach aimed at integrating additional mitigation and adaptation actions into the existing SECAP, optimizing the Energy Management System, and integrating the climate budget into the municipal budget. The two remaining French municipalities supported by the project are currently behind in this activity, having joined OYS in December 2023 and September 2024, respectively.

***Example #4: Tailored support and its outcomes: case of municipality of Lorquí (Spain)***

*The experience of the Spanish municipality of Lorquí has demonstrated the effectiveness of using the Design Thinking approach. The support provided for implementing Lorquí's SECAP actions saw a high level of involvement from political representatives and municipal technicians. Lorquí implemented the developed actions in two phases:*

1) *An initial internal phase (first-year annual cycle) during which municipal departments used the Design Thinking approach to determine which actions to implement and their priority within the municipal implementation plan, culminating in the development of a roadmap.*
2) *A second phase (second-year annual cycle) in which the process was opened to relevant local stakeholders through a series of thematic workshops. In these workshops, municipal employees and stakeholders discussed the work program and proposed solutions, defining a shared implementation plan.*

*The success of the Lorquí experience is primarily due to the following factors:*

- *The municipal technical staff's experience in sustainable planning and their strong commitment to co-creating participatory processes for SECAP implementation.*
- *Strong political support for the involved municipal offices and a strong emphasis on cooperation between the administration, citizens, and stakeholders to achieve fair and shared sustainable development for the community.*

## 2.2. Challenges in implementation

As in the introduction mentioned, municipalities face different challenges. It's important to note that these challenges are often interconnected. For example, a lack of funding might exacerbate the difficulty of hiring and retaining qualified staff, which in turn can hinder technical implementation and stakeholder engagement. The most prominent challenges still appear to be related to human resources/capacity, political will/prioritisation, and funding.

| Challenge | Strategy to address the challenge |
|---|---|
| **Lack of staff/capacity:** This is the most widespread challenge, mentioned in several municipalities (Vicenza, smaller Czech municipalities, Kežmarok, Považská Bystrica, Coimbra, Figueira da Foz, Ropaži). This includes both a lack of staff and the over-burdening of existing staff with multiple responsibilities, which limits their focus on SECAP implementation. Added to this is the loss of key staff (energy managers, etc.) and the resulting need to train new staff, which causes significant delays (Spišská Nová Ves, Tukums). In terms of specific technical skills, it is highlighted, especially in small municipalities, the difficulty of staff in managing and monitoring complex Project Financing contracts (building and public lighting) as in the cases of the Italian municipalities of Roveredo in Piano and Cordenons (Italy). | **Provide "*psychological support*" and motivation:** Recognising the emotional and relational challenges faced by municipal staff and providing support to address motivation and engagement. This is a crucial, though often overlooked, aspect of capacity building.<br><br>**Training and education:** Providing training to municipal officials to increase their understanding of SECAP principles, possibilities, and implementation strategies (Kežmarok). This addresses the knowledge gap and empowers staff to take ownership.<br><br>**Technical support and expertise:** Providing technical assistance on specific areas like ISO 50001 implementation and complex contracts (project financing with ESCOs) through technical expert partners. This fills critical skill gaps.<br><br>**Regular meetings and coordination:** Establishing regular meetings (monthly coordination meetings) to facilitate communication, collaboration, and progress tracking (Latvian and Italian municipalities). This addresses coordination issues and keeps momentum. |
| **Resistance/lack of political support:** Resistance to prioritising sustainability over other concerns is prevalent, particularly when it involves financial reallocation or behavioural changes (Abano Terme, Tukums, Cascais, Guimarães, Coimbra, Figueira da Foz, Petržalka).<br><br>Shifting priorities due to external factors such as increased energy prices or competing demands can significantly derail SECAP implementation (Besko, Petržalka, Coimbra) or vice versus (Tukums, Saldus).<br><br>Investment decisions are often driven by the availability of subsidies rather than by long-term sustainability plans. | **Prioritising territorial needs:** Emphasising the importance of aligning SECAP actions with the actual needs and priorities of the local territory, rather than solely relying on pre-existing plans. This ensures relevance and effectiveness.<br><br>**Using decision-making tools:** Employing tools that consider potential challenges (like lack of human resources and technical difficulties) before selecting measures, allowing for proactive mitigation. This proactive approach prevents problems from escalating. |
| **Lack of funding/limited financial resources:** This is a major obstacle for many municipalities (Bydgoszcz, Sztum, Besko, Raciechowice and other municipalities). | **Securing additional funding:** Actively seeking and securing additional funding to accelerate implementation of energy efficiency measures, e.g., through initiatives like EUCF. This directly addresses financial constraints. |

***Example #5: Case study of municipality of Abano Terme (Italy) excelling in SECAP implementation***

*The municipality of Abano Terme participates as a beneficiary of the OwnYourSECAP activities to ensure continuity in the implementation of the SECAP, following the plan's development during the European Compete4SECAP Project. The OwnYourSECAP tool for selecting and prioritising actions helped Abano Terme choose 15 priority actions from its SECAP for implementation over the project's three-year period. The administration aims to transform the SECAP into an active operational tool for the sustainable management of the local authority and its territory. The priority actions for the first year of implementation (2024) focus on three key sectors: energy efficiency, sustainable mobility, and hydraulic safety.*

*The priority actions identified by the SECAP Working Group of the municipality were:*

1. *Support for energy retrofits in private buildings through tax incentives.*
2. *Support for the development of cycling and pedestrian infrastructure in the city and implementation of the Bike Plan.*
3. *Electrification of local public transport through public-private partnerships.*
4. *Improvement of hydraulic safety through updates to the Water Management Plan.*

*Through SECAP implementation activities, Abano Terme has successfully reprioritized sustainable development on the political agenda and brought it to the forefront of public interest. With the support of OwnYourSECAP, Abano Terme aims to implement 15 of the 42 SECAP actions between 2023 and 2025.*

# 3. Monitoring and evaluation

## 3.1. Tool #3: Annual monitoring of SECAP measures

Monitoring the implementation and results of SECAP measures is essential to ensure they are effective and achieving their intended goals. *OwnYourSECAP* consortium established a simple and standardised monitoring tool how to effectively monitor SECAP measures in accordance with the Covenant of Mayors requirements. SECAP journal is available here for download: https://www.ownyoursecap.eu/wp-content/uploads/2025/01/SECAP_journal_v3_21Jan2025.xlsx.

1. **Establish Clear Indicators and Targets:**

Define Key Performance Indicators (KPIs) consistent with project KPIs: These are specific, measurable, achievable, relevant, and time-bound metrics that track progress towards SECAP objectives.
Indicators and targets include:

- Reduction in greenhouse gas emissions (e.g., tonnes of $CO_2$ equivalent per year).
- Increase in energy efficiency (MWh reduction in energy consumption).
- Increase off renewable energy production (MWh generated from renewables).

2. **Develop a Monitoring Plan:**

Define data collection methods: Determine how data will be collected for each KPI. This involves:

- Energy consumption data from LA's assets/utility/other companies and stakeholders.
- Building energy performance certificates.
- Traffic counts and surveys.
- Data from smart meters and other monitoring devices.
- Surveys and questionnaires for citizens and stakeholders.

Establish data collection frequency: Decide how often data will be collected (e.g., monthly, quarterly, annually).

- Clearly define who is responsible for collecting, analysing, and reporting data.
- Implement a system for storing, managing, and analysing data. This involve using spreadsheets, databases and specialized software dedicated to mitigation and adaptation data.

3. **Implement a Monitoring System:**

- Collect data according to the defined schedule and methods.
- Analyse the collected data to track progress towards targets and identify any trends or issues.
- Regularly report on progress to relevant stakeholders, including municipal staff, political leaders, and the public. This could involve creating progress reports, dashboards, and/or presentations to politicians/citizens/relevant stakeholders.

Various approaches to monitoring SECAP implementation and results have been used by the *OwnYourSECAP* project partners. Monitoring activities and approaches used in the respective target countries are highlighted below, with several key points:

1. **Core indicators:**

- **$CO_2$ emissions reduction ($tCO_2e$):** This is another frequently used indicator, often calculated based on energy savings data. While important for quantifying environmental benefits, its relevance is sometimes diminished in regions with high percentages of bio-energy-based district heating or low-carbon electricity grids (Bydgoszcz, Sztum, Besko, Raciechowice, Sweden).
- **Energy savings (MWh):** This is the most used indicator across the municipalities and is considered a key metric for assessing the effectiveness of energy efficiency measures. It's also directly linked to cost savings, which is a primary concern for many municipalities (Bydgoszcz, Sztum, Besko, Raciechowice, Kežmarok, Považská Bystrica, Lorient, Cascais, Guimarães, Coimbra, Figueira da Foz, Latvian municipalities).

2. **Additional indicators and considerations:**

- **Adaptation and dual-effect indicators:** Italian LAs have been supported in the definition of specific indicators for adaptation and dual-effect (mitigation + adaptation) actions, in addition to standard mitigation indicators (Abano Terme, Pordenone Conurbation, Vicenza). Examples include green surface created and surface improved for preventing floods.
- **Implementation indicators:** Many municipalities primarily used implementation indicators, such as the number of PV installations or kilometres of new bike lanes (all municipalities).
- **Investment costs and payback periods:** The project added the dimension of $CO_2$ emissions reduction and expected investment costs to calculate benchmarks like cost-effectiveness of energy/emission savings and investment payback periods (all municipalities).
- **Fossil fuel consumption reduction:** This is used as an indicator, particularly for vehicle fleets where fossil fuel use remains prevalent (Sweden).
- **Self-sufficiency:** Some municipalities, like Petržalka, focus on indicators related to achieving energy self-sufficiency through renewable energy sources.

In summary, while energy savings and $CO_2$ emissions reduction are the most common indicators, the monitoring approaches are tailored to specific local contexts and priorities. Partners also emphasizes the importance of considering additional indicators for adaptation and dual-effect measures, as well as the need for consistent monitoring practices and a focus on financial implications.

## 3.2. Insights from monitoring

A combination of existing local resources, project-provided tools, and specific data collection methods were used for monitoring, with a recognized need for further improvements in this area.

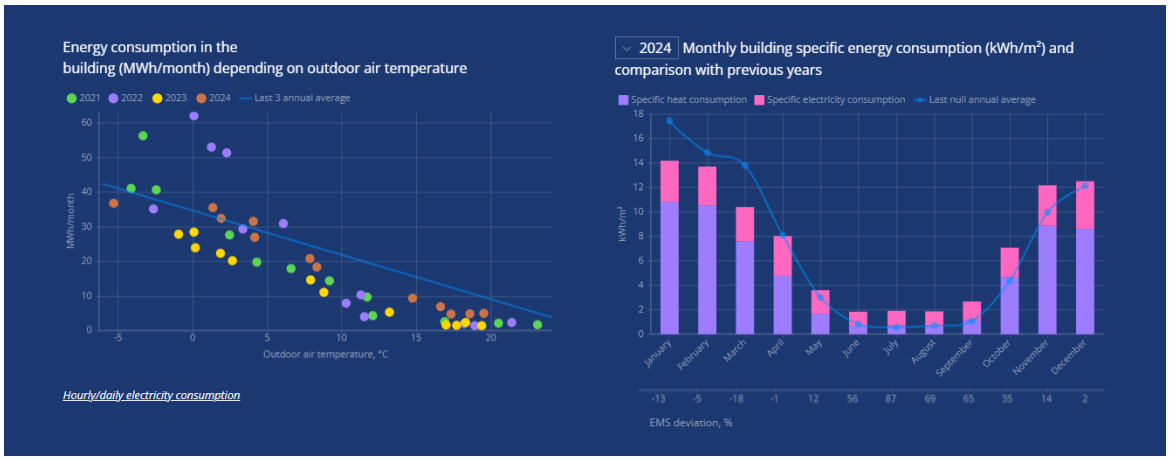
Several important lessons about tracking progress and ensuring accountability through monitoring can be identified:

- **Use a combination of tools and approaches:** Relying on a single tool or method is insufficient. A mix of existing municipal tools (e.g. *Energy Monitoring Platform* offered by *OwnYourSECAP* project), project-specific tools (like *Energiemosaik* and the *OYS template*), external expertise, and data collection methods tailored to the specific measures provides a more comprehensive and robust monitoring system.
- **Visualise data for better understanding:** Using visualization tools like *Sankey diagrams* can help municipal administrations understand energy flows and the impact of various actions more easily.
- **Tailor indicators to the context and type of measure:** While energy savings (MWh) and $CO_2$ emissions reduction ($tCO_2e$) are important core indicators, they may not always be the most relevant. It's crucial to select indicators that are appropriate for the specific context (e.g., considering the fuel mix of district heating and electricity grids) and the type of measure (e.g., using specific indicators for adaptation measures).
- **Consider financial implications:** Monitoring should not only track environmental impact but also consider financial aspects, such as investment costs, payback periods, and cost-effectiveness of energy/emission savings. This is crucial for demonstrating the value of SECAP measures to decision-makers and the public.
- **Ensure consistent and planned monitoring:** Simply having access to tools and data is not enough. It's essential to establish a clear monitoring plan and ensure that municipalities consistently track indicators according to that plan. This requires clear responsibilities, data collection schedules, and reporting mechanisms.
- **Recognize monitoring as an ongoing challenge and be open to improvement:** Monitoring is an ongoing process, and there is always room for improvement. Municipalities should be open to exploring new tools and approaches to enhance their monitoring capabilities and address emerging challenges.
- **Utilise external support and expertise:** External partners and consultants can provide valuable support in developing and implementing effective monitoring systems, especially for municipalities with limited internal capacity.
- **Data collection is crucial:** Implementing new measures, such as the installation of heat pumps, needs to be accompanied by a robust data collection strategy to properly assess the impact of the measures.
- **Simple metrics can be highly effective:** Simple and easily measurable metrics like MWh/year invoices can be very useful for tracking progress and demonstrating financial savings, however monthly data would provide better data for possible further improvements (especially in case of building refurbishment projects).

In essence, effective monitoring requires a tailored, multi-faceted approach that combines appropriate indicators, robust data collection methods, clear responsibilities, and a commitment to continuous improvement. It is also crucial to link monitoring to financial outcomes to demonstrate the value and justify the investment in SECAP measures.

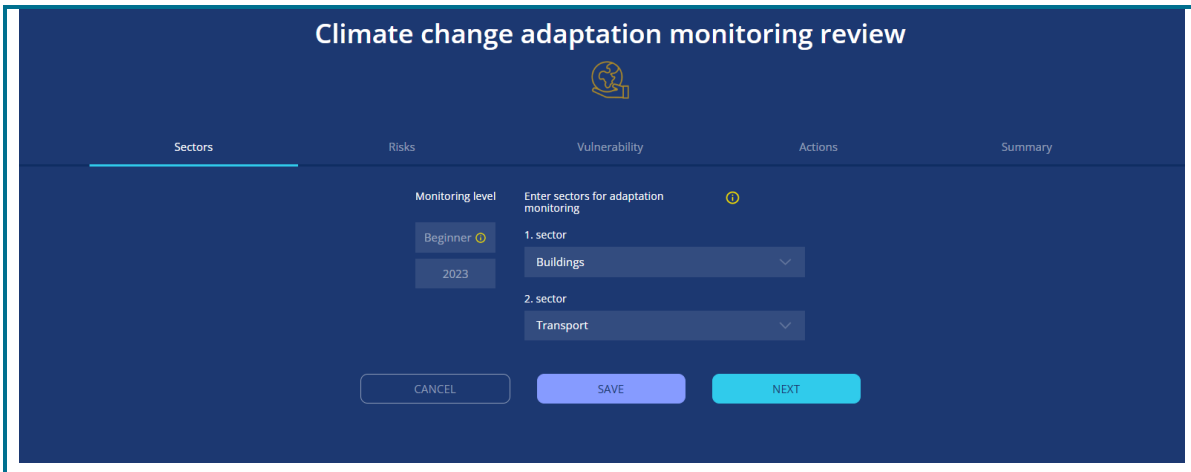
***Example #6: Monitoring energy savings***

*To monitor their energy consumption and savings, eight Latvian municipalities participating in the OwnYourSECAP project use the Energy Monitoring Platform (www.energoplanosana.lv/en). Monitoring energy savings becomes significantly simpler and more efficient when a municipality has implemented and maintains an energy management system (EnMS). With a functioning EnMS, there is no concern about the availability or reliability of historical and current consumption data. Municipalities can track energy savings not only in buildings but also in public lighting projects, municipal fleets, and public transportation services.*




***Example #7: Monitoring climate adaptation data***

*The development of the Climate adaptation monitoring module (see www.energoplanosana.lv/en) within the OwnYourSECAP project represents a significant step towards enhancing climate change adaptation in municipalities. By leveraging this online tool, municipalities can systematically gather and evaluate crucial data on climate adaptation measures, fostering a more resilient and sustainable future for their communities. Continuous improvement, knowledge sharing, and collaboration among stakeholders are essential to make the most of this innovative monitoring platform and drive successful climate action.*




*This Climate module is a convenient and easy to use tool where any municipality can start to keep track of data not only on adaptation measures, to monitor their effectiveness but also to understand which sectors are priorities, which are the municipality's vulnerabilities, e.g., coastal erosion or economic losses in agriculture due to prolonged drought and heat, etc.*

*The Climate Module monitors sectors, risks, indicators and actions. Each sector is affected by a risk and often the same risks can affect several sectors. Vulnerability indicators, on the other hand, are selected to measure whether the actions implemented by the municipality increase its climate resilience. The indicators are used to monitor and quantify the impact of a risk on a sector. The purpose of the actions is to reduce vulnerability to risks and to prevent and mitigate the impacts of risks, as reflected in the indicator values.*

*To learn more about monitoring climate data and how to strengthen municipal capacity for climate adaptation, please have a look at this public report: https://www.ownyoursecap.eu/wp-content/uploads/2025/01/D3.3_Tools_adaptation_institutionalisation_v2_30Sep2024.pdf.*

# 4. Comparative analysis of SECAP methodologies

The effectiveness of the project methodology varied across municipalities. While it provided a valuable framework for SECAP implementation, challenges arose due to factors like limited resources, the need for adaptation to specific local contexts, and resistance to change.

The project methodology provided a valuable foundation for SECAP implementation, but it required flexibility and ongoing support to be fully effective. Future applications should consider the specific needs and contexts of each municipality and provide tailored support to address the identified challenges.

- **Positive Outcomes:**
  - **Increased competences:** Municipalities gained increased competence, tools, and a broader perspective on SECAP development, implementation, and monitoring.
  - **Improved SECAP implementation:** Municipalities observed a change in their SECAP implementation practices, adopting more structured approaches.
  - **Valuable guidance:** The *OwnYourSECAP* methodology, based on the Covenant of Mayors (CoM) approach, provided valuable guidance for many municipalities.
  - **Successful applications:** In some cases, the methodology was highly effective, leading to significant improvements in SECAP implementation.
- **Challenges:**
  - **Limited resources:** Lack of resources (mainly human) hindered effective implementation across many municipalities.
  - **Resistance to change:** Municipalities were sometimes resistant to adapting their existing processes and fully embracing the methodology. The *OwnYourSECAP* approach requires municipal employees to work towards changing their attitudes and behaviours by communicating with and involving their colleagues. However, this has not always been possible.
  - **Difficulty in adaptation:** The methodology required adaptation to suit the specific needs and circumstances of each municipality, this especially in cases of drafting the roadmaps.
  - **Limited use of tools:** In some cases, project-developed tools and templates were not fully utilised by partners and municipalities.
  - **Personnel changes:** Staff turnover and changes in personnel hindered the continuity of implementation efforts.

# 5. Lessons learned and path forward

The survey reveals several key lessons learned regarding SECAP implementation, which can be categorized as follows:

1. **Importance of Strategic Planning and Tools:**

Need for comprehensive planning beyond the SECAP: having complementary strategic planning documents (e.g., Water Management Plan, Urban Green Management Plan) alongside the SECAP is crucial for effective implementation (Abano Terme, Pordenone Conurbation).

Strategic planning for financial challenges: Improved strategic planning is essential for anticipating and addressing funding delays and ensuring smoother implementation (Bydgoszcz, Sztum, Besko, Raciechowice, Coimbra, Figueira da Foz). This includes better financial planning and resource alignment.

Benchmarking: Regular benchmarking of measures is needed, rather than relying solely on available funding and political considerations (all LAs).

2. **Crucial Role of Community and Stakeholder Involvement:**

Difficulty and necessity of community involvement: Engaging citizens and external stakeholders is challenging for many municipalities, particularly in Italy, but crucial for successful implementation and triggering investments from citizens and industries. Institutionalizing this involvement is key.

Community involvement as a driver for change: Involving the community can be a powerful driver for change and accelerate the implementation of actions.

3. **Significance of Leadership, Capacity, and Teamwork:**

Need for a motivated core team and high-level commitment: A dedicated and motivated core team (including politicians, administrators, and citizens) and strong high-level commitment are essential for successful plan development and implementation (all LAs).

Importance of dedicated personnel (energy manager/team): Having a dedicated energy manager and/or team is highly beneficial for driving implementation.

Senior leadership involvement: The person in charge of the project within the local authority should hold a senior position to ensure its importance and effectiveness.

Addressing capacity gaps: Providing education and training to officials in relevant areas like project management and conflict resolution can improve implementation capacity.

Overcoming staff turnover: While not explicitly stated as a solution, the emphasis on dedicated personnel highlights the need to mitigate the negative impact of staff turnover.

4. **Financial aspects:**

Need for adequate and sustainable funding: Securing sufficient and sustainable funding is crucial for timely and full implementation of SECAP measures. Funding delays significantly hinder progress (Bydgoszcz, Sztum, Besko, Raciechowice, Cascais, Guimarães).

Exploring additional funding sources: Municipalities should explore additional funding sources beyond traditional channels, especially when national policies limit funding for specific types of projects.

Many measures require little or no funding: Emphasizing that many measures can be implemented with minimal, or no funding can encourage action even in the face of financial constraints.

5. **Importance of Internal Coordination and Communication:**

Improving internal communication and coordination: Enhancing communication and coordination between different departments within the municipality is crucial for effective implementation (general mention regarding four municipalities).

6. **External Support and Opportunities:**

Benefits of external support (e.g., EUCF grants): External support, such as assistance in obtaining EUCF grants, can be a significant benefit for municipalities.

In summary, the most important lessons learned revolve around the need for robust strategic planning, active community involvement, dedicated leadership and capacity, securing adequate funding, and effective internal communication and coordination. These elements are crucial for overcoming challenges and achieving successful SECAP implementation.

**General recommendation to enhance the process:** Based on the experience of the *OwnYourSECAP* municipalities, municipalities are advised to involve motivated colleagues (even if they have not been directly involved so far) in their working groups and ensure all relevant stakeholders are engaged in preparing the short roadmaps for the actions. We also encourage employing design thinking principles during meetings, starting with simple tools like sticky notes to foster creativity and collaboration. This comprehensive approach ensures that SECAP actions are implemented effectively and inclusively, with measurable and impactful results.

# 6. Overall assessment of the implemented measures in target Countries

The partners are currently supporting the municipalities in the implementation of the SECAP actions for 2023-2024 and have already started working on the actions for 2025. Overall, the 44 municipalities benefiting from the activities in the target municipalities are currently working on the implementation of 247 actions moving investments for over 250 million EUR.

Ambitious results are also expected in terms of energy savings resulting from the implementation of the actions (over 520,000 MWh/year) and in terms of increasing local renewable energy production (over 50,000 MWh/year). In terms of avoided emissions, the implementation of the actions will lead to a reduction of over 180,000 $tCO_2e$ in the 11 target countries.

| OYS Overall impact in SECAP action implementation | | | | | |
|---|---|---|---|---|---|
| Country | N. of measures selected | Investments (€) | MWh saved | MWh produced | $tCO_2e$ avoided |
| Latvia | 30 | 26 800 311 | 25 975 | 339 | 4,892 |
| France | 25 | 14 292 350 | 14 760 | 9 700 | 14,081 |
| Czech Republic | 19 | 5 196 697 | 1 253 | 69 | 723 |
| Portugal | 21 | 27 133 500 | 18 950 | 2 911 | 5.770 |
| Sweden | 18 | 28 257 800 | 12 394 | 91 | 23 |
| Slovakia | 18 | 1 675 150 | 74 | 0 | 30 |
| Austria | 22 | 14 286 909 | 1 773 | 32 684 | 7.514 |
| Ireland | 18 | 21 799 705 | 12 124 | 0 | 2.601 |
| Italy | 24 | 79 233 280 | 2 728 | 25 | 2.477 |
| Poland | 30 | 26 401 146 | 43 520 | 7 386 | 14 320 |
| Spain | 22 | 11 061 632 | 2 864 | 365 | 766 |
| TOTAL | **247** | **256 138 481** | **136 415** | **53 570** | **15 881** |

# 7. Conclusions

The project employed a flexible and adaptable methodology, tailoring its support to the specific needs and contexts of each municipality. This differentiated approach, combined with the use of standardised tools and the expertise of external partners, was crucial for effective SECAP implementation. The analysis also highlights the importance of addressing not only technical aspects but also motivational, relational, and political challenges.

The methodology of *OwnYourSECAP* demonstrated varying degrees of effectiveness across participating municipalities. While the framework offered valuable guidance and fostered improvements in SECAP implementation practices, significant challenges were encountered. These challenges included limited resources, resistance to change, and the need for greater flexibility and adaptation to specific local contexts.

Despite these challenges, the project contributed to increased municipal competence in SECAP development and implementation. Key successes included enhanced understanding of SECAP processes, improved coordination within municipalities, and a greater focus on sustainability within local decision-making.

A key aspect that emerged from the project's activities is the importance of emotional and relational support for beneficiary municipalities. Several partners emphasized how human relationships and emotional support provided to municipal employees have often been crucial to the effectiveness of the activities. Municipalities frequently require coordination, facilitation of inter-sectoral relationships, communication, and moderation activities to effectively collaborate and share knowledge. This support activity is often more impactful than technical support alone, although technical support has proven to be equally important and highly necessary in many of the beneficiary municipalities.

Moving forward, future efforts should prioritize addressing the identified challenges, such as providing tailored support to municipalities, strengthening human and financial resources, and fostering a more conducive environment for SECAP implementation.