



Central and Eastern European Sustainable Energy Union CEESEU

Deliverable 2.5

Companion Guide to SECAP Development in the CEE Region

September 2023

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And with input from the CEESEU Advisory Board



CEESEU has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 892270



CENTRAL EASTERN EUROPEAN
SUSTAINABLE ENERGY NETWORK

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1 Introduction

1.1 Relevance of this deliverable

This guide was created as part of the EU-funded Central and Eastern Europe (CEE) Sustainable Energy Union (CESEU) project. It includes information from training materials developed during the project, interviews with local experts and representatives from CEE cities that have already implemented [SEAPs/SECAPs](#) (Sustainable Energy Action Plans/Sustainable Energy and Climate Action Plans), as well as feedback from project partners on the SECAP process in their region.

With a reach well beyond the lifetime of the CESEU project, this Guide can be used by CEE public administrators involved in the SECAP development process – whether in small, human resources-constrained municipalities or large ones with ample professional staffing spread among several departments.

In the course of the project, CESEU partners identified several key challenges associated with SECAPs in the CEE region, information gathered from municipal partners as well as from the project's experts, most of which are regional energy agencies:

- Access to finance is a recurrent issue
- Data collection and monitoring are key challenges
- Resistance is greatest in countries where awareness levels appear especially low
- It is easier to exert influence at local levels rather than at the national level
- Staff often do not agree on whether the emission reduction target can be reached
- Politics at the national level can intrude on and influence engagement
- Certain projects are pushed forward only for reasons of positive public relations and visibility
- Overcoming regulatory limitations is hampered by a lack of existing regional initiatives that might provide good examples
- Lack of know-how and human resources as well as inadequate organisational capacity
- Diverse local (political) interests and stakeholder group misunderstandings

The guide provides at least partial answers to these issues and makes specific recommendations from the lessons learned in the setup and development of SECAPs in CESEU municipalities. It also emphasises the need for outreach strategies or procedural changes by EU-level actors e.g., the Covenant of Mayors (CoM) initiative¹, which will better address the unique circumstances of the CEE.

1.2 Who is the guide for?

The guide provides a comprehensive overview of the planning, development and implementation of Sustainable Energy and Climate Action Plans (SECAPs) with their goal of a 55% reduction in greenhouse gas (GHG) emissions by 2030 and municipal accession to the Covenant of Mayors (CoM). In addition, it provides information specific to the Central & Eastern European (CEE) region as well as examples from the experiences of developing and implementing SECAPs within the CESEU project. The material herein will provide support for CEE municipalities in developing the main sections of their SECAPs, in engaging with stakeholders, and in the implementation of their Action Plans.

¹ Covenant of Mayors, <https://eu-mayors.ec.europa.eu/en/home>

In the main, this guide is meant to support CEE municipalities that may have lagged behind their Western European counterparts in developing SECAPs for a variety of reasons - perhaps a lack of awareness or knowledge of the planning process, a lack of expertise or capacity, missing access to resources, or stakeholder disinterest. It will provide how-to support to public administrators in Central and Eastern Europe for developing their SECAPs, in which their municipalities promote increased energy efficiency, a switch to sustainable energy, a reduction in carbon emissions, and improved adaptability to climate disruptions, thus helping the region contribute towards meeting the EU's emissions neutrality goals.

1.3 Supplementary materials

The CESEU project developed a number of aids that are relevant both for larger cities and for smaller municipalities in the development, implementation and evaluation of SECAPs. These resources are available on the CESEU [project's website](#) and elsewhere, as linked below.

SECAP Training materials (I): local and regional SECAP planning processes, political dimensions, stakeholder engagement, and administrative structures; examples from Warsaw and Zagreb	Training slideset I
SECAP Training materials (II): SECAP implementation processes, monitoring, the urban adaptation support tool, data collection, reporting requirements, and financing of SECAPs	Training slideset II
SECAP Evaluation Tool: an easy-to-use tool for municipalities to conduct a quick self-assessment to evaluate your compliance with the development of a SECAP	Original English and translations
A quick guide how to use the SECAP Evaluation Tool	Guide to using the Tool
Policy recommendations to achieve better SECAPs	Policy recommendations
Assessing energy poverty, monitoring emissions, and identification of socially efficient solutions to meet climate policy ambitions	Next steps in your SECAP
Energy efficiency forerunner model: Replication Guidelines	Replicating the energy efficiency model

A recent and very useful addition to the toolkit for use by municipalities is the cooperation agreement between CESEU partner (and a founding member of the Central and Eastern European Sustainable Energy Network, [CEESEN](#)) [Climate Alliance](#) and Google for use of data in the [Environmental Insight Explorer](#) (EIE)² for all EU municipalities with more than 50,000 inhabitants. Register first with the EIE, then [contact Climate Alliance directly](#), specifying, on an official municipal letterhead, that you would like to use the EIE data and what the data will be used for.

² A trademark of Google LLC

2 SECAPs at a Glance

The EU's vision is that by 2050, we will all be living in decarbonised and resilient cities with access to affordable, secure and sustainable energy. Through acceding to the CoM - Europe movement, state their intent to (1) reduce greenhouse gas emissions on their territory, (2) increase resilience and prepare for the adverse impacts of climate change, and (3) tackle energy poverty as one key action to ensure a just transition. A **Sustainable Energy and Climate Action Plan (SECAP)** is a political tool and at the same time a technical document, and refers to the implementation and monitoring of energy and climate actions at a local level. At the same time, it is a communication and promotion instrument for the stakeholders involved. As a key document, it shows how a CoM signatory³ intends to reach the EU's 2030 mid-term energy and climate commitments. A SECAP may cover a longer period, but in this case, it should contain intermediate values and objectives for the year 2030.

The SECAP should focus on **mitigation** - measures for reducing GHG emissions (i.e., carbon dioxide CO₂, methane CH₄, and nitrous oxide N₂O, among others) and the final energy consumption of end users - and **adaptation** actions to contend with the impacts of climate change. The main sectors of interest in mitigation are buildings, public facilities and infrastructure, and urban transport (sometimes termed "mobility"). A local authority (LA) can also include actions related to local electricity production and heating/cooling generation. For [adaptation](#), a SECAP should include actions in the sectors and areas that are likely to be most vulnerable in a city (e.g., hotspots).

The LA should provide a good example for implementing mitigation measures related to its own facilities, buildings, vehicle fleet etc. However, a SECAP should include actions related to the public and private sectors as well, since signing a Covenant of Mayors 2030 Commitment covers the entire geographic territory of the local authority.

The main steps of a SECAP process include:

1. **Defining a strategy** (including Vision, Objectives, Targets)
2. **Baseline Emission Inventories (BEI)**
3. **Climate Change Risk and Vulnerability Assessment**
4. **Mitigation and Adaptation Actions and measures until 2030 (Action Plan)**
5. **Energy Poverty**⁴

A SECAP should not be considered a fixed and rigid document. Instead, it should demonstrate the planned intentions of the LA in committing to a transformative strategy for climate change mitigation and adaptation actions. It can and should be adapted over time so that it responds adequately to challenges.

In joining the CoM, municipalities commit to setting mid- (2030 and 2040) and long-term (2050) targets consistent with EU objectives and at least as ambitious as their national targets, with the long-term goal of achieving climate neutrality by 2050. At the technical level, then, the minimum reduction in carbon emissions for the achievement of climate neutrality is 80%; however, municipalities can use the national reduction targets for 2050 that normally are higher than 80%

Details on the steps required for SECAP development for mid-term targets are provided in Section 3.

³ See Covenant of Mayors, <https://eu-mayors.ec.europa.eu/en/home>

⁴ Mandatory from 1 January 2025; see Covenant [reporting guidelines](#) on energy poverty

2.1 Stakeholder involvement

Involving stakeholders is the necessary first step when the goal is the initiation and stimulation of the *behavioural changes* needed to complement the technical actions embodied in your SECAP, which is one of the most important features for the successful implementation of a SECAP.

In the framework of a SECAP, stakeholders have interests **affected by the SECAP** and their activities **affect the delivery** of the SECAP. They possess/control information, resources and the **expertise needed for SECAP** formulation and implementation. In addition to that, their participation/involvement is needed for **successful implementation of the SECAP**. Last but not least, they are citizens/organisations that have direct effect and are affected **by all phases of the climate mitigation plan**.

Here is a list of stakeholders who may be important when initiating the SECAP development process. Don't think of this as a closed list - your municipality may have others you wish to include.

- Local Authority: relevant municipal departments and companies (municipal energy and water utilities, transport companies, etc.)
- Local and regional energy agencies
- Representatives of national/regional/provincial administrations and/or neighbouring local authorities, to ensure coordination and consistency with plans and actions that take place at other levels of decision
- Financial partners such as banks, private funds, Energy Service Companies (ESCOs), insurers
- Institutional stakeholders like chambers of commerce, chambers of architects and engineers
- The building sector: building companies, developers, housing authorities, housing maintenance
- Transport /mobility players: private/public transport companies, etc.
- Energy suppliers, utilities
- Business and industries
- Civil protection (e.g. police and fire departments)
- NGOs and other civil society representatives' including students, workers, etc.
- The general public (e.g. residents)
- Knowledgeable persons (consultants, e.g.)
- Universities, schools and research centres/institutes
- Hospitals/emergency services
- The tourist industry
- The agricultural community, where appropriate
- Media

Stakeholders should be involved in every stage of the SECAP process from its initiation through planning and implementation to monitoring and evaluation.

- The first phase in the stakeholder engagement process is to design a plan, to include setting goals, drafting a work plan, the identification of stakeholders. and an analysis of the issues to be discussed with them.
- The second phase relates to capacity building. The SECAP team should assess the training and resource needs of the stakeholders and develop communication materials and methods to keep them aligned with your SECAP's development and implementation. When planned activities are launched in the next phase, the SECAP should establish a method for tracking progress in the involvement of stakeholders.

- In the final phase of the stakeholder engagement process, collect feedback, evaluate processes and results vs. goals; these will help you to improve or revise your strategy for stakeholders' involvement.

There are many ways to involve stakeholders, here are just a few of them:

- ✓ Information and education activities (e.g., brochures, newsletters, advertisements, exhibitions, site visits)
- ✓ Information and feedback activities (e.g., public meetings, surveys and questionnaires, staffed exhibitions)
- ✓ Involvement and consultation activities (e.g., workshops, focus groups, forums, open house)
- ✓ Extended involvement activities (e.g. community advisory committees, citizens' juries).

2.2 Energy poverty

The European Commission's [DG for Energy](#) defines energy poverty as "a situation in which households are unable to access essential energy services and products." The EU has stated a commitment [to tackle energy poverty](#) and to protect vulnerable consumers.

In the framework of SECAPs and as its third pillar together with mitigation and adaptation, **as of 1 January 2025 local authorities are obligated to make an assessment** to determine if and how the municipality is affected by energy poverty, identify vulnerable groups, then design actions to counter energy poverty if necessary. Until the end of 2024 it is not required to have a specific action plan with measures on energy poverty, but mitigation and adaptation measures should contribute to this aim⁵.

Four primary indicators can be helpful in assessing energy poverty:

- arrears on utility bills
- the inability to keep a home adequately warm⁶
- a very low share of household expenditure on energy compared to the national median (also known as 'hidden energy poverty' as it may indicate under-consumption of energy - but it can conversely indicate investments in insulation or new, energy-efficient heating sources)
- a very high share of household expenditure on energy compared to other expenses (greater than 10%).

Underlying energy poverty are factors such as low income, high energy prices, inefficient appliances, or lack of access to certain energy services. So far the fight against energy poverty has focused on lighting, heating, cooling and running household appliances. However, [recent research](#) points to other relevant aspects such as transport poverty, which refers to the inability to achieve a sufficient level of transport services (e.g., difficulties with paying a vehicle's running costs, or poor access to public transport).

⁵ CoM [Reporting Guidelines](#) on energy poverty

⁶ See "[Inability to keep home adequately warm](#)" and [Energy Poverty. National Indicators](#), p.45

3 The Main Steps in the Development of a SECAP

Figure 1 shows the main steps in SECAP development. Each of the steps is clarified below.

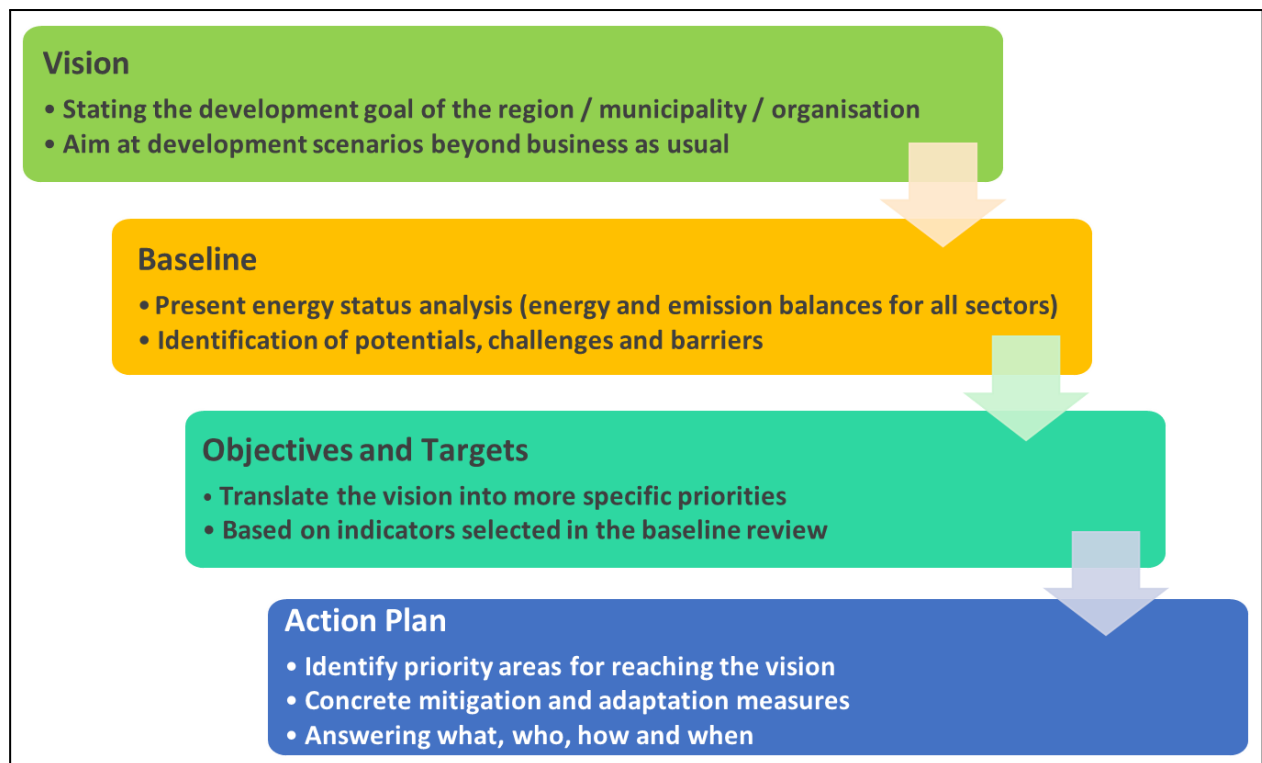


Figure 1. The SECAP development process

3.1 Strategy

The development of strategy includes defining your LA's vision and setting objectives and targets.

3.1.1 Vision

The vision provides the (political) direction and orientation for your local authority's SECAP in order to attain its climate and energy objectives. It should be ambitious yet still realistic. It must be compatible with the Covenant of Mayors' commitments - a **55% GHG emission reduction by the 2030** target date and with municipalities gradually becoming resilient and adapted to climate disruptions - the heat waves, wildfires, floods, land- and rock- slides, high winds, and coastal erosion that are the rapidly escalating impacts of climate change.

As noted in Section 3, your SECAP should be developed with the support of local communities, i.e., with citizen participation and discussion groups. Engagement strategies should be established for primary stakeholders to ensure that they are involved appropriately and most efficiently. This engagement can be formal or informal. **Stakeholders in vision development** can be **local government decision makers** for the sectors of energy, environment, infrastructure, businesses, regional development and economics, **utilities** (energy producers, distributors, infrastructure providers and regulators), **energy sector decision makers**, particularly from industries that produce or consume large amounts of energy (e.g., electricity, natural resources, agriculture and energy-intensive industry),

experts (scientific, engineering, policy, social science and businesses), and **NGOs** engaged in research and advocacy in low-carbon energy.

Tips for creating an energy vision

- ✓ Define a core “visioning team”
- ✓ Define possible points of entry based on baseline analysis
- ✓ Plan different energy scenarios and projections for your region
- ✓ Test the scenarios with key stakeholder groups – involve all relevant entities (public authorities, industry representatives, researchers, NGOs, etc.) and get them on board
- ✓ Strive for reaching a consensus within your stakeholder groups

3.1.2 Objectives and targets

Objectives and targets should relate to indicators chosen in the baseline review (section 4.1.3). They should translate your vision into sectoral targets. SMART objectives should be used here, in which SMART is the acronym for Specific, Measurable, Achievable, Realistic, and Time-bound.

Tips for creating SMART targets

- ✓ **Specific** (well-defined, focused, detailed and concrete): What are we trying to do? Why is this important? Who is going to do what? When do we need it done? How are we going to do it?
- ✓ **Measurable** (kWh, time, money, %, etc.): How will we know when this objective has been achieved? How can we make the relevant measurements?
- ✓ **Achievable** (feasible, actionable): Is this possible? Can we get it done within the timeframe? Do we understand the constraints and risk factors? Has this been done (successfully) before?
- ✓ **Realistic** (in the context of the resources that can be made available): Do we currently have the resources required to achieve this objective? If not, can we secure extra resources? Do we need to reprioritise the allocation of time, budget and human resources to make this happen?
- ✓ **Time-Bound** (defined deadline or schedule): When will this objective be accomplished? Is the deadline unambiguous? Is the deadline achievable and realistic?

3.1.3 Baseline Emission Inventories / Monitoring Emission Inventory

The baseline review (Baseline Emission Inventory, BEI) provides a description of your municipality’s current situation in relation to energy and climate change. Based on it, the SECAP process involving objective-setting, elaboration of suitable Action Plans, and monitoring can be started. The review should be based on **existing data** and should include relevant plans, instruments, legislation, and existing policies. The baseline needs suitable **resources** for collection and review of data sets. It can be established as a self-assessment process, while combining it with an external peer review can add more value to the process.

The BEI has to be relevant, i.e., confined to within your jurisdictional territory, and must be based on data for energy consumption, energy production, mobility, etc. The BEI must define a **baseline year** against which the achievements of the emission reductions in 2030 shall be compared. It is very important that BEI and Monitoring emission inventory (MEI)⁷ use the same methodology and that data sets are consistent, so that reports throughout all years are compatible and comparable.

In the framework of BEI/MEI, LAs shall report **final energy consumption and emission factors** for all sources of emissions (direct and indirect and non-energy related) per sector and per energy carrier. It is not recommended to include the GHG emissions generated by large industrial power plants (as these are covered by [cap and trade](#) schemes or similar). Based on these principles, you need to report greenhouse gas emissions (GHG) from **the three main macro-sectors**, namely **buildings/infrastructure, transportation, and other non-energy related** contributing to the total emission accounting, and account for the energy supply macro-sector via a local emissions factor for indirect emissions. The report should as well cover other activity sectors in the scope of the CoM in which your LA intends to take action.

The GHG emissions are calculated for each energy related activity sector by multiplying the activity data by the IPCC emission factors⁸ per energy carrier⁹. While this might sound dauntingly complicated, it's actually relatively simple in practice - refer to Figure 2, below.

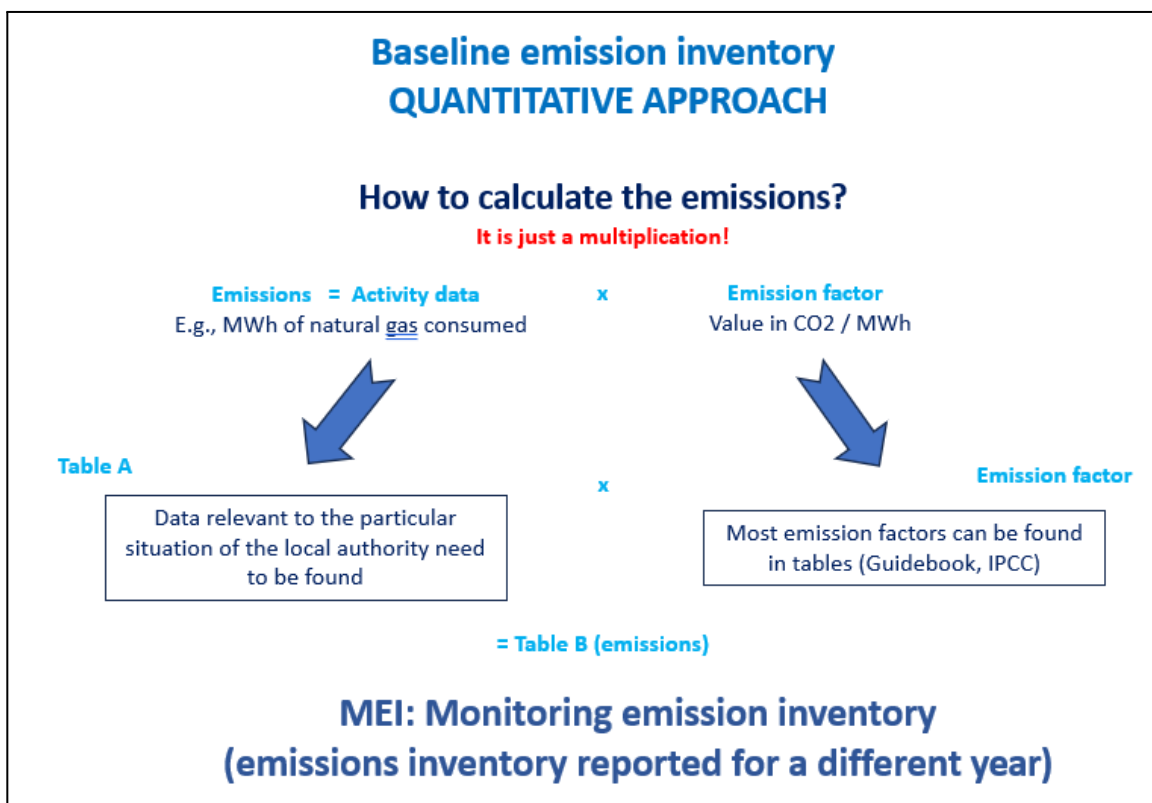


Figure 2. BEI (and MEI) - the quantitative approach

⁷ The difference between BEI and MEI: [Covenant of Mayors for Climate & Energy Europe, Reporting Guidelines](#)

⁸ An emission factor is a coefficient that quantifies the emissions or removals of a GHG per unit activity. Emission factors are often based on a sample of measurement data, averaged to develop a representative rate of emission for a given activity level under a given set of operating conditions. Refer to the IPCC [Glossary](#)

⁹ [Energy carriers](#) include electricity and heat as well as solid, liquid and gaseous fuels.

Final energy consumption covers all energy supplied to final consumers (end-users) for all energy uses. It is disaggregated into final end-use activity sectors. Figure 3 outlines sources for your data collection.

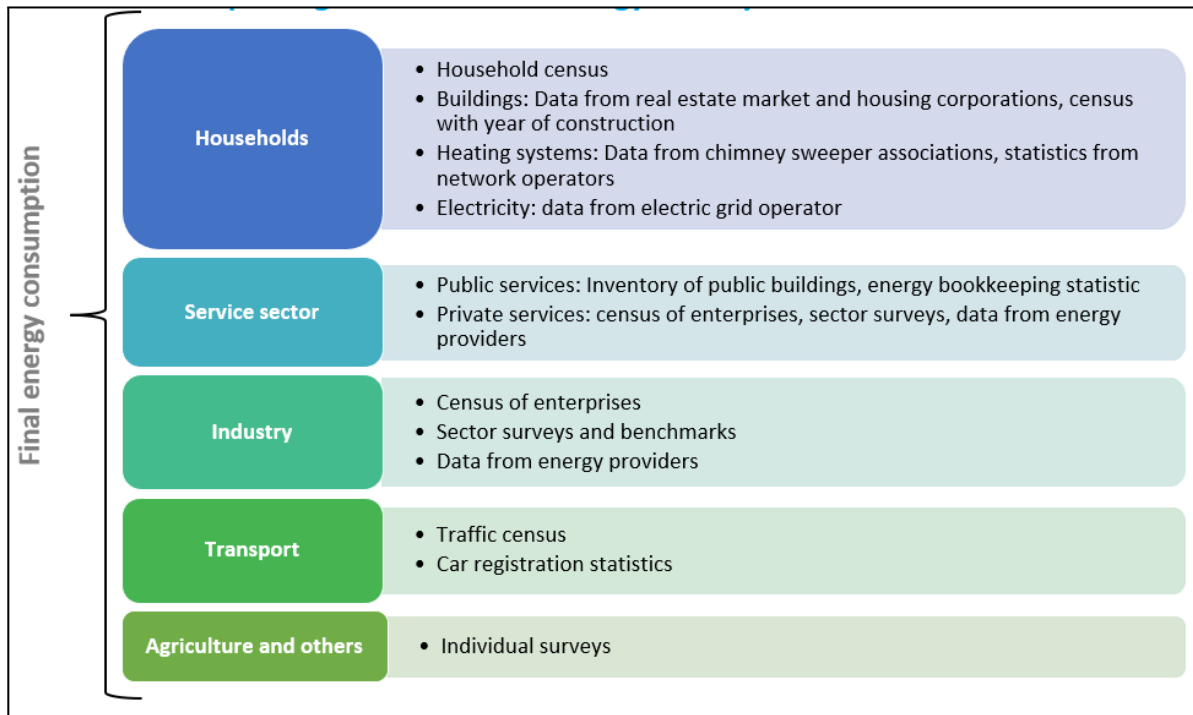


Figure 3. Examples of good sources for energy data by economic sector

Local energy (electricity and heating/cooling) production is not included as an activity sector of the BEI/MEI, but its impact is included through the calculation of the [local emission factors](#) to be applied to the calculation of the GHG indirect emissions deriving from the consumption of electricity and heating/cooling, and reported under the Energy Supply macro-sector.

The baseline review must also include a **Risk and Vulnerability Assessment (RVA)**, which determines the nature and extent of risks by analysing potential hazards and assessing the vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend.

A **SWOT** (Strengths, Weakness, Opportunities and Threats) analysis can be a very useful instrument in the SECAP process. Based on the findings in the baseline review, it can be used for determining the Strengths and Weaknesses of the local authority in terms of energy and climate management, as well as the Opportunities and Threats that could affect the SECAP. This analysis can help with the definition of priorities in the development of SECAP actions and measures.

3.1.4 Data availability and collection

The collected data should describe **local** consumption and consequently your municipality's situation. It is not appropriate to recalculate by downscaling national or regional data to the municipal level.

The data to be collected should encompass electricity, gas, district heating, heating oil, diesel, gasoline, diesel, plant oil, biogas, biofuel, solar thermal, geothermal, other fuels and other biomass energy data. It should focus on the following sectors:

- ✓ Municipal buildings equipment, facilities
- ✓ Tertiary (non-municipal) buildings, equipment/facilities
- ✓ Residential buildings
- ✓ Industry (non ETS - i.e., outside of the EU emissions trading system)¹⁰
- ✓ Municipal fleet
- ✓ Public transport
- ✓ Private transport
- ✓ Agriculture, Forestry, Fisheries
- ✓ Purchase of green electricity
- ✓ Local production of renewable energy
- ✓ Local production of electricity, cold and heat in cogeneration plants
- ✓ Waste and waste water
- ✓ CO₂ emissions factors

Data on **electricity, gas, district heating** (conducted energy carriers) and **other fuel sources** can be gathered from energy providers. They are obliged by EU legislation ([EU Directive for Energy Efficiency](#), 2023 revision) or / and national legislation to provide information about energy consumption data in an aggregated way, which is not GDPR-protected data. If a municipality has several energy providers, the network operators should give information on the energy consumptions in their jurisdiction, as they have all related information about the amount of energy distributed in their territory. Another way for your municipality to acquire data on energy consumption is to include data delivery clauses in the contract between the municipality and the energy provider or via cooperation agreements (e.g., supported by a regional energy agency or another institution).

Acquiring data from energy providers can provide information on **heating oil, plant oil, biogas, biofuel, solar thermal, geothermal consumption**. Some municipalities develop cadastres using available in-municipality technical data for calefaction, boilers and/or cogeneration systems. Another option is to use municipal calculation on heating oil consumption using chimney sweep data (power, age and average hours of consumption) or to launch [surveys](#) among the population on their energy consumption.

It is recommended, if possible, to compare the gathered consumption data with other sources such as available statistical data regarding the consumption at the municipal level (energy carriers and sectors), average estimates for the different building typologies in the city, and surveys among the population on energy consumption in their households and the travelled kilometres in their cars with their diesel or petrol consumption.

¹⁰ [Non ETS emissions](#) explained

Gathering data for the **transport sector** is often the most challenging. Regarding the municipal fleet, many municipalities calculate fuel consumption by the rate of refuelling from bills/invoices. For public transport, transport companies are aware of their consumption but the more difficult exercise is to calculate this for usage within municipal boundaries (public transport often services several municipalities). Consumption in the **private transport sector** is the most difficult to observe. The approach of vehicles registered can be used here. Many municipalities calculated mobility consumption by taking into account the number of various vehicles registered at the municipality, the specific consumption of these vehicles, and an estimate of the distance travelled. Other options can be to use data on fuel sales in municipal territory (notably, this does not describe very well the local situation) or to develop transport flow models by using road cameras.

Data on **local energy generation and emission factors** should relate to electricity as well as heat and cold production from wind parks, photovoltaic, solar thermal, cogeneration, hydroelectric and district heating. Regarding electricity production, network operators have the information on the annual amount of energy produced by the different technologies. Heating and cooling producers can provide appropriate information. In addition to these, municipalities have information on the amount and location of the energy systems as they issue the necessary installation permits (solar thermal, cogeneration, geothermal etc.).

3.2 Climate change Risk and Vulnerability Assessments

The **Risk and Vulnerability Assessment (RVA)** analyses potential hazards and their impacts deriving from climate disruption and assesses extant vulnerabilities that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend. Thus, an RVA determines the nature and extent of a risk.

The RVA consists of three **main steps**:

Step 1: Municipalities assess the impact that each climate hazard type has on a series of Vulnerable/Impacted sectors, such as:

- Health and life¹¹
- Infrastructure (Energy, Water, Transport, Social)
- Built environment
- Economy (Tourism, Agriculture and Forestry)
- Biodiversity (Coastal areas, Green zones/forests).

Step 2: Implementation of vulnerability analysis with an emphasis on potential effects and affected groups. The analysis is conducted per sector and for all climate hazards.

¹¹ It's well worthwhile thinking outside the box for RVAs. For example, the fire that destroyed the town of Lahaina in Hawai'i in August 2023 was impossible to extinguish because it disabled generators supplying water pressure, a situation made worse by the melting of domestic water pipes made of plastic that further depressurised the system. Ultimately, firefighters had no water to spray on buildings.

Step 3: Implementation of the risk assessment analysis with an emphasis on future risks and level of impact. The analysis is conducted per sector and for all climate hazards.

Concerning **data availability**, meteorological data is used by most municipalities for weather forecast models. Often this data is available for free from meteorological institutions¹². For analysing public health data, municipalities use hospital data. Insurance data can be used for measuring the damage wrought by previous climate-related disasters, though recent fires and floods suggest that such damage estimates may not be indicative of future losses. Furthermore, there are a few tools available that provide useful data for risk and vulnerability assessment, relying on observed and projected climate change and its impacts across the EU.

- **European Environment Agency (EEA) indicators:** They cover a wide range of aspects related to climate change and its impacts in Europe and are available on the [EEA website](#). They give as well information on the trend or status of the investigated phenomenon. The indicators cover the following topics: agriculture, air pollution, biodiversity - ecosystems, climate change adaptation, climate change mitigation, energy, environment and health, industry, land use, resource efficiency and waste, soil, sustainability, transport, and water and marine management.
- **Lancet Countdown indicators** focus on the relationship between climate change and human health and are available on the website of [European Climate and Health Observatory](#). Indicators tracked are related to the following areas: impact, exposure, and vulnerability; adaptation, planning, and resilience; mitigation actions and health co-benefits; economics and finance; and politics and governance.
- **Copernicus climate indices** visualise selected climate variables and impact indicators from the [Climate Data Store](#) of the Copernicus Climate Change Service (C3S). These climate indices are related to the domains of health, agriculture, forestry, energy, tourism, water and coastal and can be accessed interactively in the [European Climate Data Explorer](#).

3.3 The Action Plan

SECAP Actions should relate to the three pillars of the Covenant of Mayors for Climate & Energy (“[2030 targets](#)”), which include **mitigation** (55% emission reduction target by 2030), **adaptation** to climate change and **secure, sustainable and affordable energy**.

The implementation of the Action Plan encompasses a few steps including gaining commitment by decision-making bodies, receiving official stakeholder approval, providing sufficient financial resources, and ultimately, implementation. Finally, results should be communicated, monitored and evaluated.

3.3.1 Planning implementation

Joining the Covenant of Mayors is already a firm **political commitment**. Another important step in SECAP development is the affirmation by the local decision-making body (i.e., usually the municipal Council) that gives **formal approval** to the SECAP and provides the necessary financial resources (refer to Figure 4). Local authorities should further support the SECAP process by allocating adequate human resources with sufficient time, budget and a clear mandate, and should be involved in the elaboration

¹² For example, the [World Meteorological Organization](#)

process so that its departments accept and support it. Municipal officers should receive suitable training. Implementation reports should be produced and reviewed periodically. However, to allay concerns as to what a **commitment** implies, it is not a legally binding target with the CoM - it is, instead, an expression of an aspiration combined with a determination to reach the emissions reduction goal.

Local financial resources are always scarce; therefore, it is recommended to put effort into investigating additional funding sources. Some options for additional financing might include the European Structural and Investment Fund, National funding programmes, or alternative financing instruments (for example crowdfunding).

The implementation phase takes the longest time as well as effort and requires substantial financial means. Involvement of stakeholders as well as good internal (i.e., between departments of the LA) and external (i.e., with citizens and stakeholders) communication is essential.

The implementation plan of SECAP should define priority sectors for actions (e.g. municipal buildings, equipment, facilities), key actions (step-by-step), responsible departments, persons or companies, time and financial frameworks. Finally, it should consider what its result will be, such as expected energy savings, expected renewable energy production, expected CO₂ reduction.

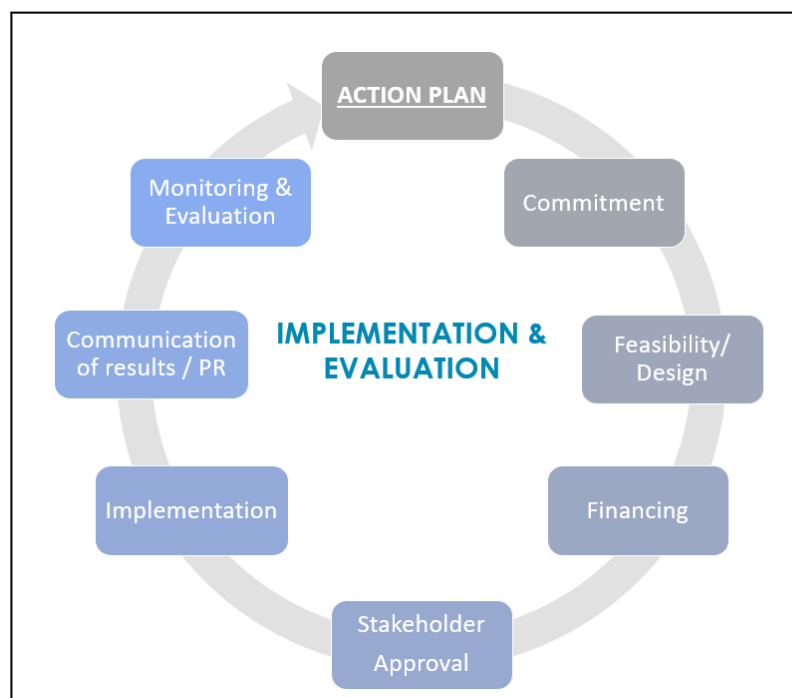


Figure 4. SECAP steps

Implementation is a general term, and includes several principal components:

- Concrete actions and prioritisation for their implementation
- “SMART” targets and target indicators
- Responsibilities and definitions of working groups
- A designated time frame for implementation and monitoring
- A plan for sufficient budget set-asides and specification of funding sources
- Monitoring and evaluation
- Investigating accessing additional financial resources

3.3.2 Implementation tips

You should consider that the implementation process takes time, often significantly longer than initially anticipated, requires the involvement of multiple stakeholders, and excellent external/internal communication. A SECAP unequivocally needs trained staff for its implementation. Its implementation should be regularly monitored. Finally, before rolling out ideas on a large scale, SECAP implementation can provide opportunities for testing innovative ideas on a smaller scale.

Tips for implementing a SECAP

Project management approach

- ✓ Use project management means: plan, set deadlines/milestones, control finances, implement deviation analysis and risk management
- ✓ Divide the project into different parts and select people to be responsible for these
- ✓ Plan procedures and processes for implementing each action's part and choose a quality management system to ensure that objectives are followed
- ✓ Use management instruments to keep track and monitor activities in the action plan (e.g., a scorecard system with indicators on percentage of budget deviations and emissions reduction etc.)

Human resources & communication

- ✓ Plan involvement of stakeholders during SECAP implementation (e.g., regular meetings to inform them or to exchange ideas)
- ✓ Regularly inform the municipal Council
- ✓ Plan and implement trainings for persons involved in the implementation as well as for the internal team
- ✓ Use tools such as pilot / demonstration projects for testing some measures before a large-scale implementation

4 Establishing Organisational Structures

Identifying clear organisational roles and responsibilities in a local authority is essential for the success and sustainability of your SECAP. It is the responsibility of the local authority that the SECAP is being considered vertically (by the various levels of management) and horizontally (across all departments). An LA can establish new structures or adapt already existing ones.

However, there are substantial differences in this regard between larger and smaller municipalities. Setting up organisational structures for SECAPs in smaller communities or cities can be challenging since they often face significant challenges due to limited staff resources when dealing with various issues, including sustainability and climate action.

To cope with these limitations and still make progress, here are some recommendations that especially smaller municipalities and communities shall consider in their organisations:

1. **Prioritise key initiatives:** Focus on a few high-impact projects that align with the community's most pressing needs and sustainability goals. By concentrating efforts, you can maximise the impact of limited staff resources.
2. **Leverage volunteerism:** Engage community volunteers who are passionate about sustainability and climate action. Volunteers can provide valuable support for tasks like organising events, conducting outreach, and data collection.
3. **Seek external partnerships:** Collaborate with neighbouring communities, regional organisations, and nonprofits that specialise in sustainability. These partnerships can provide access to additional expertise and resources.
4. **Bundle small communities into one SECAP:** Collaborating on a regional SECAP can be a highly effective approach, particularly when individual communities have limited resources or capacity to develop and implement their own plans.
5. **Leverage collective expertise:** Each community may bring unique strengths and expertise to the table. Collaborating allows communities to tap into a broader pool of knowledge and experience, fostering innovation and best practice sharing.
6. **Enhance funding opportunities:** Regional SECAPs may be more attractive to funders and grant programs, as they often demonstrate a more significant and coordinated effort. This can increase the likelihood of securing financial support.
7. **Plan comprehensively:** Regional SECAPs can lead to more comprehensive and integrated planning. This can result in more effective solutions that address shared challenges, such as transportation infrastructure, renewable energy generation, or waste management.
8. **Tap into technical assistance:** Seek out technical assistance programs and consultants who can offer specialised knowledge and guidance on sustainability projects to help bridge the gap in expertise. Sometimes there is also funding available from your government or through EU-funded projects to pay for consultancies.
9. **Utilise internships:** Consider hosting interns or partnering with local educational institutions. Interns can assist with research, data analysis, and project management, providing valuable support at a lower cost.

10. **Engage in regional networks:** Join regional or state-level sustainability networks and associations - one example for the CEE is [CEESEN](#). These organisations often offer resources, best practices, and peer support to help smaller communities. **CoM Territorial Coordinators (CTCs) or energy agencies** can provide assistance to local authorities with skills insufficient to draft or implement their own SECAP. They can provide strategic guidance, financial, and technical support. Another form of support can be subcontracting some specific tasks, e.g., compilation of a BEI or a RVA, or tasking these to interns.

For larger municipalities with adequate staffing, and alongside an administrative structure responsible for the overall management, you should consider consolidating the structures responsible for preparing the Baseline Emission Inventory (BEI), Risk and Vulnerabilities Assessment (RVA), planning and implementation of strategies and measures, as well as stakeholder engagement and multi-level governance initiatives into one working unit. Availability of an energy manager and resilience expert in the administrative structure would also play a crucial role in the process of SECAP development and implementation.

However, no matter the size of a city or community, the administrative structure should guarantee implementation, monitoring and updating of the SECAP by providing either adequate allocation of staff capacity and strong internal coordination or procurement of external services. The existence of a clear organisational structure will work towards implementing the long-term vision while balancing costs and benefits (see tips on this in Figure 6). It should engage stakeholders and the local population so that SECAP measures are accepted and have long-term impacts (for an example, refer to Figure 5).

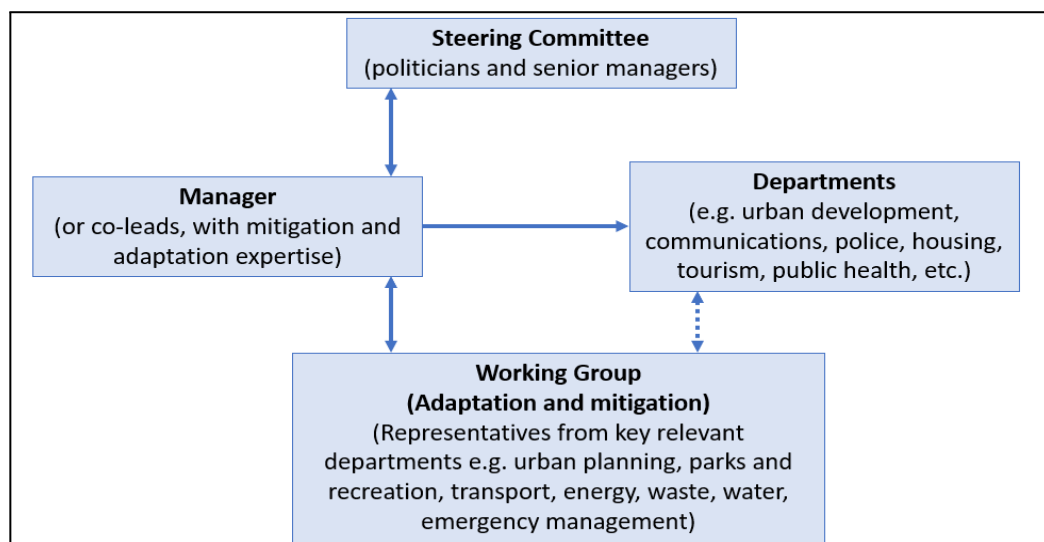


Figure 5. A possible organisational structure in well-staffed municipalities¹³

At the beginning of the SECAP elaboration process, a ‘Covenant coordinator’ or ‘**SECAP Manager**’ should be appointed. In smaller communities these can be engaged people from outside the administrative structure, like representatives from local community groups, NGOs or even volunteers that are idealistic and yet experienced enough in leading the implementation process. Make sure that they must have the full support of the local political authorities and respective administrative sections as well as the necessary time availability, and the budgetary means to carry out their tasks. They

¹³ Source: [C4S Team up for energy](#)

should be responsible for maintaining communication with relevant departments, and should have some climate action expertise, skills in moderation and communication, and a comprehension of connections across disciplines. The more key municipal players accept roles in the SECAP, the stronger their feeling of personal responsibility for the goals of the Action Plan. Adequate training could be necessary for working groups members in different fields (e.g., technical competencies, project management, development of investment projects). Furthermore, a specific communication campaign may help reach and convince the municipal workers in different departments.

The **Steering Committee** (SC) should include representatives from political-administrative bodies, political representatives (city or community councillors) or other relevant stakeholders. It should provide the overall SECAP coordination and make strategic decisions. Among its roles are reporting on implementation progress, monitoring, initiating working groups, and communication activities (e.g., external communication, campaigns for identity). It should meet on a regular basis (i.e., 2-4 times per year).

Members of the **Working Groups** (WG) should be stakeholders and civil servants from different departments. Political representatives and consultants can be involved as well. The WG plans and implements specific actions, and reports progress to the SC. The number of meetings depends on the needs of the WG (3 meetings/year might be reasonable).

Guiding questions when establishing a SECAP organisational structure in your LA are presented in Figure 6.

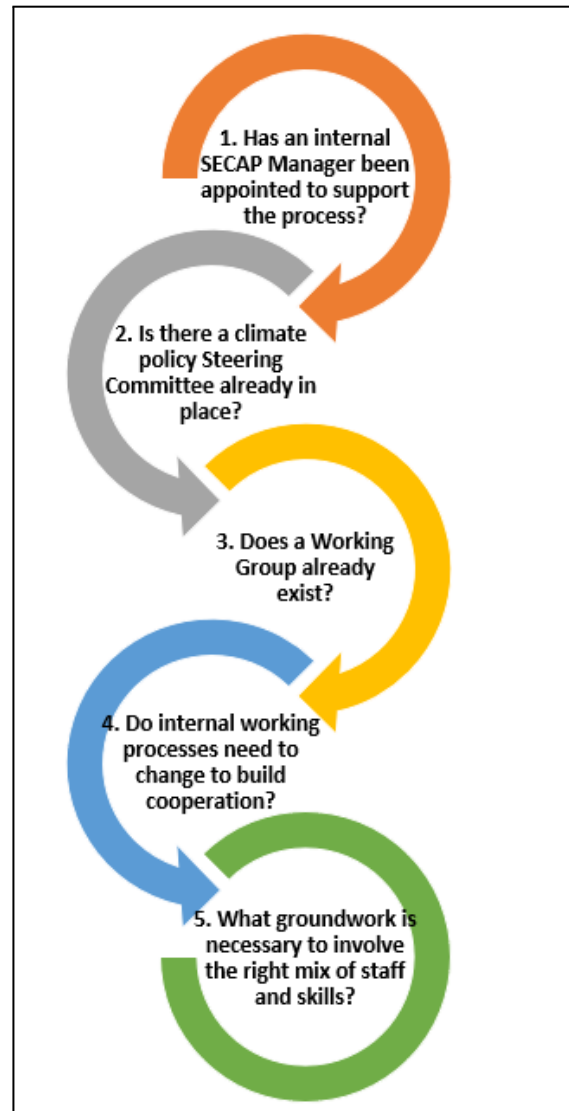


Figure 6. Some guiding questions for establishing organisational structures

5 Impediments You May Encounter and How To Overcome Them: Lessons Learned from SECAP Processes within CEESEU

We now share with you the practical experiences and lessons absorbed during the SECAP development processes within the CEESEU project and partnership. These include methodological and organisational findings, the challenges in collecting data, and contending with budgetary limitations. They partly reflect the initial problems that project partners encountered and the various ways issues were solved throughout the CEESEU project.¹⁴ If you want to learn more about CEESEU's results, please refer to the [resources](#) shared on the project website.

5.1 Impediments

Methodology:

- If you are working in a bundling initiative, attempting to suit the needs of both smaller and larger municipalities with due consideration given to regional contexts of sustainability, energy, and environmental policies, you might need to redraft your methodology in order to provide a commonly acceptable template (RO).
- Consider the pros and cons of deciding to follow a national methodology (if one exists) rather than the one proposed by the CoM, as the national one may afford more immediate access to financing delivered through central authorities (EE)¹⁵.
- Instead of a simple replacement of one methodology by another, consider if overlapping methods for climate action planning might be possibly appropriate, heeding to the Covenant of Mayors' while perhaps incorporating the special considerations set by an association of municipalities with common climate interests (HU)¹⁶.

Organisation and administration

- Creation of effective SECAP workgroups will require the inclusion of key staff across multiple departments - public utilities, projects development, emergency situations, environment, and energy - if it is to be highly effective. These workgroups can be capacitated both by online means as well as in-person visits by the regional energy agency, and may also obtain support related to basic administrative tasks, e.g., the issuance of Council decisions specific for the adhesion to the CoM (RO).
- Often there is a lack of expertise in smaller municipalities, but this doesn't mean that you can simply step aside and have a local energy agency do all the work. Municipalities should actively

¹⁴ Country names where an issue raised was a particular problem are appended in parentheses.

¹⁵ This EE alternative energy and climate action plan provides guidance for dividing inputs into eight groups (health, social welfare, and rescue capacity; land use and planning; natural environment; economy, including green public procurements and circular economy; bioeconomy; community, awareness, and cooperation; infrastructure and buildings; energy and security of supply).

¹⁶ Some municipalities in HU view the current CoM platform as overly complicated and difficult to use for non-English speakers. Often consultants use it for data input instead of public administrators, but the quality of the output SECAPs might vary significantly due to the different capacities of the (unmonitored) consultants.

participate in the data collection process, contribute to the identification of energy efficiency and renewable energy sources, and think about broader sustainable development issues. LAs are, after all, the entities best-positioned to generate collaboration with local businesses, NGOs, citizens, and other local interests during the SECAP development process while soliciting diverse perspectives and ideas (HR). The experience you gain from such efforts will be beneficial for future initiatives and the improvement of projects that will contribute to the sustainable development of your community. Joint development of your SECAP will provide you better insight into the current situation related to energy consumption, the most suitable actions for improving energy efficiency, and how best to encourage optimal use of renewable energy solutions in both the public and private sectors.

- If you are a small municipality, you might be routinely have to multitask, yet in the lead-up to a comprehensive SECAP it would be best if the Mayor assigns you - at least temporarily - solely to work on SECAP development tasks to enable you to keep your attention sharply focused on details and procedures, and that way to avoid inadvertent errors (PL).
- In larger municipalities, organisational issues can hamper the SECAP development process. For instance, you may encounter colleagues' resistance (which might be politically motivated) against the new tasks requiring their attention while carrying out SECAP development and, later, implementation. Or, alternatively, concise and accurate interdepartmental communication might be plagued by the unclear verbiage of others or mis-assigned responsibilities that are beyond their capabilities (HU). To get around this, dedicated staff can overcome situations that might otherwise evolve to become ineffective communication channels or essential, but absent, feedback loops.

Gathering data

- Collecting data for SECAPs has been challenging for all involved in CEESEU, and may also be for you. The new option of using EIE data (refer to page 5) may help you if your municipality has a population of at least 50 000 people. Ask for help if you need it from a regional energy agency or an NGO involved in climate and energy responses to assist you in navigating through various government databases (HU, HR).
- Depending on your location, your regional energy agency may already have compiled a great deal of the data you require, or may be able to add your municipality to query its database to help with your specific energy and climate data requirements. The agency may already have compiled historical weather data and data from energy providers to help you with calculating baseline emission inventories and for the Climate Risks and Vulnerabilities Assessment, and may already be using GIS software for, e.g., Urban Heat Island vulnerability assessments (RO).

Budget restrictions

- It hardly needs to be underscored that budget availability is a, if not the, crucial issue. Municipal budgets across the region are often low and since the implementation of defined SECAP measures often requires substantial investments, you are likely to need to search for additional funding possibilities, perhaps especially EU grants and subsidies. If your current knowledge concerning available financial sources is low, it will be necessary for you to invest more time and effort to find proper funding opportunities - or again to link with regional energy agencies, which may be keeping current in ascertaining which funding sources are suitable. Keep in mind that the process

of applying to different funding sources for SECAP actions is always challenging, especially for small municipalities due to complex application procedures, strict eligibility criteria, and intense competition. Don't pin your hopes on a single source, instead distribute your applications across as many as you can - but make sure that your needs and applications completely match and are relevant to the funds' criteria; don't waste your time or that of your applications' reviewers.

- In some countries, weak climate leadership at national levels and/or funds distributed by central authorities do not adequately support local development planning and can pose difficulties in SECAP development. You may also encounter the hindrance of a democratic deficit, where citizen involvement in local decision making remains low, and civil society is weak. You will have to reach out to people who know how to engage different stakeholders so that you can maximise your opportunities to develop a fundable SECAP. Again, regional energy agencies or specific NGOs should be able to offer you assistance and direction.

5.2 Lessons learned by municipalities during the SECAP process

- ▣ Municipalities' perception regarding SECAP development processes can play an important role. Some of your colleagues may be afraid of the unknown. For example, they could be concerned that the commitment of a SECAP to meet the CO₂ emission reduction target of 55% by 2030 is much too ambitious.

Explain to your colleagues that the SECAP might bring many future gains (financing/funding opportunities, monitoring indicators for implementation, etc.), especially in the event that municipal politics already correspond to the EU's emission reduction goals. It is important to highlight (as often happens with plans) that the estimated timeframe for proposed actions might change for various reasons (delayed financing, problems with obtaining funds, construction work issues), which does not imply that the SECAP's objectives are going to be unfulfilled. Moreover, the emissions reduction goal in a SECAP **is not legally binding** - it is, and will continue to be, an aspiration the municipality strives to meet in its commitment to the CoM.

- ▣ If you are bundling with other neighbouring municipalities, they may have different starting points in reference to their knowledge of SECAPs and their requirements.

A reasonable start-point to overcome this issue is for you to provide the links in Section 1.4 to the other municipalities, and then engage with your peers in them to exchange insights and share experiences. The available online training materials (unfortunately available only in English, but online translation can help with this) can enhance municipalities' understanding of the SECAP framework.

- ▣ If you are a forerunner in your county (or equivalent administrative area), you might be approached by other municipalities to engage in SECAP development, as they may recognise the topic as highly significant for their respective areas.

You will then be in the perfect position to be an ambassador for SECAPs, highlighting that a SECAP is more than just a document, and its development will enable their municipalities to focus on specific projects in the areas of energy efficiency and the utilisation of renewable energy sources. Their interest is already important as it is likely to trigger active engagement in SECAP development and implementation processes. As with any mentorship, your taking on this leadership role is very likely to be a positive experience, and will further lead to those municipal

representatives becoming interested in sharing their experience in SECAP development and implementation with others in the county and in deepening connections with your local government.

- ☒ In some countries, SECAPs might not yet be included as a criterion for the tenders needed to access national development programmes (i.e., providing operational funding). Some municipalities that have already developed their SECAPs may express their disappointment to you as they are unable to directly derive benefits from it, and do not perceive the practical usefulness of having done the work on the SECAP document.

This is not an easy situation to deal with, nevertheless it is an important one. First, remind your colleagues that the EU as a whole is committed to a 55% emission reduction by 2030, and that national government perspectives can change. For instance, [EU Member States will have two years from October 2023](#) to transpose most of the different elements in the new, recast [Energy Efficiency Directive \(EU\) 2023/1791](#) into national law. To help with this, promotion of best practices and case studies from within the CEE can have further positive influence, and this is available both via the [CoM](#) and [CEESEN](#). Increasing the popularity of SECAPs through awareness-raising measures among citizens, decision-makers and the private sector can support the acceptance and understanding of SECAP benefits at the national level.

Moreover, collaborative efforts with other municipalities on SECAPs and their functional implementation can help with building the following attributes:

- ✓ strengthened competencies and capacities of municipal staff to plan, implement and monitor energy and climate actions;
- ✓ efficient management of energy consumption in municipal buildings;
- ✓ new approaches towards the development and implementation of actions foreseen in SECAPs;
- ✓ long-term political commitment as well as adequate procedures and resources supporting the municipalities' efforts towards climate neutrality;
- ✓ strengthened intra- and intersectoral collaboration (among respective municipal departments, with relevant stakeholders and other local governments).

5.3 Streamlined Advice: Seven Essential Recommendations

To summarise the key points for all municipalities, regardless of size, to address in working towards a more sustainable and resilient future - whether by utilising the framework of aCoM SECAP or another form of climate and energy action plan - are as follows:

1. **Secure, allocate, and use funding strategically:** Seek and use funding wisely, explore grants, partnerships, and budget reallocations to support SECAP development and implementation. Balance competing priorities by carefully allocating resources while considering long-term benefits and synergies with other community needs.
2. **Acquire technical expertise:** Develop a strategy for building the capacity of local staff and community organisations to effectively support, plan, implement, and manage SECAP projects. Invest in training and capacity-building activities to develop in-house expertise or partner with external organisations (i.e., local/regional energy agencies, NGOs) to access technical

knowledge essential for SECAP success. Assign technical and administrative staff with concrete tasks for SECAP implementation.

3. **Prioritise data collection:** Identify key data sources, engage with regional agencies for data sharing, and leverage technology for efficient data gathering.
4. **Engage stakeholders actively and authentically:** Foster engagement through outreach, public meetings, and collaboration to ensure diverse voices are heard, and to create a shared sense of ownership over the SECAP. Promote public awareness via education campaigns to inform residents about the benefits of SECAP initiatives and to encourage sustainable behaviours.
5. **Advocate for supportive policies:** Work with other municipalities and/or regional authorities to advocate for regulatory and policy changes that enable and/or support SECAP initiatives, such as zoning updates and incentives for sustainability.
6. **Leverage existing technology and keep up to date with technological advances:** Explore cost-effective and scalable technology solutions, such as energy-efficient retrofits, that align with your community's capabilities and infrastructure. Reach out to other cities/communities in your country and further afield to learn from best practices and exchange experiences in the use of technologies for increased energy efficiency and renewable energy application. Subscribe to mailing lists that inform you of new technologies being developed, such as *The Blueprint*.¹⁷
7. **Establish efficient monitoring systems:** Create efficient monitoring and reporting systems to track progress toward SECAP goals and demonstrate transparency and accountability to stakeholders.

¹⁷ Sign up for this daily newsletter at [Interesting Engineering](#).

6 Suggested Reference Texts

Bertoldi P. (editor), Guidebook 'How to develop a Sustainable Energy and Climate Action Plan (SECAP) – Part 1 - The SECAP process, step-by-step towards low carbon and climate resilient cities by 2030, EUR 29412 EN, **Publications Office of the European Union**, Luxembourg, 2018, ISBN 978-92-79-96847-1, doi:10.2760/223399, JRC112986

<https://publications.jrc.ec.europa.eu/repository/handle/JRC112986>

Bertoldi P. (editor), Guidebook 'How to develop a Sustainable Energy and Climate Action Plan (SECAP) – Part 2 - Baseline Emission Inventory (BEI) and Risk and Vulnerability Assessment (RVA), EUR 29412 EN, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-96929-4, doi:10.2760/118857, JRC112986

<https://op.europa.eu/en/publication-detail/-/publication/a2ac8a5e-f134-11e8-9982-01aa75ed71a1/language-en>

C4S Team up for energy, Upgrading from SEAP to SECAP for integrated climate action, A quick access guide. <https://compete4secap.eu/resources/energy-management-systems/>

Eurovertice, Irradiare, Ekodoma, Guide for the elaboration of Sustainable Energy and Climate Action Plans, LIFE Adaptate project, Dec 2019.

<https://lifeadaptate.eu/wp-content/uploads/LIFE-Adaptate-SECAP-Guide-1.pdf>

Papadimitriou, E., Casabianca, E. and Cabeza Martinez, B., Energy poverty and gender in the EU: the missing debate, European Commission, 2023, JRC132612

<https://publications.jrc.ec.europa.eu/repository/handle/JRC132612>

7 Appendix: Background of the CEESU project

The Central and Eastern European Sustainable Energy Union (CEESU, 2020 - 2023) aimed to build the capacity of public administrators in Central and Eastern Europe to develop SECAPs (Sustainable Energy and Climate Action Plans) that promote increased energy efficiency, sustainable energy, reduced carbon emissions and improved climate change adaptability, helping the region to contribute towards meeting the EU's climate goals. Moreover, the Central and Eastern European Sustainable Energy Network CEESEN is to be strengthened to support the green transition in Central and Eastern Europe (CEE) and within the European Union (EU) more broadly.

CEE municipalities have lagged behind their Western European counterparts in developing SECAPs.¹⁸ This has been due to a number of reasons such as a lack of awareness and interest in the planning process, lack of expertise, capacity and access to resources - particularly in small municipalities - as well as the need for outreach strategies or procedural changes by EU level actors, such as the Covenant of Mayors (CoM), that will better address the reticence that often underpins climate action in the CEE. In a focus on these concerns, the CEESU project committed to:

- Create training materials and train local public administrators in the CEE on developing and implementing SECAPs, taking into account the specific contexts of CEE communities;
- Guide, according to the Grant Agreement 23 CEE municipalities (and subsequently amended to 20 plus 38 micro-municipalities and one county-level Energy and Climate Action Plan/ECAP for 6 municipalities) in engaging with stakeholders and carrying out multi-level governance to develop SECAPs;
- Guide CEE municipalities in financing and implementing SECAP actions;
- Improve engagement between public administrators in the CEE and with the EU;
- Offer guidance to the CoM and other EU actors on how to better reach and serve the needs of CEE municipalities in the development and implementation of SECAPs.

As a result of implementing the CEESU project, several important longer-term impacts are expected to be achieved:

- 650 GWh of energy savings by the end of the project;
- Improved capacity and skills of at least 645 public administrators in CEE municipalities;
- Better alignment of national and regional development plans with SECAPs in the CEESU countries and improved national and regional sustainable energy and energy efficiency policies;
- At least 25 million Euros of sustainable energy and climate change adaptation investments;
- The Central and Eastern European Sustainable Energy Network [CEESEN](#) will attain at least 2,500 committed members.



Alphabetised list
of partners in
CEESU

¹⁸ See e.g.

<https://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/03/EV55-EasternEuropesenergychallengeMeetingitsEUclimatecommitments-DavidBuchan-2010.pdf>