

Multi-level governance and partnership practices in development and implementation of Sustainable Energy Action Plans (SEAP)

This report was written by Arne Riedel (Ecologic Institut) and Giorgia Rambelli (ICLEI), Alexander Storch (Umweltbundesamt Wien).

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Executive Summary

Signatories to the Covenant of Mayors (CoM) and their Sustainable Energy Action Plans (SEAPs) play a major role in the task of designing and implementing policies for the reduction of greenhouse gas emissions on the local level. The success of the CoM to win close to 6,300 signatories by the time of the writing of this report required– and still requires – flexibility as well as guidance. The municipalities need at the same time:

- 1. flexibility for their SEAPs to adapt to local governance and financing frameworks, and
- 2. guidance regarding their design and implementation.

Detailed instructions on how to develop a SEAP have already been issued earlier.¹ The scope of this study allowed taking a closer look at a limited number of case studies. This gathers a range of actual experiences from CoM signatories, spanning singular municipalities as well as coordinating regions. The abstract recommendations that could be drawn from such a small set of samples are necessarily broad but show overarching challenges for a number of structures and local circumstances.

Multilevel governance recommendations

Interview results with stakeholders in a first set of three case studies for **multilevel governance** resulted in the following **recommendations for main elements for a process leading to the successful creation and implementation of an SEAP**:

- Set the stage for greenhouse gas reduction potentials: An initial analysis of the local circumstances needs to take stock of the most relevant and accessible sectors (incl. also large emitters) and local stakeholders.
- **Push for climate action:** A strong push for climate action is needed from the **municipality** itself. Within the selected case studies, both bottom-up and top-down approaches worked, either by an active administration with political backing or by a region giving additional financial and administrative support.
- Coordinate internally: Following the local analysis, all relevant departments should be approached. In the case studies, a balanced

¹ European Commission, How to develop a Sustainable Energy Action Plan (SEAP), 2010.

cooperation of environmental **and** economic departments was of particular relevance.

- Coordinate externally: An early start of local level participation and sector specific networks enables decision makers from the start to the implementation of the process, and allows them to continue beyond the initial goals.
- Look for assistance: In cases where local municipalities cannot come up with sufficient financial or technical means, a top-down support in these areas, particular from regions to small municipalities, can enable them to create a SEAP in the first place. However, to ensure sustainable financing, other options always need to be considered (see also findings to task 2).

Remaining challenges identified in the case studies could be summarized in three categories:

- Early participation: The capacity building for networks of stakeholders is a time and resource-consuming process that should be started and widespread even before designing a SEAP. Depending on the country, activating civil society and spreading acceptance of the process is particularly challenging.
- Continuous horizontal and vertical integration: It was highlighted that a continuous political support on the local level is a key facilitation for horizontal as well as vertical integration. Exchange and learning from other municipalities in the region or state (with similar structures and backgrounds) about best practices for SEAP design and implementation also needs continuity.
- Other (external) factors that emerged were the challenges to find secure financing options for future implementation activities (see also task 2 of this report), as well well as a clear and stable regulatory framework (in particular on the national level).

Sustainable financing recommendations

For **recommendations on sustainable financing**, the interviews with a different set of three municipalities showed in part parallel findings to the ones on MLG but also went – due to its more specific nature of questions – beyond:

• Success is in the mix. This can include cooperation among different level of government and public actors, or the local government sector collaborating

directly with the community, or several municipalities working together. To move a sustainable energy action or plan from planning to implementation it is necessary to create **partnerships and collaborations**, both **multi-level and cross-level**, in order to obtain the adequate support to implement the business model both form a technical and a financial point of view. All **actors and stakeholders, including private sector and the community, should be included** in the process from the first steps.

- Think outside of the box. All the case studies show how the approach of relying exclusively on funding (top down) is not a viable business model. It is important to move from zero-interests grants to fund action, to business plans including more sustainable financing mechanisms. This includes striving for partnerships with the private sector, e.g. with the set up of PPPs and ESCOs as a defined goal, and for more inclusive approaches including the community not only in the process but also giving it the possibility to invest in it. Participation catalyzes investments.
- **Stability and change.** While the mind-set of the public sector needs to shift form grant-based funding schemes to innovative financing options including different stakeholders, a certain degree of **stability** is still very much needed within the **regulatory frameworks**. Especially at national level, uncertainty in regulations, **bureaucratic and overburdening application processes** to access funds continue to appear as a major issue for the investors and their confidence, as well as for local governments wishing to apply for funds or to explore financing options.
- Support and capacity. Especially when dealing with financing local authorities need technical support in rolling out but also in managing such projects. Multi-level governance and cross-level collaboration with peers have great potential in triggering know-how and with it solid bankable projects, with the benefit of aligning the local actions with sub-national strategies. The private or the tertiary (NGOs, community groups, etc.) sectors have also an ample role to play in providing support and step-by step assistance, especially directly on the field. When this support network is missing the results of the projects can be severely undermined. Lack of capacity, support, and guarantee, combined with difficulties in managing a large consortium can hinder implementation, and the support of larger entities (e.g. regions) with more capacity, can support the roll-out of sustainable energy action through large-scale investments.

1 Analytical framework

1.1 Objectives of the study report

The Covenant of Mayors (CoM) promotes a shift towards a more sustainable environment on the local level. For this reason, CoM-signatories submit Sustainable Energy Action Plans (SEAPs) that reflect their efforts to significantly reduce greenhouse gas emissions and specify the means to implement this goal. Two aspects in the process of creating and implementing the SEAPs are of specific interest in this study:

To ensure a legitimate process and leverage the available potential for the SEAPs, the CoM promotes multi-level governance including a wide range of stakeholders from national, regional, provincial and municipal level. At the same time, it encourages to use a range of funding instruments of public and private source for the implementation of SEAP measures.

Following these two major aims, this report will:

- 1) Identify how MLG has helped municipalities and/or regions to successfully design and implement a SEAP by focussing on three best practices/case studies.
- 2) Analyse a second set of three case studies on the mobilisation and use of public and/or private funding for the implementation of SEAP's, focussing on regions and identify potentially replicable factors to success.

The report draws on the partners' experience of various projects in the field of multi-level governance, municipalities' climate action plans incl. sustainable energy, and public/private funding.

1.2 Methodological approach

The methodology for this report builds on the requirements of the objectives mentioned above. As an overarching approach to both tasks, literature and desk reviews of existing sources were conducted.²To find suitable case studies for

² For instance, the Covenant of Mayors Office (CoMO) has put together a list of possible strategies and initiatives within the Covenant Coordinators 'Guidelines', 2013. See also the "Benchmarks of Excellence" at <u>http://www.covenantofmayors.eu/actions/benchmarks-of-excellence_en.html</u>. The capaCITY-project, for instance, provided information on selected cities and towns in 15 countries.

both tasks, the methodology also needed to take into consideration **task-specific criteria** that allow the identification of good practice examples. In the following subsections, these requirements are described in more detail.

In addition to the specific criteria, the selection of the case studies for both tasks also considers defined **overarching criteria** such as the municipalities' or the project's geographical location and the size of the city or region.

An in-depth analysis of overall obstacles or difficulties encountered by local and regional authorities was carried out by conducting **exploratory interviews** to bring in first-hand knowledge from the preparation and implementation processes (task 1) or the mobilisation of financial resources for the implementation (task 2). An example draft for a case study is included in the Annex to the report.

The relevant Inputs were collected by up to three phone interviews per case study and provided information for the final analysis. The questionnaire for the interviews built on a common set of questions that were asked in task 1 as well as in task 2 interviews. Again, to enable a task-specific focus of the questionnaire, a sub-set of additional questions for both tasks was added to the common set.

1.2.1 Good practices of multi-level governance (task 1)

Multi-level governance (MLG) is to be understood as a connection of decisionmaking processes by a variety of independent actors,³ often part of a state's different hierarchy levels and equipped with different competences. This system, however, does not itself require a strict hierarchy or exclusive competences between its actors.

MLG refers to a system of decision making that is per se independent from a specific topic.⁴ To determine good practices of MLG in a specific field, the criteria usually have to also consider the desired outcomes of this field. For this study, the thematic focus is on MLG in the development and implementation of SEAPs.

³ The CoR itself considered MLG as "coordinated action by the European Union, the Member States and local and regional authorities, based on partnership and aimed at drawing up and implementing EU policies", see White Paper on Multi-level Governance, p. 6. The follow-up in the CoR's Opinion on Building a European Culture of Multilevel Governance, p.2, added the principles of subsidiarity and proportionality to the partnership aspect.

 ⁴ This can be seen by the overall relevance of MLG as a guiding principle in the implementation of the cohesion policy in connection with new common provisions on the EU's structural funds, see Art. 5 of Regulation (EU) No 1303/2013.

A number of efforts already have been made to identify good examples of MLG. One of the most recent examples is a study commissioned by DG REGIO on promoting multi-level governance in support of Europe 2020.⁵ While this study focused on cities' and regions' case studies on energy efficiency and social inclusion, our study aims towards a more overarching angle on MLG in the development and implementation of SEAPs including the coordinating regions' role. Thus, the criteria for good governance were adjusted in this study to accommodate the different angle.

Additional sources to identify good governance criteria were in particular:

- the MLG Scoreboard for the EU-level,⁶ and
- the CoR's 5th monitoring report on the "Europe 2020" strategy⁷

The following outline aims to structure MLG criteria for two purposes: (1) to give a quick impression of suitable case studies of MLG processes, and (2) to evaluate selected case studies in more detail to identify good practices.

To build such a system of criteria some MLG criteria – as used for instance in the MLG scoreboard – are used for an overview ranking of suitable case studies. To add further detail when evaluating selected good MLG practices, the criteria need to describe different notions or different stakeholders within their scope. Thus, it is suggested to use an overarching set of criteria "clusters" that can be split up into more specific sub-criteria later. The following structure s suggested to include aspects of the **design**, and the **implementation** of the SEAP:

General clusters

1) Transparency of the approach and communication

Overall criteria on outreach activity by the municipality and the availability of information:

a. Active provision of information / openness of the consultation

⁵ European Commission, Local and Regional Partners Contributing to Europe 2020 - Multi-level governance in support of Europe 2020. Despite the willingness of the parties to participate, the study aimed for a mix of case studies to reflect a broad variety of governance contexts and arrangements in different countries with different administrative systems, different approaches to multi-level governance and to have different ways of addressing the issues at stake.

⁶ Committee of the Regions, Scoreboard for monitoring Multilevel Governance (MLG) at the European Union level, p. 20: Rationale and methodology of the 2012 Scoreboard.

⁷ Committee of the Regions, 5th Monitoring Report on Europe 2020, See section 4, "Multilevel Governance at work for Europe 2020".

b. Responsiveness

2) Stakeholder Involvement and participation

This criterion relates to the participation processes with a number of actors:

- a. Within the administration
- b. With Civil society / citizens
- c. With Businesses
- d. With local policy-makers/political fora

3) Horizontal Integration

The horizontal integration of the municipalities' approach relates to its efforts in reaching out to different policy areas and also to maintain the cooperation with other municipalities:

- a. Local level
- b. Cross-border cooperation

4) Vertical Integration

The vertical integration of the municipality's or region's approach relates to its exchange with (and possibly influence by) other authorities on different levels:

- a. Municipality contact
- b. Regional contact
- c. National contact

5) Innovation

Overall criteria on the innovative character of the municipality's or region's approach

Additional selection criteria that have to be taken into account are:

- Geographical distribution
 - To the extent possible, a balanced geographical distribution of the municipality allows to showcase different challenges (and the municipality's efforts to overcome them) in different parts of the EU.
- Size and structure of municipalities

The overall aim of task 1 is to identify how a genuine strategy for sustainable *energy* action can be built that is also coherent with European, national, and local regulations. This process could provide valuable additional insights for all kinds of municipalities interested in climate and sustainable energy action, but would arguably benefit the municipalities most that often do not have the (financial or personal) resources to create their own strategic concepts.

To *reflect* a mix of powerful, networking, and smaller municipalities, the six case studies for task 1, aim to include:

- Two larger city frontrunners, since larger municipalities tend to have more resources also more experience with strategic (climate action) planning,
- two regions/coordinators, focusing on coordinative processes for local municipalities, and
- two suggestions for smaller municipalities.

1.2.2 Good practices of mobilization of public and/or private funding (task 2)

For the selection of case studies for good practices of the mobilization of public and/or private funding, the following criteria needed to be considered.

Selection criteria:

1) Sector focus

This criterion addresses different sectors in which the SEAP measure can be implemented – with a focus on sectors requiring direct investment.

- a) Renewable Energy generation (distribution, sale?)
- b) Energy Efficiency measures
- Building sector
- Lighting
- c) Multi-sector actions

2) Diversity of business model

This criterion aims at guaranteeing a selection of business models and funding sources.

- a) EU Funding
- European Investment Bank programmes (ELENA, JESSICA)
- European Technical Development Assistance (MLEI)
- b) Financing
- *Innovative financing* (e.g. green bonds)
- Community-lead initiatives

3) Public/private investment

This criterion relates to level of engagement and type of partnerships created with the private sector and the different stakeholders both in the development and implementation phase.

4) Multi-level / cross-level engagement

- This criterion relates to the engagement of the different levels of government, or of different municipalities, in both developing and funding/financing the action.
 - a) Multi-level cooperation
 - b) Cross-level cooperation

5) Innovation

• Overall criteria on the innovative character of the municipality's approach

Additional selection criteria that have to be taken into account are:

• Geographical distribution

A balanced geographical distribution of the case studies selected allows to showcase ambitious solutions in different economic and social contexts. In addition, such distribution allows to explore innovative financing opportunities, and funding solutions in relation to both country-specific and regional conditions and frameworks. Among the challenges in the different contexts: country-specific legal barriers to develop PPPs or ESCO models, diversified access to Regional Development funds, but also limited spending/borrowing capacity for municipalities.

• Size of municipalities

To guarantee a set of recommendations for replication it is important to address different sizes of municipalities. This will allow to streamline key factors for replication both within similar size municipalities, and to identify success factors that work across-size.

Furthermore, the size of a municipality has a direct impact on the investment that the can be undertaken, which reflects directly both on the type of investment (e.g. on the sector) and on the business model. In addition, the size often impacts capacity available (both in terms of skills and of staff). For this reason actions led by group of municipalities, as well as, by a joint effort with other level of government will be considered. The connection between funding and financing options and the size of the municipality will be explored particularly through case studies directly involving citizens and stakeholders.

The ten case studies proposed include:

- provinces to directly focus on how multi-level governance can affect financing options,
- medium size cities, and
- groups of municipalities to address how cooperation among smaller actors can be used to create critical mass to leverage large investment.

1.2.3 Interviews

Overall, a total of up to three interviews were conducted for each of the six case studies identified by the partners and agreed upon with the CoR.

A common questionnaire identified relevant information for both, task 1 and task 2. In addition, an additional sub-set of questions for the individual task ensured that more specific information was acquired where needed. As the questionnaire was used by different interviewers and to explore different case studies with different objectives and focus, the questions were purposefully developed to cater for diverse contexts, in order to be used as a basis for all case studies in both tasks.

The interviewer already had knowledge on the case study and was able to adapt the questions and direct the discussion during the interview, which, in some cases, took place in the national languages and not in English.

1.2.3.1 General interview questions

The interview questions for both tasks, one and two, share a common framework as set out below. Questions are grouped in five sections to be followed throughout the interviews.

The main question sections follow the questions during the timeline of setting up a SEAP process:

- Why was the process started on the local level?
- Who was involved in the process?
- How (well) was the plan created and implemented?
- What are essential factors to replicate the experience?

Question section VI adds questions on more contacts and potential links to documents and plans.

Additional questions are laid out specifically for task one on multilevel governance and task two on funding/financing in the following subsections (1.2.3.2 and 1.2.3.3 respectively).

Ι.	<u>The first round of questions</u> is aimed at assessing the context						
Assessing the	in which the SEAP or 'case study' action was						
Framework –	developed/implemented. The questions will address the local						
why?	<i>context</i> , as well as the relevant <i>national conditions</i> , in order						
	to understand the external factors that triggered the						

	development and implementation of the SEAP.
	LOCAL CONTEXT:
	Does the local government have a local climate strategy? If yes, for how long has it been in place? Are there good circumstances for implementation of actions described in the 'case study'?
	Were there any obstacles or challenges to the development of your local plan? How did you overcome them?
	REGIONAL/COUNTRY- SPECIFIC CONTEXT:
	How are national and sub-national frameworks connected in relation to local climate action? Is any support (capacity and funds) foreseen at national/regional level for sustainable energy action planning?
II. Partnerships and stakeholders ´engagement - who?	<u>The second set of questions</u> aims at investigating the type of stakeholders involved and their role in developing the object of this case study. The questions will help assessing how good partnerships (vertical/ horizontal) have influenced planning and implementation.
- wno:	PROCESS:
	Who drove the process (both design and implementation) at all phases? What levels of government were directly involved?
	Which stakeholders were included in the discussion and how? Did citizens engage? And the business sector? How is participation organized and is it fruitful?
	MANAGEMENT:
	Were several departments engaged? Was any management structure set up for such collaboration?
	If more than one municipality was involved, what is the relation with the other local governments in the area? And

	with the region? Is there a history of collaboration? Are there other areas of co-operation in emerging or innovative collaborations with neighbour municipalities or the region?				
III.This section features specific questions related to tAdditionaltask 2 (see 1.2.3.2 and 1.2.3.3)SpecificQuestions					
IV. Success factors - how?	<u>The fourth round of questions</u> will explore results and outcomes, and specifically it will help identifying what tools have been used and what steps have been taken to implement the action. Recommended steps:				
	How did you start planning? How did you engage the right actors (including other municipalities)? Did you have all the data necessary for a good quality baseline? How was the sector of implementation chosen and why? What do one need to consider selecting a sector? Did you set up any management system / management structure to monitor the development and implementation of the project in this case study? Do you have a monitoring and evaluation system in place? How (how often, by whom, to whom, in which way) did you review the project subject of this case study? What are the most significant results? How did you communicate/ disseminate the results? Why did it work? What kind of resources (both capacity and skills) is needed? What tools and policies were utilized to bring forward the implementation? Did you use any tools to facilitate the set-up the action?				
V. Replication factors	<u>This fifth set of questions</u> aims at collecting recommendations for replicating the action Specifically, it wishes to collect feedback on dos and don'ts, first-hand recommendations on kicking off a similar funding process, as well as to identify challenges and room for improvement of the actions.				
	What worked really well and why? What should one know to kick off a similar action?				

	What did not work at all and why? How can this be prevented or improved? What are the main advantages and disadvantages of the used model? What are the specific conditions that would allow this solution to work successfully in another municipality? Can the measures be replicated in other sectors? Did the action have any positive social impact? Do you see any in the future? Approximately how many jobs have been created as a result of the project? In one sentence, do you have any recommendations for other local governments interested in starting a similar process?
VI. More information	Links + contacts

1.2.3.2 Task 1 additional interview questions

Creating and using MLG structures	 <u>This round of questions</u> focuses in more detail on the creation and the actual use of MLG structures. It adds follow-up questions particularly to round II of the questions ("Partnerships and stakeholders 'engagement - who?"), and also adds questions specifically for regions/ coordinators with a number of municipalities involved in the creation and implementation of SEAPs. ADDITIONAL QUESTIONS REGARDING THE PROCESS: Where also non-governmental networks (e.g. by universities, businesses, etc.) involved in getting the process started? How was the communication organized: Which entities lead the communication? Ware regular exchanges and for for for
	communication? Were regular exchanges and fora for exchanges established? (If so: Are they still in place?)Was a legally binding decision by the local government or
	decision-making body (local parliament) required for the SEAP?

How was the use of MLG (incl. the involvement of many actors and combining different decision-making processes) perceived in your municipality? (E.g. a barrier to fast decision making, a necessity or facilitation for political consensus?)
ADDITIONAL QUESTIONS REGARDING THE MANAGEMENT:
What was the role of the different government levels in the decision making process? (How was the decision-making power distributed?)
Was the local government's decision to create and implement an SEAP dependent on another level's support or vote?
ADDITIONAL QUESTIONS SPECIFICALLY FOR REGIONS/COORDINATORS:
Were you as a region/coordinator the (only) initiating force of the process?
Did all municipalities in your region/under your coordination participate in the Covenant of Mayors?
If so: What was perceived as the most supportive element?
If not: What were important barriers for the ones not participating?
What were the issues that you as a region/coordinator had to help with most? (E.g.: Applications, coordination, data/knowledge, funding, monitoring?

1.2.3.3 Task 2 additional interview questions

Mobilization of	This round of questions focuses on exploring more in
sustainable	detail the mobilization of sustainable funding/financing -
funds	how it happened, what to consider, whom to engage.
(private/public)	Barriers and challenges, as well as requirements and
– what?	recommendations from financial institutions engaged
	will be explored.

ABOUT THE PROCESS
Did you have sufficient know-how and capacity for financing and funding within the municipality?
What kind of help did you need (e.g. capacity building, technical assistance)? Did anyone from public institutions or private associations provide you information or advice to manage it?
What type of funding/financing options did you explore and why did you decide to opt for this type of funding/financing?
Which financial institutions/funding source did you engage with? How?
What are the biggest barriers to ask for European grants? What kind of elements made your project financially- sound (please make reference to the feedback received by your partners or the financial institutions involved)? Did you think about combining different sources of financing/funds? If yes, how did you do it? If applicable, what are the benefits of engaging other municipalities?
ABOUT THE MODEL:
What steps did you follow when developing your business plan? Did you include socio-economic consideration in your
plan? Which ones?
Is the funding sustainable also for the future? Will you need co-financing?
What is the composition of the funding used for this actions (private sector, public budget (municipal, provincial, national funding) European funding, others)? What leverage factor on investment has been achieved to
date?

2 Analysis of multi-level governance and partnership practices

2.1 Overview

The six case studies for an analysis of multi-level governance and partnership practices have been selected to enable a selection from a variety of approaches undertaken by the municipalities. From our experience, the approaches for creating and implementing action plans depend to a good extent on the size and structure of the municipalities and their administrative efforts.

To reflect this in the analysis, the six municipalities span a large range of sizes and structures.

- The first two suggestions are large cities with active inner-city participation processes and their vertical integration. This includes Hannover, Germany, with more than 500,000 inhabitants, and Tallinn, Estonia with around 400,000 inhabitants.
- Two suggestions are taken from regions that coordinate a large number of SEAPs for the participating municipalities. For these case studies, the special focus is on the horizontal coordination and communication. Suggested regions are the Province of Barcelona, Spain, and the Emilia Romagna Region, Italy.
- The two final suggestions focus the view on small municipalities with fewer capacities. The suggested municipalities are here Bregenz, Austria (with about 28,000 inhabitants) and Les Mureaux, France (with about 32,000 inhabitants).

To ensure an analysis of SEAPs that have been largely implemented, only municipalities were selected, whose SEAPs were approved more than two years ago. Also, an additional top-down and cross-search for municipalities' activities under "Intelligence Energy Europe" and "Coop Europe" was conducted. The preliminary assessment of the selected SEAPs followed the basic criteria as set out above (section 1.2.1).

The addition of a first column for the sectors covered by the respective SEAP allowed to reflect already some of the individual aims and challenges of the municipalities. In some cases, specifically for the large and small municipalities, no specific information on vertical integration could be found just by the analysis of the SEAPs. Additional insights are added via interviews for the final three case studies.

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration,	Horizontal integration (local level/	Vertical integration (regional	Interesting Aspects (Innovation,
				civil society,	cross-border)	contact/	Challenges)
				businesses,		national	
				policy makers)		contact)	
1	Hannover,	Local	Very detailed	Inner-	Department for		Hannover is a
	Germany	generation	SEAP,	administrative	energy <u>and</u>	information	climate action
	(pop.	(modernization	distinguishing	staff (climate	economy;	yet	front runner
	514,137)	of coal	programmes	action unit)	Later.		with
		generation,	between actors	Cooperation	Cooperation		extensive
		cogeneration,	and	with local	with the		participation
		renewables:	overarching	utilities (Klima-	"Region		process
		mainly wind,	topics (such as	Allianz	Hannover"		experience.
		also biogas and	efficiency)	Hannover	(a consortium		Reaching out
		waste);		2020);	of 21 cities and		with
		Also: energy		Working groups	municipalities		cooperation
		efficiency (in		with societal	of 1.1 Mio		on the inter-
		particular		actors (political	inhabitants)		regional level
		industry,		parties,	Several		(between
		business and		churches,	municipal		municipal and
		households),		environmental	Networks, such		state level).
		buildings		and consumer	as ICLEI,		Large city
		(particularly		NGOs)	Climate		with
		from the			Alliance,		continuous

2.2 Suggested case studies on multi-level governance

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration, civil society, businesses, policy makers)	Horizontal integration (local level/ cross-border)	Vertical integration (regional contact/ national contact)	Interesting Aspects (Innovation, Challenges)
		administration)			Masterplan Municipalities, and others		political support of climate targets
2	Tallinn, Estonia (pop. approx. 408,000)	Energy production and use; heat production and use; traffic and transport; street lighting; water resource management; waste treatment; housing; urban design; land use; consumption habits	Detailed SEAP on the program level, breaking it down into measures and actors in Annex 6, SEAP also available in English	Plans to include participants in the implementation of the managerial process; Regular meetings, debates, roundtable discussions	Suggested inter-local coalition, including representatives of the city government and a number of departments	No additional information yet	Plans to incorporate participation processes on the managerial level. Challenge to diversify energy sources with a central country-wide Power Plant that supplies most of the electricity in Estonia.

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration, civil society, businesses,	Horizontal integration (local level/ cross-border)	Vertical integration (regional contact/ national	Interesting Aspects (Innovation, Challenges)
				policy makers)		contact)	
3	Province of	All sectors	Very	No information	No information	Since 2008,	Coordinating
	Barcelona,	covered,	transparent,	on participation	on the	the province	role of
	Spain	SEAPs scope	information	at the level of	exchange of	of Barcelona	province,
	(pop approx.	is widened to	available in	the province	information	coordinates	Including the
	5,400,000)	include waste	English	could be	and	and finances	mobilization
		treatment,		retrieved.	coordination	the drafting of	of resources
		transport and		Stakeholders	between	the SEAPs of	by negotiating
		water cycle		supported by the	provinces	the	with the
		emissions		province at	could be found	municipalities	European
				municipal/		within its	Investment
				SEAP level		territory,	bank;
				include political		promotes	Scope: Until
				and technical		study visits	2014, 200
				staff in the		and provides	SEAPs had
				municipal		technical	been prepared
				councils,		support,	by
				general citizens,		including	municipalities
				as well as utility		biannual	in the
				companies,		monitoring	province.
				public transport		and data	Emission per
				operators,		exchange	inhabitant
				architects,			was reduced

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration, civil society, businesses, policy makers)	Horizontal integration (local level/ cross-border)	Vertical integration (regional contact/ national contact)	Interesting Aspects (Innovation, Challenges)
				engineers and other professionals, and the commercial sector			by 24% between 2005 and 2012. A challenge seems to be the financial crisis, which supported the decrease in CO2 emission, while at the same time reducing the capacity of municipalities to finance proposed actions.
4	Emilia Romagna Region, Italy	Energy Production, Services and	Detailed and transparent SEAP	Wide variety of actors, stakeholders	Several departments are engaged in	SEAP of e.g. Bologna has been	Enhance the close collaboration

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration, civil society, businesses, policy makers)	Horizontal integration (local level/ cross-border)	Vertical integration (regional contact/ national contact)	Interesting Aspects (Innovation, Challenges)
		Industry, Public Housing, Public buildings and Lighting, Mobility		involvement	the process of SEAPs. Management structure for such collaboration is missing	elaborated autonomously. A reform of	between the different coordinators to encouraged the development of new approaches Support a bottom up approach of SEAPs and encourage the Municipalities to cooperate together more closely. The growing awareness of the importance to know its own

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration, civil society, businesses, policy makers)	Horizontal integration (local level/ cross-border)	Vertical integration (regional contact/ national contact)	Interesting Aspects (Innovation, Challenges)
5	Bregenz, Austria (pop. 28,000)	Local energy generation (financial support for renewable energies: Biomass, pellet heating, solar thermal systems, solar, cogeneration); Also: housing, industry and business, mobility; procurement	Very detailed SEAP	"energy-team" (e5-programme) with members from the administration, local politics, and citizens; administration; administration- internal WIKI- platform; Climate Dialogue	Cooperation with neighbouring municipalities on specific aspects of implementation (mobility)	No additional information yet	consumptions Participation in the e5- programme. Diverse measures, incl. An own funding scheme for renewables.
6	Les Mureaux, France (pop. 32,337)	Local generation (solar, district heating)	SEAP with clear structure, no additional information	Set of Agenda 21 workshops; Series of consultation	CooperationwithotherEuropeancitiesviaCASH	No additional information yet	Strong dependence on fossil fuels

No.	Criteria / Municipality	Sectors	Transparency	Participation (intra- administration, civil society, businesses, policy makers)	Horizontal integration (local level/ cross-border)	Vertical integration (regional contact/ national contact)	Interesting Aspects (Innovation, Challenges)
		housing, installations and industries, transport, procurement	yet	methods; support of associations	(Cities Action for Sustainable Housing)		

2.3 Selected case studies

This section presents the conducted case studies on task 1 in an accessible format along the criteria and subcriteria as described above. In coordination with the CoR, the following case studies were agreed upon for task 1: City of Hannover, Region of Barcelona, and Emilia Romagna Region. This selection enabled to analyse active internal processes as well as the roles of coordinators.⁸ A summary of the findings and overarching assessment of all task 1 case studies can be found in section 2.4.

Name and brief descrip	otion of the case study				
Member State(s) /	Germany / City of Hannover				
Partner(s)					
Executing entity	Ecologic Institute, Berlin				
Timeframe of case	18-30 September 2015				
study					
Contact	Arne Riedel, +49 30 86 88 0 192,				
	arne.riedel@ecologic.eu				
Additional information	The case study is based on three interviews (two				
	with the representatives of the city of Hannover, one				
	with the local energy utility):				
	Ms Ute Heda, City of Hannover, Project Manager,				
	Klimaschutzleitstelle, <u>ute.heda@hannover-stadt.de</u> ,				
	+49 511 168 40683				
	Mr. Hans Mönninghoff, City of Hannover, former				
	head of Environment and Economics Department,				
	hand.moenninghoff@htp-tel.de, +49 511 920 16033				
	Mr. Stefan Scheloske, Enercity, Hauptabteilung				
	Unternehmensentwicklung und Beteiligungen,				
	stefan.scheloske@enercity.de, +49 (0)511 430 2782				

2.3.1 Case study for the City of Hannover

Summary

Hannover submitted its SEAP already in December 2008. It was chosen for a case study in particular for its front-runner status in pushing a sustainable energy agenda, also into the whole region, and its extensive participatory activities.

⁸ See also the Covenant of Mayors Office's Covenant Coordinators 'Guidelines' for key roles, responsibilities, as well as a number of examples from a wide range of regions and provinces.

The process in Hannover leading up to its SEAP "Klima-Allianz Hannover 2020" can be traced back to as early as 1992 when a first climate action program was established in a council resolution, aiming for 25% of emission reductions by 2005 compared to 1990. It followed political priorities, and lead to the creation of an administrative climate protection unit in 1994. The results of the program by 2005 produced a number of lessons to learn, in particular to widen the scope of participation and to make its goals binding. For the SEAP, the administration teamed with the local – and city-owned – energy utility "enercity".

With its SEAP, Hannover aims for a CO_2 emission reduction of 40% by 2020 compared to 1990 levels. It focuses mostly on energy supply by its city owned utilities (700,000 tons), additional potentials for renewable energy in the region (400,000 tons) and reductions in energy demand by industry, businesses, and households (700,000 tons).

Setting up four working groups (industry, offices, housing, and disseminators), the mayor of the city personally invited high-level representatives from companies and civil society to take part in the participatory process to discuss goals and implementing measures. The process was organized – incl. a professional moderation of the meetings – by the city in close cooperation with the local energy utility and continues to this day in a number of networks. Also, as a follow-up plan, Hannover created a "Masterplan 100% climate protection", aiming for by 95% greenhouse gas emission reductions and 50% reduction of energy consumption by 2050.

From a governance perspective, Hannover's SEAP process can be best described as policy and administration driven, also giving an impressive example establishing a multi-stakeholder process.

Criteria	Subcriteria	Description
	(if applicable)	
Transparenc		The climate protection unit within the
y (incl.		administration provides a website with
knowledge		information and downloads of relevant
transfer)		documents (also in English). This includes a
		collection of data with descriptions of all local
		measures, as well as materials for the
		monitoring and from the sectoral working
		groups. The unit is also available to contact for
		additional information.
		The SEAP itself is mainly structured into work
		programs of the participating actors: city,

Criteria	Subcriteria (if applicable)	Description
		utilities, production and services, housing and private households. It then adds cross-sectoral themes: institutional and financial support, energy efficiency, combined heat-power, and monitoring. Renewable energies are specifically described in an own section in the regional context (including the Region Hannover). Regarding the implementation and further development , the city also takes part in a program funded by the federal level (Masterplan 100% climate protection), exchanging best practices with the other 18 Masterplan- municipalities of the first round and – starting 2016 – passing on their knowledge with the second round of Masterplan-municipalities. Hannover also reaches out actively as a climate action city. Most recently it hosted an <u>international conference on municipal climate</u> action on 1 and 2 October 2015.
Stakeholder Involvement and Participation	Administration	Since its creation in 1994, the city's climate protection unit ("Klimaleitstelle") provides one of the focal points for all climate action developments. However, the SEAP process was initiated based on a political consensus on the city level between the two governing parties. Most importantly, in the period of creating the SEAP, the competences for economy and the environment were combined in a single department that pushed the creation and implementation of participatory processes (see also below: horizontal integration). The SEAP process was lead by a steering committee including the head of the department for environment and economy of the city of Hannover, the head of the department for environmental and regional planning for the Region Hannover, and the energy utility's technical director. They were supported by the heads of the city's and the region's climate

Criteria	Subcriteria	Description
	(if applicable)	
		protection unit the head of the climate protection agency (a cooperative effort of city, region and a number of large and small businesses, established in 2002), the head of a <u>local fund for climate action</u> ("proKlima", established in 1998, financed by the city of Hannover, five other surrounding cities, and the local utility), and the head of the <u>local business development</u> <u>agency</u> ("Hannoverimpuls", established 2003, focusing on five major themes). This mix of actors in the core decision making
		structure shows the deep integration and high
		level of participation in the SEAP process.
		In addition to this, the head of the administration (mayor) was personally involved, e.g. by inviting high profile members of businesses and fora for the working groups.
	Civil Society	Civil society groups were included in their own working group with "disseminators", reflecting the importance of this sector. To simplify the overall process, the group focused on a representative approach , including associations, clubs and other overarching groups (e.g. churches). Individuals were not participating. As interviewers pointed out, participation from the universities was comparably scarce and only the local University of Applied Sciences took active part at that time. While the city originally had planned to end the process after its decision on the SEAP, the stakeholders pushed for a continuation of the working group . These meetings are still ongoing.
	Businesses	Main partner for the SEAP process was (and is) the local energy utility (Stadtwerke "enercity") , 75% of which are owned by the city. Costs and efforts of the SEAP were shared between the administration and the utility. "Enercity" was involved in all four working

groups. Hannover had also two predecessor processes that supported the creation and networking of its working groups on industry and housing (incl associations). The industry group profited from an existing cooperation between the city and local businesses ("Ökoprofit") that had created a network of environmental managers. The housing group profited from the creation of an agency for environmental communication fo the Hannover World Exhibition in 2000 ("KUKA"), coordinating housing associations. Following the plans on implementation, the working groups are continued as an <u>energy</u> <u>efficiency network</u> (for businesses) and a <u>climate partnership</u> (on housing) and have	Criteria	Subcriteria	Description
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efficiency network (for businesses) and a climate partnership (on housing) and have			
climate partnership (on housing) and have			
regular meetings.			regular meetings.
		Political fora	All interview partners pointed out that the SEAP
			process was founded on a common political
understanding by the two leading local parties			understanding by the two leading local parties
(social democratic and green) in the 1990s and			(social democratic and green) in the 1990s and
			the intense discussions on energy supply
			following the Chernobyl disaster already in the
late 1980s.			
			The early inclusion of local businesses in the
			process, however, led to an acceptance throughout the political spectrum . While the
			administration, the general acceptance of the
• •			process by politics enabled continuous progress.
Overall, the SEAP was accepted in a			Overall, the SEAP was accepted in a
•			unanimous decision in the city council across
			all parties. The ongoing political support can
			be seen in the unanimous decision (city), and
			majority decision (region) respectively, that
			were taken in 2012 to work on a <u>Masterplan</u>
with ambitious targets for 2050.HorizontalCooperationHorizontal integration of several policy fields is	Horizontal	Cooperation	
		-	Horizontal integration of several policy fields is and was key to the SEAP process in
	integration		

Criteria	Subcriteria (if applicable)	Description
	fields	concept (1992-2005) and its evaluation, the administrative responsibility was centered in the department for environment and economy. While the environment section included planning capacities, the economy section included the housing sector. This proved to be a crucial point for a coherent approach including businesses, associations and energy utilities as well as involving and engaging environmental stakeholders and other civil society groups.
Vertical Integration	National	The cooperation in the creation of the SEAP took mostly place in the city's administration and with its own stakeholders. However, the implementation of the SEAP and further development of climate and energy goals is closely linked to the surrounding municipalities and the (unique) construction of a "Region" : In 2001, the city of Hannover joined competences with 20 surrounding municipalities, thereby creating a (in Germany) unique structure of "Region Hannover". The city benefited from coordination in the region with regards on renewable energy generation, energy supply in general, public transportation, and waste, to name a few. The region finished its own climate action concept in 2009 (not submitted to the SEAP) and joined forces in 2012 to work on a shared "Masterplan 100% climate action" aiming for by 95% greenhouse gas emission reductions and 50% reduction of energy consumption by 2050. According to the interview partners, Hannover received no relevant political or financial support from the state or federal level at the time of the creation of the SEAP. With the start of the National Climate Initiative in 2008, however, federal funding opportunities opened up later for the municipal level . The city of Hannover and the "Region of Hannover" (see above) joined forces for their new "Masterplan" that was approved in 2014.

Criteria	Subcriteria (if applicable)	Description
	Cross-Border	Hannover has been an early actor in climate action networks and is a founding member of the Climate Alliance (Klimabündnis). Due to its close ties with the Climate Alliance, Hannover was already aware of the developing Covenant of Mayors initiative and joined already on 12 December 2008. Hannover also joined already in 1991 the International Council for Local Environment Initiatives (ICLEI, now ICLEI – Local Covenants for Sustainability)
Innovation		Governments for Sustainability). At the time of the SEAP process (2008), Hannover showed a very inclusive approach that was continuously developed and still stands out among other climate active municipalities. The vast networks and connectivity among the local actors multiply the input, and also empower cross-sector involvement and discussions. The SEAP process in Hannover had – as perceived by the interview partners – very little drawbacks and was overall very positively received. It shows how much an active administration can achieve when other levels (state and federal) are still hesitant to proceed on climate targets. However, interview partners stressed the importance of political support (or at least not countering activities). A central suggestion for a replication of Hannover's success is to figure out key responsibilities and competences, create beneficial (legal, financial, and cooperative) framework for stakeholders and hold up to these decisions.
Regarding regions and coordinators: Communicati on to local municipalities		Hannover is not a SEAP coordinator. The Region Hannover developed its own climate action plan in 2009 and joined forces with the city of Hannover for the 2050 Masterplan, but is not a Covenant of Mayors signatory.

2.3.2 Case study for the Province of Barcelona

Name and brief description of the case study	
Member State(s) /	Spain / Province of Barcelona, DIBA
Partner(s)	
Executing entity	Ecologic Institute, Germany
Timeframe of case study	September 2015 – October 2015
Contact	Ina Krüger, +49 30 86 88 0 – 285, ina.krueger@ecologic.eu
Additional information	This case study focuses on the level of the province of Barcelona. The provincial council since 2008 took over the role as coordinator and intermediary between the CoM and the 311 municipalities in the province. At the time of writing (September 2015), 216 of the province's municipalities had completed a SEAP. Interviewed: Mrs. Immaculada Pruna Gonzales from the council of the province of Barcelona (DIBA) Ciara Escoda i Pinyol from the municipality Santa Coloma de Cervelló (which is part of the metropolitan area of Barcelona) Maica Bassas Aumedes from the municipality of Manlleu (not part of the Barcelona Metropolitan Area, but part of the province)

Summary

The province of Barcelona (5.347.403 inhabitants) consists of 311 municipalities ranging from very small scale, rural communities to large metropolitan cities such as Barcelona.

The provincial council of Barcelona (DIBA) has been active promoting climate mitigation already before 2008, which is the year when it officially became the coordinator and intermediary between the CoM and the municipalities. In this function, the DIBA encourages the province's municipalities to join the CoM. In order to support them, the DIBA offers technical advice, such as the

organization of trainings and the development of a common methodology for the establishment of SEAPs.⁹

Furthermore, DIBA provides financial support by covering 100% of the costs for the establishment of SEAPs, and providing funding tools for the implementation of measures from the plans. In addition, the DIBA negotiated a 500 Million Euro credit on behalf of its municipalities targeted at the local energy companies for the implementation of solar panels.

Typically the parties involved in the establishment of SEAPs include:

- Technical staff from the municipality (who provide data and accompany the planning to later assume ownership of the SEAPs, and who typically come from the environmental department, but also the energy department and the city planning/architecture/municipal infrastructure are involved in the process);
- a consultant specialized on energy (paid by DIBA), and/or
- technical staff from DIBA as support. The consultant is also in charge of organizing the participation process. (however, the municipal staff interviewed commented that no participation by citizens took place, because of the absence of civil society organizations in their municipalities) (see below).

As of September 2015, 216 of the municipalities in the province (covering approx. 97% of the province's inhabitants) had joined the CoM, and 213 had already established SEAPs. As of September 2015, 41 SEAPs had been subject to monitoring and hence entered in the phase of revision. Another service the DIBA provides is the monitoring of the impact of the SEAPs.

The success of the implementation of SEAPs in the province is not only confirmed by the high number of SEAPs but also by indicators such as the energy consumption in the province, which between 2005 and 2012 dropped in absolute terms (5%) as well as relative terms (11% per inhabitant). Most of this reduction was due to the transport sector. Furthermore the reduction of emissions per inhabitant was calculated at 24%. When comparing municipalities who had joined the CoM with those who had not, the DIBA found that the energetic consumption of the municipalities who had joined the CoM was reduced by 8%, as opposed to 3% in those municipalities not part of the CoM. Likewise, municipalities being part of the CoM managed to increase the local

⁹ The methodology for the SEAPs developed by DIBA is different from the general CoM methodology in that it includes waste management in the GHG inventories, and provides for 10 Energy assessments of municipal buildings and facilities.

production of renewable energy by 58%, as opposed to 31% in those municipalities not part of the CoM.

Criteria	Subcriteria	Description
	(if	
	applicable)	
Transparency (incl. knowledge transfer)	applicable)	The provincial council of Barcelona (DIBA) is providing detailed and aggregated information on the implementation and monitoring of SEAPs in the province. Furthermore, the DIBA supports participating municipalities in communication and dissemination campaigns: A total of 672 communication and dissemination actions, including school courses on the topic, have been carried out so far. Furthermore, in its function as coordinator of the Covenant Club of Cataluña, the DIBA assembled a joint catalogue of dissemination and communication activities in Cataluña, in order to facilitate access to communication tools for municipalities. In conformity with its mission, the DIBA supports municipalities by providing technical knowledge on the establishment and implementation of SEAPs (e.g. advice on the methods which can be used for the establishment of SEAPs) and through organizing professional trainings for municipal staff on the topic. Some of these trainings are organized through the Covenant Club of Cataluña or the
		network of cities and villages towards sustainability. Furthermore the DIBA covers all costs related to the establishment of SEAPs and provides funding opportunities through different funding streams for the implementation of measures listed in plans. Finally the DIBA is monitoring the implementation status and the efficiency of SEAPs.
Participation	Administration	The most active administrative levels in the establishment of SEAPs were the province DIBA and the municipalities . The government of the Autonomous region of Cataluña is also involved in the Covenant Club of Cataluña, which formed in 2012 National level administration was not involved in
		the process (had a coordinating role in the network

Criteria	Subcriteria (if	Description
	applicable)	
		of cities and villages for sustainable development in 2000-2006/7 but withdrew after that). Furthermore there are several clubs or associations which municipalities can become part of: Metropolitan area of Barcelona, which becomes more and more active in climate mitigation matters The network of Cities and Villages towards Sustainability The Covenant Club of Cataluña (see below)
	Civil Society	The civil society is engaged mainly through capacity building efforts. However, the Covenant Club of Cataluña also involves universities, research institutes, financing institutes, companies, professional associations and unions. In the drafting of plans, for the municipalities interviewed, there was a lack of participation of civil society, due to the absence of civil society organizations
	Businesses	See above, businesses can be part of the Covenant clubs. The main businesses involved are the public energy providers.
	Political fora	Municipal and provincial politicians are involved in capacity building and communication.
Horizontal Integration	Cooperation between different policy fields	The methodology for the SEAPs developed by DIBA is different from the general CoM methodology in that it includes waste management in the GHG inventories, and provides for 10 Energy assessments of municipal buildings and facilities. Typically there are several departments of a municipality involved in the planning and implementation of SEAPs: Environmental departments, energy departments, and public housing and municipal planning/architecture/municipal infrastructure.
Vertical Integration	National	The national level administration is not involved in the process or coordination of SEAP (due to current political tensions, there are no close relationships with the central government in general). At the level of the autonomous region, there is exchange of experiences and cooperation between provinces through the Covenant Club of Cataluña.

Criteria	Subcriteria (if applicable)	Description
	Cross-Border	No reports of cross-border cooperation between regions or national states.
Innovation		An innovative aspect of this case study is the important role of the DIBA (which has strong links to municipalities and villages), driving the process of SEAP establishment and implementation in the municipalities within the province. Furthermore, a previously existing culture of cooperation and several existing networks provided beneficial conditions for the formation of the Covenant Club of Cataluña on the level of the autonomous region. Also the importance of the provision of funding to municipalities for the establishment and implementation of SEAPs should not be neglected, as, due to the financial crisis, municipalities have been facing severe financial challenges in the last couple of years.
Regarding regions and coordinators: Communicati on to local municipalities		The self-understanding of DIBA is that of a supporting organization for municipalities in the province. Hence, close communication lines exist between the province and the municipalities. Communication between municipalities takes place through the Network of cities and villages towards sustainability and through the metropolitan area of Barcelona. Local citizens are involved through the consultation processes which are applied in the development of SEAPs.

2.3.3 Case study for the Emilia Romagna Region

Name and brief description of the case study					
Member State(s) /	Italy / Emilia Romagna Region				
Partner(s)					
Executing entity	Environment Agency Austria, Vienna				
Timeframe	23.09 - 30.09.2015				
Contact	Alexander Storch				
	(alexander.storch@umweltbundesamt.at)				
Additional	The case study is based on two interviews given by:				
information	Mr Francesco Tutino, responsible for the Energy				

Name and brief description of the case study					
	Office within the Sector Environment of the				
	Municipality of Bologna				
	(francesco.tutino@comune.bologna.it)				
	Ms Anna Zappoli, general director of productive				
	activities, commerce, tourism, energy and greer economy,				
	(azappoli@regione.emilia-romagna.it)				

Summary

The region has been participating as coordinator in the creation and implementation of SEAPs only since 2012. The region works in close collaboration with the ANCI Emilia-Romagna (regional organization of the National Association Italian Municipalities). The main task of the region is the economic contribution to municipalities for the preparation of SEAP. For example, the region intervened 2013 in opening the first calls for tender and supports the Municipalities in a better way of working more successfully in applying for public and European grants. The ANCI has a supportive role and stands for a common understanding of the initiative regarding especially the benefits and the added value of the project.

In 2012, 70 municipalities (ca. 30% of the regional population) participated in the Covenant of Mayors Initiative. At the time of this case study (30 September 2015), approximately 300 municipalities out of 340 (94% of the regional population) have joined the initiative. About half of the municipalities have already established an SEAP, aiming at reducing at least by 20% the local CO2 emissions by 2020. The other half are on their way to finalize it.

The Municipality of Bologna joined the Covenant of Mayors in 2008. It's the largest Municipality in the Emilia Romagna Region and has always been at the forefront in terms of SEAPs in Italy. The SEAP of Bologna has been elaborated autonomously. However, a reform of the institutional system has been carried out recently in order to support a bottom up approach of SEAPs and encourage a better collaboration between the municipalities.

The SEAP of Bologna stands out for having implemented a process of effective participation with many public and private stakeholders of the city. Actions on the sector residential building are the main challenge of the SEAP of Bologna, with the highest potential for emissions reduction.

Criteria	Subcriteria (if applicable)	Description
Transparency (incl. knowledge transfer)(if applicable)Image: stransfer stransferImage: stransfer stransferImage: stransfer stransfer stransferImage: stransfer stransferImage: stransfer stransfer stransfer stransfer stransferImage: stransfer stransferImage: stransfer str		Due to the effective collaboration of Emilia Romagna Region and ANCI, the national Association of Italian Municipalities, in which almost all municipalities are members, the number of participating cities was increased from 70 to 300 within 3 years only. Unlike the larger cities e.g. Bologna, Parma, Piacenza, which have long-time experiences thanks to elaborated local climate plans, for the smaller cities the promoting actions of ANCI was decisive. Working groups on energy were set up in order to create a place for meetings and discussions. The Region provided the Municipalities with different instruments in an effort to better manage data on emissions. E.g. a free online platform has been set up, which provides a catalogue with measures and information on emissions.
		At the level of the Municipality of Bologna the communication is organized through websites, newsletters, information days with workshops and seminars.
Participation	Administration	The SEAP process was originally initiated by the Provinces and ANCI. Only since 2012 the Region takes part in the process of implementation of SEAPs. In Bologna the SEAP process is based on the city level, within the Sector Environment and Energy, with the support of external consultants.
		Many departments are involved e.g.: Department Urban Requalification Department Care and Quality of the Territory Department Community Wellness Department Financial Resources

Criteria	Subcriteria (if applicable)	Description
		Department Economics and City Promotion
		The wide variety of actors shows a good integration and a high level of participation in the SEAP process. However a supervising management structure is missing.
	Civil Society	Public meetings are conducted on a regular base, which are also open to private persons. These meetings are organised mainly by ANCI Emilia-Romagna with the aim to inform and explain the significance of the SEAPs. In the process of the SEAPs itself, however, the citizens are not involved (or only very weakly) but only informed.
	Businesses	The direct engagement with the involved stakeholders (associations and representatives of competent professional bodies as manufacturer, architects and engineers) is seen as very important. Therefore many forums and workshops have already been organised for public discussions. E.g. stakeholders of the building sector were strongly involved due to the increasing requests of energetic quality of buildings. Other non-governmental networks which are involved in getting the process started are public agencies and companies, local utilities, universities etc.
	Political fora	After the Kyoto Protocol has entered into force, an energy plan for cities was introduced with the aim of reducing greenhouse gas emissions significantly. That seemed to be also the right time to implement SEAPs. The majority of actions to be taken for the SEAP process fall under the responsibility of the Municipality.

Criteria	Subcriteria (if applicable)	Description
Horizontal Integration	Cooperation between different policy fields	Horizontal integration of several policy fields is necessary in order to realize the synergies of further energy plans of the Region. Municipalities as e.g. Bologna have already recognized this fact and therefore several departments are engaged in the process of SEAPs. However a management structure for such collaboration is missing yet in Bologna. An Energy Centre to encourage synergies between the different structures was under discussion but could not be implemented yet.
Vertical Integration	National Cross-Border	Bologna is the largest Municipality in the Emilia Romagna Region and has always been at the forefront in terms of SEAPs in Italy. Nevertheless, the SEAP of Bologna has been elaborated autonomously. However the Municipalities and the Region have recognized that direct cross-country comparison is an important source of understanding of how strategies are formed and to learn from each other. A reform of the institutional system has been carried out recently in order to facilitate a better collaboration between the municipalities. The internal organization has been reformed in order to support a bottom up approach of SEAPs and encourage the Municipalities to cooperate together more closely. No information.
Innovation		The close collaboration between the different coordinators encouraged the development of new approaches with the
		aim of improving work processes within the territory The internal organization has been reformed in order to support a bottom up

Criteria	Subcriteria (if applicable)	Description					
		approach of SEAPs and encourage the Municipalities to cooperate together more					
		closely.					
		The growing awareness of the importance					
		to know its own consumptions in order to					
		improve the capacity to intervene in the					
		future					
Regarding		Communication takes place in particular					
regions and		trough the ANCI, in which almost all					
coordinators:		municipalities are members.					
Communication		Bologna stands out for having					
to local		implemented a process of effective					
municipalities		participation with many public and private					
		stakeholders of the city.					

2.4 Findings on multilevel governance aspects

The selected case studies offer a number of findings on multilevel governance aspects. Following the criteria and subcriteria as set out above (section 1.2.1), the analysis channels those findings in four main categories:

- Participation
- Horizontal integration
- Vertical integration and
- Communication and transparency

A number of questions from the interview guidelines also went beyond these MLG criteria, and asked the interview partners on their opinion on success and replication factors (sections 4 and 5 of the questionnaire). The inputs on those sections were also taken into account for this analysis and helped framing the criteria specific recommendations for municipalities in starting and implementing their SEAP processes.

Taking into account the differing structures of the case study objects (one city, two regions), the findings from the case studies also had a particular focus, which is reflected in the findings and recommendations:

• the city of Hannover delivered a good example for a administrative driven process with political backing that focused on an inclusive process

throughout the local stakeholders; its major findings are highlighted in the participation and horizontal integration sections;

• the provinces of Barcelona and the Emilia-Romagna Region show the relevance of additional support for large number of local municipalities by an overarching governance level; this role of the region as a service provider can extend to advice but also financial means; their major findings are highlighted in the vertical integration and communication sections.

While examples from all the case studies will be highlighted throughout the analysis, please also refer to the case studies themselves or the projects' contact partners for further information.

Summing up the main elements for a process leading to the successful creation and implementation of an SEAP, the following recommendations can be drawn from the reported case study experiences:

- Set the stage for greenhouse gas reduction potentials: An initial analysis of the local circumstances needs to take stock of the most relevant and accessible sectors (incl. also large emitters) and local stakeholders.
- **Push for climate action:** A strong push for climate action is needed from the municipality itself. Within the selected case studies, both bottom-up and top-down approaches worked, either by an active administration with political backing or by a region giving additional financial and administrative support.
- **Coordinate internally:** Following the local analysis, all relevant departments should be approached. In the case studies, a balanced cooperation of environmental and economic departments was of particular relevance.
- **Coordinate externally:** An early start of local level participation and sector specific networks enables decision makers from the start to the implementation of the process, and allows them to continue beyond the initial goals.¹⁰
- Look for assistance: In cases where local municipalities cannot come up with sufficient financial or technical means, a top-down support in these areas, particular from regions to small municipalities, can enable them to create a SEAP in the first place. However, to ensure sustainable financing, other options always need to be considered (see also findings to task 2 in section 3.4).¹¹

¹⁰ Recommendations on the participants in local fora for the energy sector can be found in the Organization of forum Guidelines by the "Energy for Mayors" project.

¹¹ Other studies already explored the necessities of supporting structures, see DIBA, Summary of the Survey on Supporting Structures involved in the Covenant of Mayors.

Remaining **challenges** that were identified in the case studies could be summarized in three categories:

- **Early participation**: The capacity building for networks of stakeholders is a time and resource-consuming process that should be started and widespread even before designing a SEAP. Depending on the country, activating civil society and spreading acceptance of the process is particularly challenging.
- **Continuous horizontal and vertical integration**: It was highlighted that a continuous political support on the local level is a key facilitation for horizontal as well as vertical integration. Exchange and learning from other municipalities in the region or state (with similar structures and backgrounds) about best practices for SEAP design and implementation also needs continuity.

Other (external) factors that emerged were the challenges to find secure financing options for future implementation activities (see also task 2 of this report), as well well as a clear and stable regulatory framework (in particular on the national level).

2.4.1 Participation

Participatory processes deliver key inputs for the SEAP's emission reduction potential, its sectoral scope, as well as the development and time scale for implementation measures. Good practices and experiences from the three case studies are structured along three main questions:

- Who needs to be included and which sectors/stakeholders proved difficult to engage in the process?
- How can municipalities set up SEAP processes to build up on existing structures and networks?
- What is necessary to continue participatory processes for the implementation and further development of emission reduction goals?

The **inclusion of stakeholders** in the process of creating and implementing a SEAP generates input on priorities und technical possibilities, and can also lead to a more widespread acceptance of the plan's goals. The process can take place on several levels but always needs to include input of and support from crucial local stakeholders. However other governance levels can also offer relevant stakeholders, such as regional or state energy agencies, industry associations, unions, and of course relevant policy makers on the regional, state or national level (for them, see below on vertical integration).

Overall, an inclusive participatory process is suggested by the interviewed stakeholders. However, limited resources might impede a municipality's capacity to include all relevant stakeholders. Additional organizational and

financial support from the regional level – as seen in Barcelona province and the Emilia Romagna Region – could mitigate this issue. Following an initial analysis of existing potentials for greenhouse gas emission reductions, a municipality should prioritize its activities.

Businesses should be involved in two capacities in particular:

- As relevant part of the regional economy they provide valuable contributions to implementation measures, as highlighted from the building sector in the Emilia-Romagna Region.
- Also, major contributors to emissions should be included in the planning stage already as they provide large emission mitigation potentials. This includes the local utilities which can especially when owned by the state, as seen in Hannover prove to be a very active partner in climate change activities.

Participatory methods to include civil society stakeholders should generally aim for a low entrance barrier. However, as seen in the Barcelona province, the absence of civil society organizations in a municipality can result in a very low rate of public participation. However, as shown by the Emilia-Romagna Region, a region can use information formats to explain the significance of SEAPs to citizens. This way, more general means of outreach and advertising the region's and municipalities' climate activities could aim to activate a larger interest in these issues and build capacity for future involvement.

As the example of Hannover shows, addressing targeted stakeholders personally with a (preferably high ranking) official can offer additional credibility and impetus during the start of the process. Additional networks (see also below) then offered contacts to continue the exchange on the expert level. While Hannover with its existing networks and contacts did not encounter too many challenges in the participatory process, the involvement of higher education (university) proved challenging for personal reasons.

The **inclusion of existing structures and networks** can be identified as one of the key aspects to quickly increase and multiply participation in the SEAP process of a municipality.

Sectoral networks can stem from a number of previous cooperation among stakeholders or between the municipality and stakeholders. They can be drawn from the private or the business sector, financed by their own means or based on voluntary cooperation. Taking the example of Hannover, the city reached out to a number of groups in its process to set up its SEAP. After having reviewed which sectors would need to be included to achieve substantial emission reductions, the administration decided to set up four working groups, mostly along sectoral lines (industry, offices, housing, and disseminators). An existing network between the city and local businesses' environmental managers allowed the city to communicate its new efforts quickly. For the housing sector, a previous cooperation among housing associations in an agency for environmental communication provided also valuable contacts.

Also, as the example of the Barcelona region shows, existing activities of the provincial council (DIBA) in the area of climate mitigation already had established necessary contacts between the region and the municipality level. The same is true for the Emilia-Romagna Region, in which networks existed already between public agencies and non-governmental sectors, including companies, local utilities, and universities.

Continuity in participatory processes enables municipalities to develop follow-up as well as new measures to implement their SEAP goals and aim for further emission reductions beyond them. Support from a municipality can be given to potential networks by financial or organizational means.

In Hannover, the working groups on housing and for businesses continued their meetings as a climate partnership and an energy efficiency network respectively. Also, the city continues to provide meeting space to its civil society stakeholders. The "disseminators" had specifically asked the city to continue their activities. As a good example, it can be highlighted that the continuation of the participatory process enabled the city to an easy transition towards its "Masterplan" process, including the participatory structures in setting emission reduction targets and implementation measures for 2050.

In the Barcelona province and its surrounding regions, the Covenant Club of Cataluña (see also under vertical integration) aims to give actors in the public and private sectors an opportunity for knowledge and practice exchange.

2.4.2 Horizontal integration

Since SEAPs cover a range of sectors and actors, the horizontal integration of different policies is a key factor to their successful creation and implementation. This section aims to answer the following two main questions:

• Which departments and inner-administrative actors proved to be key participants in the SEAP process?

• What needs to be considered concerning political fora and municipal decision making processes?

Administrations follow clear distributions of competences. Prior to the creation of a SEAP, an initial analysis should provide which sectors need to be involved in the creation of a SEAP. Then, the **departments and sections of a municipalities' administration** that should necessarily be included should become clear very quickly. Clear choices for a close involvement in the process are units with competences in the energy sector (production, consumption, transport), the environmental sector, in economic affairs/businesses, and city planning. More specific sectors could include energy grids, building/housing, and traffic.

Looking at the case studies, Hannover's SEAP focuses heavily on energy issues (production and – efficient – consumption), and due to its previous long standing activities in the responsibility to create and implement the plan was in the city's department for economy and the environment. In combination with its climate protection unit, the department led the SEAP process, started stakeholder consultations inside and outside of the administration (see above). In the Barcelona province, the main responsibility is usually with the environmental department, which then includes the energy and planning or infrastructure departments in the process. Also within Bologna, a city within the Emilia Romagna Region, the process is based within the sector on Environment and Energy, involving other departments on local developments and economic aspects.

In a SEAP process driven by the administration (such as in Hannover), the introduction of a steering committee proved useful to include a number of relevant administrative actors in the planning of the process. This included the local and the regional climate protection agency, the head of a local fund for climate action and the head of the local business development agency. Not only strictly administrative personnel took part: The technical director of the state-owned local utilities was also represented. In comparison, such a management structure is missing yet in Bologna: plans of an "Energy Centre" to facilitate cooperation and create synergies have not been implemented yet.

The **inclusion of political actors** in the SEAP process depends on their own perceived role and general support of the process. Overall, (the lack of) political support has been considered by the interview partners as one of the potentially biggest opportunities and challenges for the whole process:

In some cases, the SEAP process itself is initiated on the political level. In this case, the administration is also able to gain political support for their

participation processes and for the organization of majorities to decide on the plan and its implementation measures. Interview partners warned, however, that in a critical political environment, the administration's influence to change this would be rather limited. However, contact with other levels of governance (on a regional, state, or federal level) can still lead to external support for climate action within the municipality.

In general, the involvement of political actors in the process can vary between a merely institutionalized approval (e.g. only confirming the finalized SEAP) or with a specifically designed role within the process (e.g. within an advisory body incl. stakeholders). Examples from case studies such as Hannover have shown that an early political involvement – which had been established before the creation of the SEAP – was comparably easy to achieve and lead to an unanimous approval of the SEAP.

Finally, the overall political approval for climate and environmental action (beyond a single municipality's reach) can have severe effects on the local level: In some cases, accidents like in Chernobyl started discussions in Hannover in the late 1980s, the Kyoto Protocol entering into force 2008 led to an energy plan for cities in the Emilia-Romagna Region.

2.4.3 Vertical integration

This section on vertical integration reflects on cross-level cooperation and support the signatory initiated and/or received, depending on the role as municipality or regional coordinator. Two main questions to answer in this section are:

- Which levels can provide early support for the SEAP process?
- Which networks can be leveraged to gain experiences quickly and learn from best practices?

The selected case studies allow **two major conclusions** for the initiation of the SEAP process:

- An active administration with continued political support on the local level, and existing networks can set up a SEAP process without political or financial support from the state or the federal level (Hannover).
- Coordinating regions play a key role as a service provide for smaller municipalities with the lack of experience and/or personal and financial resources (Barcelona and Emilia-Romagna).

Information gathered in the interviews showed that in the three selected case studies, the positive influence of the national level was minimal to non-

existent. Apart from putting the general legal framework in place, no specific funding programs for climate action programs such as the SEAPs were in place at the time of the process.¹² With a view to the example of the Barcelona province, the national government of Spain actually increased the challenge for municipalities: The amendments of the funding scheme for renewable energy in 2012 caused a significant drop in the profitability of large and medium scale renewable energy schemes and stopping the expansion of the sector.

From the case studies, the distinction in the approach between a "standalone" city and a region coordinating a large number of municipalities becomes quite apparent in the area of vertical integration:

- As a **bottom-up** example, the city of Hannover itself sparked climate action within the administrative collaboration with surrounding municipalities ("Region Hannover"). This cooperation took place within the steering committee of the city's SEAP, but also resulted in an own climate action plan of the Region (not submitted under the Covenant, however). Combining their efforts for future city/Region planning, both entities worked together in the development of their 2050 emission reduction targets and measures. The result, a "Masterplan 100% climate protection", was accepted by the city's and the Region's decision making bodies in 2014.
- Within the regions, a **top-down** approach showed great results: Interviewees • from the municipalities in the Barcelona region stressed the importance of the regional council (DIBA) who played a key role in motivating them to become part of the CoM and to start the SEAP planning process. The DIBA also supports the municipalities financially, covering 100% of the costs for the establishment of SEAPs. But offering financial incentive is only one part in the coordination between region and municipality: Technical staff from the provincial council (responsible also for the participatory process, see above) supports the local municipalities together with an energy consultant. This proved to be a key factor in overcoming the lack of skilled staff in small municipalities. The same was reported from the Emilia Romagna Region that cooperated with the national Association of Italian Municipalities (ANCI) to quickly increase the number of participating cities. The Region also provided a free online platform to the municipalities with a catalogue of local measures.

In the example of Hannover, the vertical integration took mostly part via **climate action networks and cross-border initiatives**. Being a member of both, the Climate Alliance, as well as ICLEI, the city had already started an

¹² In Germany, the federal funding scheme "National Climate Inititative" offers *inter alia* funding for municipal climate action plans since 2008. Hannover had already finalized its SEAP by then.

exchange of best practices in the 1990s that it could build on. These connections also allowed Hannover to get involved in the first round of municipalities under the Covenant of Mayors, submitting their SEAP as early as December 2008.

In the Barcelona province, the Metropolitan area of Barcelona – also spanning a number of surrounding municipalities – is becoming increasingly involved in climate action. In addition, municipalities can take part the Network of Cities and Villages towards Sustainability to increase exchange. For the exchange among provinces, the Covenant Club of Cataluña was created in December 2013, including four Catalunian provinces (Barcelona, Girona, Lleida, Tarragona) and the Metropolitan area of Barcelona. It intends to increase their cooperation in a number of working groups over the years.

In the Emilia-Romagna Region, a reformed institutional system aims to facilitate cooperation between the municipalities in the future and support also a bottom-up approach to climate action.

2.4.4 Communication and transparency

This section highlights the importance and relevant examples from the case studies on transparent and active communication to spread knowledge of good practices from the SEAP process. It evolves around two main questions:

- Which communication channels have to be considered for the SEAP?
- How can experience be multiplied and spread quickly and cost-efficient?

Good governance relies on a transparent process, including the decision making processes, the distribution of competences and the inclusion of participants. While some of these aspects have already been covered in the sections above, this section focuses:

- on the municipalities' efforts in providing information on their SEAP process in a transparent manner, and
- on the communication of their experiences.

The Covenant of Mayors aims to further increase the efforts of European municipalities. To enable other interested cities and municipalities to **inform themselves on existing processes and measures**, it is crucial to provide an easy access to relevant information.

The provision of the SEAP document itself via a website should be seen as the minimum standard. To increase transparency, municipalities should also make available information on the process drafting the SEAP and - as its

implementation continues – also documents on the monitoring of its measures and successes. Region coordinators can also provide aggregated information on the implementation and monitoring. A translated version of the SEAP and important strategic decisions in English can further spread the accessibility across borders.

To further increase awareness of the Covenant of Mayors and also spread knowledge on good practices, the Covenant also relies on **signatories to reach out and advise other interested municipalities** on the process and the implementation. Typical ways for outreach are (in order of increasing effort): public relations, conferences and networks.

A good example for an active exchange that could be drawn from the case study of Hannover is the integration of local climate action into a network of likeminded actors, including a continuous exchange of best practices. The city applied for the federal level program to develop (and implement) climate goals and measures up to 2050. With this program, the city started the dialogue with 18 other frontrunner municipalities in Germany, exchanging challenges on drawing up greenhouse gas balances and on including various levels of participation as well as good practices for cost-effective implementation measures.

For a regional coordinator, workshops for a number of neighboring municipalities can facilitate exchange and enable also twinning between experienced municipalities and those that are about to start or still at the beginning of the process. As seen in both of the province case studies, the offer of technical advice, including the organization of trainings and financial support resulted in high numbers of SEAPs among the municipalities in the respective regions.

- The provincial council of Barcelona that also developed of a common methodology for the SEAPs, reached a participation in the Covenant of Mayors of over 69% of the municipalities (216 out of 311) with about 97% of the province's inhabitants. Almost all of them (213) also established a SEAP. In this specific example, the region is also reaching out to other provinces within the "Covenant Club de Catalunya" in order to upscale the positive experience gathered.
- In the Emilia Romagna region, over 88% of the municipalities (300 out of 340) joined the Covenant of Mayors, representing more than 94% of the region's population. Almost half of the municipalities already established their SEAPs, the other half is on their way to finalize it.

3 Case studies on sustainable funding

3.1 Overview

Ten case studies from across Europe (two from Italy, one from Spain, two form Poland, one from Latvia, one from Slovenia, one from Sweden, two from the UK) have been identified to showcase actions in different sectors, as well as diverse approach to funding and financing. Among the sectors addressed: Renewable Energy generation, Energy efficiency (buildings, lighting) as well as cross-sector actions, including the previous stated but also district energy as well as climate adaptation, water management etc. Mobility is notably missing: this is mostly due to the larger investment required for transport infrastructure, which would be most likely accessible to a large city. Case studies on transport are available but EIB loans refer to lager cities (e.g. Prague, Warsaw- in case of interest they can be provided).

The case studies target both funding and financing options, and focus on the regional level and on both single municipalities and groups of them. The case studies also present a selection of models for Stakeholders engagement and partnership with both the community and the private sector. Several of the case studies reflect specifically on the role of Covenant Coordinators and Supporters in the implementation of SEAPs among their signatories. Although these cases do not address specifically small to medium size municipalities as previously foreseen, to respond to the request of the Covenant of Mayors, examples on how regions and provinces (Covenant Coordinators) support their signatories have been included. Because of the particular nature of the Barcelona's case study, we previously included an additional example to choose from (Aberdeen), and we have subsequently added two more case studies upon request of the Covenant of Mayors (Latvia and Sardinia).

No	Criteria / Municipality	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
2	Padua, Italy (pop. 200,000) – Covenant Signatory	EE- Buildings - Padova - FIT!	Funding – Mobilizing Local Energy Investment (PDA- MLEI)	The project aims to retrofit condominiums through energy performance contracting. The consortium is engaging condominiums throughout the City of Padova, while procuring a private ESCO which will propose and deliver EPC with each condominium.	enegages a wide range of stakeholders including ethical banks, foundations and socially responsible	in south of Europe, directly
3	Namyslow, Poland (pop. 16,300)	EE- Lighting - LED PACK Public Lighting Modernis	Funding - European Local ENergy Assistance (ELENA - EIB)	The municipality of Namyslow has created a dedicated municipal limited liability company (LED PACK) that will be responsible for the	engages 32 municipalities (including Covenant of Mayors	municipalities in East of Europe applying for

3.2 Suggested case studies on sustainable funding

No	Criteria / Municipality	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
		ation Project in South Poland		implementation of the project. The project will use an Energy Performance Contracting approach for implementation, where a consortium of municipalities will enter into a PPP agreement with a private partner, an ESCO company	South of Poland	
4	Gothenburg, Sweden (pop. 240,000) – Covenant Signatory	cross sector - Green Bonds	Financing - Local climate Fund	Eligible Projects include Renewable Energy (solar, wind, wave, bio, waste and hydro) Energy Efficiency Waste Management Water Management BioFuel Smart grids Sustainable transportation (e.g.	with private and public sector, as	bonds set up in Scandinavia.

No	Criteria / Municipality	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
				public transport, cycleandshippinginfrastructure)SustainableSustainablehousing(e.g. infrastructure andconstruction)Environmental(max20%)BiodiversityBiodiversity(e.g.developmentofneworrestorationofareas)WaterVaterclearingfacilitiesAir pollution		
5	Barcelona Province, Spain (pop. 1.600 million) – Covenant Coordinator	Cross- sector - REDIBA	Funding: ELENA (EIB)	The Province of Barcelona is assisting municipalities to set up investments in energy efficiency of street lighting and public buildings,	Covenant of Mayors Coordinator, and as such, supports	implementation were successfully re- discussed in line with new priorities after

No	Criteria / Municipality	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
				energy performance contracts, as well as in biomass district heating systems. Around €100 million have been invested during the 4 years of the project. EPCs will be procured through a framework contract.	SEAPs (from baseline, to inventory, to drafting of the Plan). REDIBA is an example of funding provided by a CoM Coordinators for the signatories it supports.	
6	Manchester, UK (pop. 440,000) – Covenant Signatory	Cross- sector - North- West of England Evergree n Fund	Funding: Joint European Support for Sustainable Investment in City Areas - JESSICA (EIB)	Evergreen Fund provides debt funding	North West of England are	

No	Criteria / Municipality	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
				and £30m from the		
				HCA.		
				The fund will commit		
				capital to		
				opportunities which		
				meet European		
				Regional		
				Development fund		
				regeneration targets		
				covering employment,		
				regeneration and floor		
				space outputs.		

Additional case studies requested by Covenant of Mayors:

No	Criteria /	Sector	Business model	Private/public	Multi-level	Innovation
	Municipa		– funding/		/Cross-level	
	lity		financing		engagement	
7	Sardinia	Drafting of	Funding: Joint	The Autonomous	The Region, and	The Region
	Region,	SEAPs and	European	Region of Sardinia,	21 pilot	provides
	Italy (po.	implementin	Support for	with the Sardinia	communities (66	technical
	1.663	g selected	Sustainable	CO2.0 Programme,	municipalities)	assistance
	million) –	actions -	Investment in	has undertaken a	engaged, and 10	(including
	Covenant	Sardinia	City Areas -	strategic path aimed at	pilots (36	financial models,

No	Criteria / Municipa	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level	Innovation
	lity Coordinator	CO2.0 Programme	financing JESSICA (EIB)	reducing CO2 emissions and stimulating and promoting investment in sustainable energy. This programme aims at enacting the provisions of the European Union in the European Package on Climate and Energy 20-20-20. The project aims at directly involving Local Administrations as the protagonists for sustainable development in their	engagement municipalities) in phase 2.	business ect) for ad hoc development of SEAPs instead of providing funds to municipalities to pay external consultants for development.
8	Niepołomi ce, Poland (pop.	Installation of RES systems on	Funding:Approx.60%coveredfrom	territory. Installation of RES systems. Raising environmental	(Niepołomice,	Combination of funding and financing
	14,700) – Covenant	public and residential	the Swiss-Polish Cooperation	awareness of the	Skawina and Wieliczka)	sources including: own

No	Criteria / Municipa lity	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
	Signatory	buildings of the municipalities	Programme and remaining 40% from municipalities	citizens, which will results in using more environmentally- friendly technologies for energy production in the future, Improving the quality of the local environment, Improving living conditions on the local level; Increase in touristic attractiveness of the region.		contribution, including: payments made by the citizens who have the RES systems installed (covering 30% of the total costs of system installation) payments from the municipal budgets (covering 10 % of the total costs of system installation) Example of Covenant Signatory supporting other municipalities not yet part of

No	Criteria / Municipa lity	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level engagement	Innovation
						the Covenant of Mayors.
9	Ljubliana, Slovenia (pop. 270.000) – Covenant Signatory	EOL investment programme: public building, public lighting, energy efficiency, energy saving	EIB ELENA loan 1.348.560 € -	Third party financing (TPF) performed by ESCOs is the main approach adopted for the implementation of the energy efficinca investment in the COL, due to the limited capacity to finance them from the COL budget. Several tenders for groups of similar buildings (schools, kindergartens, etc) or buildings with the same EE technology measures (lighting in libraries, PV and CHP plants etc) will be issued to achieve economies of scale. Two basic ESCO	between Municipality and ESCO.	This will be the largest programme of this kind in Slovenia and can become the model for similar projects in the country. The replication potential is considered high, notably the use of ESCOs for energy efficiency and renewable energy projects.

No	Criteria / Municipa	Sector	Business model – funding/ financing	Private/public	Multi-level /Cross-level	Innovation
10	lity Latvian Environm ental Investmen t Fund, Covenant of Mayors Coordiant or	More than 250 projects: Drinking water Waste water treatment Environment ally friendly heat supply Insulation of buildings Cleaner production Waste recycling	Attracting domestic and foreign funding and grant loans on easy terms to municipal and private entities to implement environmental protection projects. Funding sources include: LVAF UN ERDF	contractingmodelswhich have often beenused in the pastcontracting projects inSlovenia will be suedfor implementinginvestments from thisprogramme.Financial service -combining local andforeign financialresources, to issueloans in order tosupport municipalitiesand commercialorganizations inimplementation ofenvironmentallyfavorable projects.Services provideinclude:Program managementDevelopmentcooperation projects	collobarates with	The Mission of the Fund is to reduce environmental pollution, promoting the implementation of environmental protection projects and also to increase the capacity of municipalities and commercial organizations in preparation and carrying out of

No	Criteria / Municipa	Sector	Business model – funding/	Private/public	Multi-level /Cross-level	Innovation
	lity		financing		engagement	
			NEFCO Phare Ministry of Environment	Supervision of implementation of Climate change financial instrument (CCFI) co-financed projects Awareness raising		qualitative and effective projects from their idea to realization. Soft investments as a bridge from hard investments to hard innovations Activities that change the market combining LEIF resources and experience with ideas of NGOs

3.3 Selected case studies

3.3.1 Case study for the city of Bath

Name and brief descript	ion of the case study		
Member State(s) /	United Kingdom / Bath & North East Somerset		
Partner(s)	Council		
Executing entity	ICLEI, Freiburg		
Timeframe of case	14-30 September 2015		
study	_		
Contact	Giorgia Rambelli, +49-761 368920,		
	giorgia.rambelli@iclei.org		
Additional information	Case study based on interviews with:		
	Cleo Newcombe-Jones		
	Senior Planning Officer		
	Planning Policy & Environment Team		
	Bath & North East Somerset Council		
	Telephone: 01225 477617		
	Email: <u>cleo_newcombe-jones@bathnes.gov.uk</u>		
	www.bathnes.gov.uk		
	www.twitter.com/bathnes		

Summary

Engaging **citizens and citizen-led initiatives** when implementing sustainable energy actions and policies can help to reduce opposition to renewable energy within the community, and can support leveraging local private investments that would not be available otherwise.

Community energy generates income that will be retained locally and supports shaping and implementing a long-term vision for the area, both through increasing the share of locally-produced renewable energy and reducing greenhouse gas emissions.

The city of Bath (UK) aims to increase the production of energy from renewable sources, and In 2009, the Bath & North East Somerset Sustainable Community Strategy set the target of reducing the district's carbon pollution 45% by 2026, in line with national targets. To achieve this goal, Bath and North East Somerset Council has engaged in several projects and initiatives, and benefits fully from partnerships with local stakeholders. Bath has been in close cooperation with the Bath and West Community Energy (BWCE), a Community Benefit Society (or 'BenCom') which was founded in 2010 to deliver renewable energy, energy

efficiency and energy supply services via a strong community model to maximize local investment, and build community resilience. The council has signed a co-operation agreement with BWCE in **support of the community ownership model** and encourages renewable energy generation in this way.

Criteria	Subcriteria	Description
	(if	
	applicable)	
Business	Financing –	While National funds have been used for
model	community	retrofitting measures (e.g. Green Deal), Bath
	energy	Council has explored to 360° ways to support the
	00	development of community energy. A
		Cooperation Agreement ¹³ between the Council
		and Bath and West Community Energy (BWCE)
		established the basis for the cooperation between
		the two organisations. This Agreement is an
		innovation in relationship management and has
		been used as a template for other working
		arrangements.
		BWCE is a Community Benefit Society (or
		'BenCom') which was founded in 2010 to
		deliver renewable energy, energy efficiency and
		energy supply services via a strong community
		model to maximize local investment, and build
		community resilience.
		BWCE raises funds from a variety of sources
		including local share offers for projects via the
		Ethex website. A proportion of each project's
		profit from generation goes into a Community
		Fund for low-carbon projects. BWCE existing
		community energy capacity of 3MW generates
		£500,000 in annual income. Around 70-80% of
		this sum will be retained locally, a key factor
		in favour of this business model.
		The Council has taken a range of action to
		facilitate the development of BWCE's projects,
		such as the provision of sites on Council estate
		for projects and investment through the
		Council's Green Investment and Jobs Fund.
		The council has installed solar panels on one of its office buildings in the city centre. The Lewis
		its office buildings in the city centre. The Lewis House hosts the council's planning,
		House hosts the council's planning, environmental services and customer services
		departments, as well as a space for other public

¹³ invoking the Well Being powers in the Local Government Act 2000 and the wide-ranging General Power of Competence in the Localism Act 201112.

Criteria	Subcriteria	Description
	(if	
	applicable)	
		sector organisations. BWCE installed solar panels generating 38 kW of power, which help to run the newly-installed low-energy lighting system. The installation consists of 152 panels mounted on the roof of the building. The panels are oriented east-west to maximise output. The council leases the roof free of charge to BWCE, and receives low-cost energy from the panels. Income from the installation is paid to the shareholders as well as into a Community Fund .
	Funding –	The recently-launched £1 million Green
	community	Investment and Jobs Fund has been set up to
	energy	provide a policy loan for local renewable energy projects to further a range of Council policy
		objectives, whilst generating a source of income
		for the Council and contributing to the creation
		of 'green' jobs.
Public /	Private	The Bath Council has a cross-cutting team of
Private	Public	experts that deal with sustainability issues at
engagement	Partnership	large. The cooperation with BWCE provided for
	with the	the opportunity of having external support, able
	community	to reach out directly to citizens.
	and	The cooperation with BWCE does not only provide a technical outreach advantage, but is
	community groups	also seen as an investment opportunity with good
	groups	return on investment from both a social and
		an economical point of view.
		Cooperation started with solar projects on schools' roofs, and with the Council providing support signposting, sharing resources and granting funding when available. The first policy loan of £500k from the Council's
		Green Investment and Jobs Fund was invested in the Wilmington Farm 3 MW ground-mounted solar array, a BWCE community energy project. BWCE encountered difficulties in raising finance from banks, and the council provided the loan. The total cost of the project is £2.6 million and
		The total cost of the project is $\pounds 2.6$ million, and $\pounds 2.1$ million have been acquire through share

Criteria	Subcriteria	Description
	(if	
	applicable)	
		offer for existing members of BCWE.
		The £500k loan is at a commercial interest
		rate, and will be repaid to the Council over
		the next 15 years and should deliver a 6.5%
		annual return on investment. The loan will
		also support the community share offer for
		Wilmington Farm by helping to overcome the
		current market barrier of banks being unwilling
		to lend to community energy projects of this
		scale. Any income will be paid to shareholders
		and contribute to the Community Fund.
		The Community Fund, a registered charity, is
		aimed at supporting projects which help to
		mitigate the effects of peak oil supply, climate
		change and fuel poverty in the Bath area. It will
		do this by providing financial support via grant
		funding or investments in local projects that meet selection criteria.
		Project proposals must demonstrate that they
		promote environmental sustainability; rational,
		low or zero carbon energy use; and/or alleviate
		fuel poverty. Due to the generosity of BWCE
		members and the allocation of surplus profits
		from BWCE, the fund will start with £20,000 in
		its account. BWCE's surplus income is what is
		left over after the company's running expenses
		(for example, repayment of bank loans, premises
		costs and staff costs) and shareholders' interest
		have been paid. The proportion of the surplus
		income from BWCE allocated to the fund will be
		approved by members at each AGM. The
		intention is that, should generating capacity
		targets be met, significant funds will be passed to
		the Community Fund in years to come.
	European	European funds are not currently exploited by
	and national	Bath, this is because the application procedures
	funds	still represent a challenge for smaller cities.
		Some funds are available through the national
		government, but in terms of direct funding it
		takes a lot of resources to go through the

Criteria	Subcriteria	Description
	(if	
	applicable)	1
	<u> </u>	application process.
Multi-level/	Cross-level	At sub-regional level, changes in national policy
cross-level	(among	have been both a barrier and a driver for
engagement	peers; sub-	cooperation among Bath and the peers-cities, like
	regional	Brighton, Swindon and Bristol. The cities not
	level)	only address the national level together (e.g.
		recently through lobbying Environmental
		Standards Committee on energy efficiency –
		especially for buildings), but also commission
		joint researches and surveys, sharing both the
		costs and the technical burdens.
		There is a history of cooperation –at sub regional
		level In West of England, with climate change,
		environmental issues, transport and a housing
		and employment growth agenda at the heart of this collaboration.
	Multi-level	
	(with	To ensure success, Bath started engaging stakeholders from a very early stage:
	community,	especially when launching initiatives on energy
	NGOs,	efficiency at home, awareness raising campaigns,
	transition	but also on consultation on the overall local
	groups)	strategy (e.g. with transition groups). Bath
	groups)	Transition Group is a local voluntary
		environmental organization whose aim is to build
		a sustainable future by harnessing the power of
		the community in the face of declining natural
		resources and increasing fuel and food costs.
		They support a transition to a low-carbon
		local economy and the development of
		positive, self-reliant communities, and aim to
		lead by example in making Bath more
		sustainable.
		For the implementation of community energy, a
		real dialogue took place between the council and
		the transition groups, which are formally
		supported by the Council. While the monetary
		benefit of maintaining revenues locally is clear,
		investing in partnerships with local initiatives
		also provides an opportunity involve local
		residents in tackling climate change and

Criteria		Description
	(if	
	applicable)	
		supporting low-carbon development. The city also works with the private sector, but the focus remains on voluntary, tertiary sector and the community, while there are not major industries to engage with. Involving with the community energy model has been crucial to generate income for the community itself. It is a sustainable model, and the Council has set up (an award winning, sustainably designed) one-stop-shop , to offer assistance to community energy projects development. To support community energy groups at an earlier stage of development, the Council convenes a Community Energy Network and the online B&NES Environmental Sustainability Network which facilitates collaboration and resource sharing. The council also provides individual support to groups with training ,
Innovation	Community energy – success factors and replication	Many local governments are exploring the potential of community energy for the implementation of sustainable energy actions. This allows from one side to increase acceptance of Res and low- carbon measure, to enhance participation and to leverage private investment locally. Bath has achieved very successful results through embedding this process within the strategy of the city and through creating the right partnerships with the right stakeholders. The success factors were: getting the political administration and the community engaged : the citizens of Bath are very interested in environment and the sensibility and commitment of the community is very strong. The same approach might not work in a community where there is not this commitment. working with transition groups : the Council never worked directly with transition groups

Criteria	Subcriteria	Description
Criteria		Description
	`	
	Subcriteria (if applicable)	 Description before, but it realized that access to more capacity and technical expertise was necessary directly on the field to work on projects. providing technical advice and support with planning, policies and strategy: BWCE liaise with groups and on works and on the technical assessments, while the Council focuses on aligning the projects with the sustainability strategy, and according to local environmental, social and economic goal. fostering a strong corporate social responsibility: Bath observed a lot of direct private investments, thanks to the shared understanding of the need for long term more sustainable thinking. blending different approaches: Bath looked into nurturing a match between private and public investment. Working with other cities and regions in an
		informal way , and with the immediate neighbors is very fruitful and helps to merge expertise, skills and capacity.

More information

- Bath & West Community Energy
- Draft Community Energy Strategy
- Specific planning guidance and case studies <u>www.bathnes.gov.uk/greenbuild</u>
- Solar array loan for Wilmington Farm details: http://democracy.bathnes.gov.uk/ieDecisionDetails.aspx?Id=719
- Mayors in Action methodology on community energy: <u>www.mayorsinaction.eu</u>

Name and brief descript	ion of the case study
Member State(s) /	Italy / Regione Sardegna
Partner(s)	
Executing entity	ICLEI, Freiburg
Timeframe of case	16-30 September 2015
study	
Contact	Giorgia Rambelli, +49-761 368920,
	giorgia.rambelli@iclei.org
Additional information	Case study based on interviews with :
	Giuseppe Lenigno, Expert, Technical Assistance for
	EU and National funds implementation, Sardegna
	Regional Office for Industry –
	glenigno@regione.sardegna.it
	Elisa Mattiello, Energy and Green Economy Sector,
	Sardegna Regional Office for Industry –
	emattiello@regione.sardegna.it
	http://www.regione.sardegna.it/

3.3.2 Case study for the Regione Sardegna

Summary

The Sardinia region launched in 2011 the Sardinia CO2.0 Programme, an umbrella initiative for all projects related to energy efficiency, renewable energy, and sustainable development, to foster the implementation of the European Union in the European Package on Climate and Energy 20-20-20 locally. Through the programme Sardegna CO2.0, the Region joined the Covenant of Mayors, as a Territorial Coordinator, and since then it has become the main supporter for all Municipalities interested in joining the CoM. The "Smart City – "A" labeled municipalities" project , part of the CO2.0 Programme, is a multi-level governance project led by the Region, and it aims at supporting those Municipalities who joined the Covenant to draft the Sustainable Energy Action Plan (SEAP) through offering direct step-bystep integrated technical and financial assistance.

Trough the "Smart City – "A" labeled municipalities" project, the Region selected 66 municipalities - grouped in 21 so called "Pioneer Communities" - for receiving in the development and implementation of their SEAP. The assistance was delivered by a multidisciplinary team of 20 tutors, 12 with scientific and technical expertise and 8 with socio-economic background, selected and supported by the in-house research regional agency Sardegna Ricerche. The Region also assisted with the collection and provision of municipal energy data, through training of municipality technicians, and through

informing municipalities about access to national and European funding, and how to plan for sustainable investments. Furthermore, through SFIRS, a regional financial intermediary, 6 technical experts on economic and financial analysis have tasked with supporting municipalities in assessing the economic sustainability of the project to be presented for funding through a newly set up Urban Development Fund.

The **Urban Development Fund was set up through the JESSICA** (European Investment Bank) mechanism, to provide funds for investment in the actions of selected SEAP's. The extensive participation in the public tender for the funds shows that the support of the Regional level, the technical and financial assistance provided is a crucial component, and often the only opportunity for smaller municipalities with less resources and capacity to develop and effectively implement a SEAP.

The project has impacts on 151 thousand citizens living in the Pioneer Communities, and it aims at reducing **91 thousand tons** estimated reduction in CO2 emissions. The estimated value of the projects integrated in the SEAPs is **250 million Euros**.

At the core of the project is a successful example of multi-level governance – both horizontal and vertical – with the Region closely supporting the Municipalities, and the municipalities working together.

Criteria	Subcriteria	Description
	(if	
	applicable)	
Sector	Cross-	The objective of the "Smart City – "A" labeled
	sector –	municipalities" project is to support and assist
	Planning	Municipal Administrations in the process of
	(Energy	drafting a good quality Sustainable Energy
	Efficiency	Action Plan (SEAP).
	and	Instead of providing funds for the development
	Renewable	of the SEAPs (e.g. with help of external
	Energy	consultants) the Region, a Covenant of Mayors
	Sources)	Coordinator, decided to build the capacity
		within the municipalities to manage the
		process. 257 municipalities (out of the total
		377 presents in Sardinia) expressed their
		interest in undertaking such a path,
		individually or jointly. After an evaluation of the
		applications based on social, economic,
		demographic and geographic coverage criteria,

Criteria	Subcriteria	Description
	(if	*
	applicable)	
		66 municipalities were selected and grouped in 21 Pioneer Communities. Between April and May 2012, the Pioneer Communities signed a Memorandum of Understanding with the Region of Sardinia which defined the respective commitments and regulated assistance activities. The multidisciplinary nature of the work group made it possible to provide specialised support, both in the stage of energy consumption analysis and in the choice of interventions, as well as in the participatory process and in the process of listening to the territory. The novelty of this approach is also highlighted by the choice to include financial analysts' skills in the working group in order to assist the Pioneer Communities in identifying the best economic and financial solutions for the implementation of the actions in the SEAPs. These first 21 Communities have been supported by a multidisciplinary team of experts including 20 tutors – among which 12 with scientific and technical skills and 8 with socio-economic backgrounds – thank you to the collaboration with Sardegna Ricerche, the regional agency for research and innovation. Together with these tutors, a second group of 10 experts on economical and financial sustainability assessment has been involved in cooperation with the financial intermediaries SFIRS and BIC Sardegna, the agency that supports the Regional Administration in the
		definition and implementation of measures to promote business creation and development, and local development programmes.
		Each Pioneer Community was provided with at least one qualified tutor always available to offer support through the entire process.
		All of the SEAPs that have been submitted have been accepted and approved by the Covenant of

Criteria	Subcriteria	Description
	(if	
	applicable)	
		Mayors. The methodology adopted by the Region itself has been recognized and approved by the CoM as an effective way to carry the process, and therefore a good practice with potentials for replication. After having followed this first group of 66 Municipalities, the Region is now supporting a second group of 10 Pioneer Communities (for a total of 36 Municipalities) which are expected to submit their SEAP in October- November 2015.
Business model	Funding (JESSICA fund/ERDF funds)	In 2011, the Sardegna Region signed a Funding Agreement with the European Investment Bank (EIB) for the establishment of the Joint European Support for Sustainable Investment in City Areas (<i>JESSICA</i>) Holding Fund Sardinia (JHFS), to deploy approximately \in 70M of Sardinia's 2007-13 ERDF Operational Programme. Within this fund \in 35M were earmarked for the "Sardinia CO2.0" project to finance sustainably, through a revolving mechanism. The urban development fund (UDFs) finances projects through loans or risk capital, with the capital invested expected to produce a "return" to finance new financially robust projects. The aim is to attract additional resources from private and/or public investors, developing possible public-private partnerships. SFIRS, a financial intermediary, helped the Municipalities to access and use those funds. Projects eligible for financing through the FSU which are included in SEAP, have to be beneficial for local development, bankable, and to have an appropriate return on investment both for the administration and for potential partners. The 334 project ideas submitted by the municipalities were classified as hot or cold. The so-called hot actions are the ones capable of generating income through revenues from user

Criteria	Subcriteria (if	Description
	applicable)	
		fees, to such an extent as to repay the investment costs and ensure financial sustainability over time. Warm Actions generate revenues from user fees that are not sufficient to repay the investment entirely and, therefore, a public contribution is needed to ensure their economic and financial sustainability. Cold actions are those unable to generate income through revenues from user fees, and which costs must be entirely covered by public funds.
Public /		The aim of the fund is to attract private
Private		investment and to lead to the set up, for example,
engagement		of Private-Public-Partnerships (PPP) as well as
		Energy Service Companies (ESCOs),
		multiplying the resources provided by the Fund. Through the revolving fund, the funds generated
		become an additional source of investment to be
		redeployed for the new programming period.
		To this purpose, private investments through
		the Fund will guarantee a facilitated access to
		credit, dedicated to urban development
		projects. The aim is to encourage public
		administration to invest on financially
		sustainable projects, with long term benefits, and
		able to create new jobs. The methodological approach of the "Smart
		City" project, while likely to undergo revisions
		and refinements, in line with its experimental and
		innovative character, is proposed as a "good
		practice", replicable in a regional and European
		context, for complex projects that require the
		coordination of different stakeholders and
		maximum participation of the local communities
		within a single framework.

Criteria	Subcriteria	Description
	(if	
	applicable)	
Multi-level/	Multi-level	The involvement of different stakeholders with
cross-level	– National,	various roles and experience made it necessary a
engagement	Regional	skill alignment aimed at sharing the objectives
	and Local	and promoting effective coordination.
		Meetings were organised with local
		administrators and the heads of the municipal
		technical offices to plan project activities and
		identify the internal organisational structures in
		the Communities and the human resources
		assigned to the process. The national level has
		not been involved because it has not been needed
		in this specific context.
		Until June 2015 (when the responsibility for it
		has been moved to the Industry Department and
		specifically to the Energy and Green Economy
		Office) the project has been coordinate by the
		Directorate General of the Presidency of the
		Region of Sardinia. From the very beginning,
		however, most of the departments have been involved: the Centro Regionale di
		involved: the Centro Regionale di Programmazione (related with the use of
		structural funds), the Environment Department
		(to seek integration with project already
		developed by them), the Industry Department ,
		the Transport Department , and in general all
		offices and departments which might have been
		affected or could have an impact on the project.
		The involvement process has not been easy, but a
		good participation rate has been registered. The
		whole process has been entirely coordinated by
		the Region, both with regard to human resources
		and to economical aspects.
		Municipalities have been involved at all levels:
		from public administration, to citizens, to the
		private and business sector, everybody have
		been included and given a role. This has been
		guaranteed by the multidisciplinary team that has
		carried on the process.
		Meetings have been organized in order to
		understand private companies' view on

Criteria	Subcriteria	Description
	(if	
	applicable)	
		renewable energy and energy efficiency; many initiatives have been organized in schools in order to bring kids closer to the environmental issues; open meetings such as "energie in circolo" have been organized for citizens to present them the project and increase their environmental awareness, especially with regard to sustainability. Most of the Municipalities included in <i>Pioneer</i> <i>Communities</i> already had a history of cooperation with each other. Despite this fact there have been some communication problems inside the Communities, sometimes given by the fact that the Municipalities involved where very numerous. The role of the Region that acted as a third part has been crucial in this sense, in order to help solve conflicts and prevent the process to deviate from the purposes. Two scientific coordinators supported the General Directorate of the Presidency of the Autonomous Region of Sardinia, contributing to the construction of the project and supervising the entire development process of the SEAPs, ensuring its coherence with the requirements of the Covenant of Mayors; Sardegna Ricerche Regional Agency for research and innovation, made Renewable Energy Cluster competencies available to the
		Energy Cluster competencies available to the project, composed of technicians expert in the fields of renewable energy and environmental sustainability. In addition, it selected the tutors, managed the activities of technical assistance to
		the Communities and hosted dissemination activities at its headquarters for dissemination directed to the secondary school students of the Pioneer Communities;
		SFIRS, a Financial Intermediary, supported the Pioneer Communities in the development of investments and in evaluating their cost-

Criteria	Subcriteria	Description
	(if	
	applicable)	
Innovation		effectiveness and financial sustainability. For these activities, SFIRS set up a dedicated task force with six expert professionals who, under the coordination of a project manager, contributed to the preparation of the investment projects described in the SEAPs submitted by the Pioneer Communities; BIC Sardegna is the agency that supports the Regional Administration in the definition and implementation of measures to promote business creation and development and local development programmes. In the "Smart City" project, BIC Sardegna took care of the relations with businesses through information and activation activities, aimed at collecting project proposals in the field of renewable energy and creating Public-Private Partnerships (PPP). Sardegna CO2.0 has been the first initiative taken by the Region to address energy policy and sustainability as a first step toward the goal to adopt soon a regional energy plan, which has been approved (PAEER 2013-2020). However in order to have a proper plan it is of main importance for the Region to have a good and solid database, which is at the moment still limited and fragmented. Sardegna CO2.0 does in this sense act as a data collector, allowing for better and improved quality data. Additionally, through the Smart City project the Region also has the chance to make sure that all the actions foreseen in the SEAP and with the m future projects to be implemented, would be in line with the regional energy planning. This bidirectional exchange guarantees a coherent approach at all levels, and gives also the Region the chance to have a quality check with regard to the effectiveness and pertinence of the Regional policy once implemented at the local level.
		One of the most important achievement of the

Criteria	Subcriteria	Description
	(if	
	applicable)	
		Smart City approach has been the fact that it
		gave the chance also to very small
		Municipalities (with less than 900 inhabitants)
		to have their own SEAP. Very often small
		Municipalities don't have in house the resources
		and the expertise needed to conduct an accurate
		GHG emissions assessment and to therefore
		deliver a high quality SEAP.
		Regarding impacts at social level (for examples
		jobs which could be created etc) there are
		currently still not data available.

More information

- <u>http://www.regione.sardegna.it/sardegnaCO20/</u>
- <u>http://www.regione.sardegna.it/index.php?xsl=509&s=1&v=9&c=11839&tb</u> =9187&st=18&tb=9187&st=18
- http://www.regione.sardegna.it/documenti/1 46 20140220101912.pdf

3.3.3 Case study for the city of Namyslow

Name and brief descript	tion of the case study
Member State(s) /	Poland / Consortium of municipalities in South
Partner(s)	Poland / Lead: Namyslow
Executing entity	ICLEI, Freiburg
Timeframe of case	4-15 October 2015
study	
Contact	Giorgia Rambelli, +49-761 368920,
	giorgia.rambelli@iclei.org
Additional	Case study based on interviews with:
information	Marcin Idczak, Energy Engineer, JASPERS –
	Energy and Solid Waste, European Investment Bank
	– <u>m.idczak@eib.org</u>
	and contributions provided by:
	Partrycja Plonka, Polish Network Energie Cities,
	patrycja.plonka@pnec.org.pl.
	Julia Krzyszkowska, Bankwatch,
	julia.krzyszkowska@bankwatch.org.

Summary

The LED PACK Public Lighting Modernisation Project in South Poland project is an example of a group a small municipalities teaming up in order to approach the European Investment Bank (EIB) for funds. The town of Namyslow (16,300 inhabitants) leads and coordinates a **consortium of 33 municipalities and cities** in a common effort of implementing a project of lighting modernisation. The consortium applied for the **European Local ENergy Assistance (ELENA)** assistance and it was kicked off in 2014.

The cooperation between the municipalities under the investment programme is regulated by a participation agreement. The municipality of Namyslow has created a dedicated municipal limited liability company (LED PACK) that will be responsible for the implementation of the project.

The project aims at using an Energy Performance Contracting approach for implementation, through setting up a Private Public Partnership (PPP), in the form of an Energy Service Company (ESCO).

Criteria		Description
	(if	
	applicable)	
Sector	Energy	The investment programme aims at modernising
	Efficiency –	the lighting systems in public buildings and in
	public	street lighting in 33 municipalities and cities in 6
	lighting	regions in South Poland. The main aim of the
		modernisation is to improve the energy efficiency.
		The project is expected to trigger about 65%
		energy savings in electricity consumption in
		comparison with the energy performance prior to
		the project.
		The municipalities participating have carried out
		preliminary assessments of the number and
		technical state of the external and internal lamps to
		be modernised. Therefore providing an initial
		assessment of the investment costs and the
		expected results to be achieved thanks to the
		project. Expected results include Energy savings
		for 33,307 MWh/a and GHG emission
		reduction of 24,980 tCO2eq/a. The project
		expects to achieve total energy savings for at least
		50% through improvement of public lighting . A
		comprehensive modernization covering interior

Criteria	Subcriteria	Description
	(if applicable)	
Business	Funding –	and exterior lighting, will be carried out uniformly and by the same contractor in all six provinces engaging. Among the measures included, the installation of remote control lights, which significantly reduces maintenance costs. The project is funded by ELENA, which aims to
model	ELENA	generate large-scale bankable investment
	Financing - ESCOs	 projects that can attract outside finance. Through LED PACK, ELENA will fund project development services (PDS) with EUR 1,829,148.00, which will be used to hire 3 employees at the LED PACK company: a project manager, a technical expert and an administrative assistant. The team, which will be employed for 36 month, will be coordinate the project activities under the project. External experts will be used for provision of technical, legal and financial support. This includes support in carrying out technical assessments of the lighting systems, to define the scope and extent of the modernization, and to prepare the tenders for the refurbishment process. The investment mobilized is 41 million and the leverage factor 25. Cities participating in the project will carry out a comprehensive examination and technical evaluation of the entire system of internal and external lighting, including an assessment on the technical feasibility. The project will follow three phase: AUDIT – an assessment of current technical conditions, and development of recommendations for modernization, MODERNIZATION - installation of more efficient lighting, management and monitoring ; OPERATION - and maintenance costs of the system and the light sources. The energy efficiency solutions introduced will be documented over the duration of its implementation.

Criteria	Subcriteria (if applicable)	Description
Public / Private engagement	Private Public Partnership	For the implementation, aims at using an Energy Performance Contracting scheme (EPC). The municipalities will enter into a PPP agreement with a private partner, and set up an ESCO company. Both the technical modernization of the lighting, as well as its operation and maintenance will take place in the context of the PPP contract concluded by each town with a private partner. The partner will carry out the work, set out in the joint tender procedure and assess potential for new points of light, the most efficient management of the system and the utilization of old sources of light.
Multi-level / cross-level engagement	Cross-level (among peers; sub- regional level)	The project is a good example of small municipalities coming together and pulling their assets, capacity and strength in order to create a critical mass and approach the European Investment Bank, even for large investment. The quality of the proposal submitted was good and the EIB estimated a very high market replication potential thanks to the inter-regional character of the project. The municipalities participating, in fact, are located in six regions, factor that will potentially ensure a very high visibility as well as replication potential for this project. The project will allow for the demonstration of the viability of LED lighting, a technology with limited market penetration in Poland.
Innovation		The project will be able to demonstrate the viability of an innovative approach for project implementation, with bringing together a number of public bodies in a common objective and by using energy performance contracting approach with off-balance sheet financing.

More information:

- <u>http://test.ledpack.eu/Download/406_ELENA_Participation_Agreement_FI</u> <u>N_GB.pdf</u>
- <u>http://www.eib.org/attachments/led_pack_poland_project_factsheet_en.pdf</u>
- LED PACK presentation (in Polish)

3.4 Findings on sustainable funding aspects

The analysis of the case studies identified follows the set of criteria identified in 1.2.2 (namely: sector focus; diversity of business section model (funding/financing); public/private investment and engagement; multi-level / cross-level engagement). Each of the criteria has been assessed in a cross-cutting manner thorough the interviews questions, which were developed to ensure an adequate portrait of the impacts of multi-level governance within each relevant step of the process for sustainable financing of local energy actions. This also allowed to provide an ample overview of the key driving mechanisms for sustainable financing, which include: technical capacity, stakeholders participation, blending of financial mechanisms and business models, formal and informal co-operation among actors, political commitment, among others.

Through the case studies highlight the following recommendation for replication:

- Success is in the mix. This can include cooperation among different level of government and public actors like in Sardinia, or the local government sector collaborating directly with the community as in Bath, or several municipalities working together as in Namyslow. To move a sustainable energy action or plan from planning to implementation it is necessary to create partnerships and collaborations, both multi-level and cross-level, in order to obtain the adequate support to implement the business model both form a technical and a financial point of view. All actors and stakeholders, including private sector and the community, should be included in the process from the first steps.
- Think outside of the box. All the case studies show how the approach of relying exclusively on funding (top down) is not a viable business model. It is important to move from zero-interests grants to fund action, to business plans including more sustainable financing mechanisms. This includes striving for partnerships with the private sector, such as in Sardinia and Namyslow where the set up of PPPs and ESCOs was a defined goal, and for more inclusive approaches including the community, such as in Bath were

the community can not only participate to the process but also invest in it. **Participation catalyzes investments**.

- **Stability and change.** While the mind-set of the public sector needs to shift form grant-based funding schemes to innovative financing options including different stakeholders, a certain degree of **stability** is still very much needed within the **regulatory frameworks**. Especially at national level, uncertainty in regulations, **bureaucratic and overburdening application processes** to access funds continue to appear as a major issue for the investors and their confidence, as well as for local governments wishing to apply for funds or to explore financing options.
- Support and capacity. Especially when dealing with financing local authorities need technical support in rolling out but also in managing such projects. Multi-level governance and cross-level collaboration with peers have great potential in triggering know-how and with it solid bankable projects, with the benefit of aligning the local actions with subnational strategies. The private or the tertiary (NGOs, community groups, etc.) sectors have also an ample role to play in providing support and step-by step assistance, especially directly on the field. When this support network is missing the results of the projects can be severely undermined. Lack of capacity and support can hinder implementation, and the support of larger entities (e.g. regions) with more capacity, can support the roll-out of sustainable energy action through large-scale investments.

3.4.1 Sector focus

The actions included in local Sustainable Energy Action Plans can focus on a variety of sectors (Renewable Energy generation and/ or distribution, Energy Efficiency, but also multi-sectors actions). Different factors can influence the selection of the sector in which a city decide to directly invest in implementation. Key questions:

- What is the framework for implementation?
- Is there any national/regional/ local support to the implementation of this type of action?
- Is there any external factor or favorable circumstance for the implementation of this specific action?

While selecting where to focus direct investment it is important to understand the framework and context in which the measures will be implemented. **Assessing** if there is any **national or subnational support**, both in terms of funds and of capacity is a good starting point. In Sardinia, for example, the decision of the Region to provide direct support to its cities to first develop, and then implement both energy efficiency and Renewable Energy measures, through providing expert capacity support and through the set up of an urban sustainable Development Fund, was aligned with the regional operational plan for the sue of structural funds, as well as to the energy and climate strategy.

In this case, choosing to invest in these sectors locally allowed to **create new skilled capacity on the territory**, even in very small municipalities, while it also facilitated the **gathering of the necessary data** for the development and refinement of the overall regional energy strategy, and, at the same time, guaranteed an **alignment of the local strategies** and projects with the same strategy.

The **selection** of the sector should also take into account the **bottom-up** vision that the community and the stakeholders have for their territory. The strong feelings and desire for participation of a community can drive a local government to enhance the focus on decentralized measures, where the community can have **a direct stake in the benefits as well as in the investment**. This is the case of Bath, where an history of local transition groups and community participation led to Council to foster the development of community-owned energy projects, first only through supporting the process, subsequently through directly investing in it. **Including the community and the stakeholders** in selection of the sector of investment can lead from one side **increase acceptance** of the measures implemented – especially when it comes to RES, but also **mobilize private investment** that would not be leveraged otherwise.

The **potential of "low hanging-fruit" sectors** does not have to be underestimated. Sectors such as lighting provide a great opportunity to have a great impact with a relatively low investment cost. It is although important to ensure that the business model adopted is solid and sustainable in the long term, and partnerships (multi-level and cross-level) can support through lowering the costs while increasing the scale of the impact. e.g. through models such as group purchasing.

It is also important to remember that investment can be made across sector, for example through funding actions that include both energy efficiency and RES installation, or through integrating measures addressing the transport sector and RES. These multi-sector actions often, not only can draw upon skills from different experts within the municipalities but also have the potential of addressing issues related to the overall urban development, through taking into account planning, low-carbon solutions, resilience and adaptation measures. These **multi-sector measures can** on the long run **reduce the costs of implementation through addressing more than one issue at once in a coherent manner.**

3.4.2 Business model

Selecting an appropriate business model is key to ensure the success of the investment made. There is several type of funding initiatives available which can provide local government with the funds necessary to start the implementation of their Sustainable Energy Action. These funds need to be coupled with financing options in order to become more sustainable on the long run. The quality of the return on investment, as well as on the possibility to reinvest it, is crucial for the sustainability of the model. In addition for a local government the impact on jobs and local development are key factors for assessment of the success of such model. Key questions:

- What level of know-how and capacity for financing and funding was already within the municipality? What more was needed, and who can provide this expertise?
- Which actors have been engaged in the process, and what are the benefits?
- What are the challenges and barriers to access funds?
- Were financial options explored (also in combinations with funding)?

The access to funds appears to be still the biggest threat to implementation of sustainable energy actions. To ensure a more consistent and successful implementation, it is necessary to **enhance both project development and management skills at local level**, where often the technical capacity on developing a sound business plan is still lacking.

This is particularly true for smaller municipalities. The **role of the different level of government** is very important in this regard. Through providing support to the local level, the Region Sardinia in its role as Covenant of Mayors Coordinator has succeed in providing municipalities with the skills to directly plan their measures and their implementation. Even if not all measures submitted for funding through the Urban Development Fund created by the Region will be ultimately funded, municipalities will retain the skills developed and will be better positioned to find other ways to finance their projects in the future.

Regulatory frameworks, especially a national level, are often **complicated** and subject to **frequent changes**. This from one side **discourages the investors** and from the other hinders the capacity of setting up innovative financing schemes at local level.

Streamlining and reduction of the bureaucratic procedures for the applying for funds is also a crucial element to increase the number of applications to European grants and funds. Applications for European programmes can be very

demanding in terms of time and capacity. Multi-level (horizontal and vertical) governance can again be a success factor in this regard, where the subnational level (e.g. Sardinia) can approach financial institutions such as the European investment Bank and set up a Development Fund for all the municipalities to apply to.

Groups of **municipalities can create a critical mass**, and through pooling technical skills and capacity can successfully obtain funds for implementation of large scale, high impact projects.

The example of Sardinia shows how, thanks to a vertical **multi-level governance approach**, Regions (or a Covenant of Mayors Coordinator) have the possibility to be backed up by a financial institution and to be supported by financial intermediaries, guaranteeing for the investment.

In the case of **ELENA submission** (large-scale investment), specific recommendations can be outlined:

- In case the beneficiary is not a local authority (municipality, city, region, etc.) the EIB would often require a bank guarantee to secure the down payment of ELENA funds. Some applicants that are not local authorities (e.g. local energy agencies, Special Purpose Vehicles created to implement the project) may have small balance sheets and limited track record, which would make it difficult for any financing institution to award them a guarantee in favour of the EIB. Consequently, the EIB might not be able to release ELENA funds.
- A certain administrative capacity is required to succeed. This capacity would be typically found with larger municipalities, cities or regions, rather than very small municipalities.
- Any ELENA project needs a strong leadership, otherwise the project will not materialise.

The support of entities such as Covenant of Mayors Coordinator could go a long way in providing support to smaller municipalities willing to engage with such large-scale programmes.

Bottom-up approaches can e very successful business models, and through the engagement and support of the community, they can result in a great opportunity for economic success and democratization of sustainable development. With mechanisms such as crowdfunding, the set up of energy cooperatives and much more, **community-energy** appears to be a driver for local investment where the citizens have a direct stake into the sustainable development of their territory. In the case of Bath, the city decided to embrace the community energy business model after assessing that, beside the social benefits in terms of participation

and inclusiveness, **70- 80% of the investments will remain and be reinvested in the territory**.

3.4.3 Public/private

Moving from top-down grants and zero-interest loans to more sustainable financing options which include good return on investment, revolving mechanisms, and partnerships with other actors including the private sector remains a challenge, and an untapped potential. This includes not only a shift in mentality, especially of the public sector, but also the establishment of clearer and simpler regulatory frameworks.

Key questions:

- Who drove the process (both design and implementation) at all phases? Who was directly involved?
- Which stakeholders were included in the discussion and how? Did citizens engage? And the business sector?

Blending different approaches, and a match between private and public investment is a fruitful way to increase the opportunities of success of investing in sustainable energy actions. In all the case studies public sector had a driving role in the process. The Region Sardinia was able to set up a support network inclusive of private stakeholders able to support the development of the process (offering technical support) and the roll-out (through communication but also direct support to access funds). Bath set up a partnership with already existing groups and has worked since to strengthen cooperation both on developing new strategies (e.g. community energy strategy of the city) and in the roll out of initiatives (set up of community funds for future projects).

The involvement of **regional agencies and research institutions**, as well as of the private sector can be crucial to provide the knowledge and know how as both the case of Sardinia and Bath show. In the case of Sardinia, experts from research and financial intermediary institutions participating in the roll-out of the SMART "A" labelled municipalities were key to build capacity at local level both form the technical and financial point of view. BIC Sardegna supported the Region in approaching businesses and fostering the creation of local development programmes, through informing them of the opportunities to set up **Public-Private Partnerships (PPP)** in the field of renewable energy and collecting their ideas and proposals.

Financial intermediaries, such as SFIRS in Sardinia can provide technical expertise to the development of investment projects for the implementation of

sustainable energy actions, through helping municipalities to access, with bankable projects, funds and to attract additional resources from private and/or public investors, developing possible public-private partnerships. Sardinian municipalities have submitted 334 project ideas for evaluation thanks to this partnership.

Energy Performance Contracting scheme (EPC) selectees an increasingly investigated mean of implementation, with municipalities entering into a PPP agreement with a private partner, and setting up an **ESCO company**, This model can be quite successful but **a shift in mentality** in regards to the collaboration with private sector, as well **more stable regulatory frameworks** are needed in order to foster these models, in country where there is not an established history of collaboration with private investors.

Great results can be achieved through **engaging the community** as a private investor. In the case of Bath, thanks to the collaboration with the **local transition groups** (e.g. BWCE), the community can not only contribute to shaping the local sustainable energy policies but also directly invest into its implementation. Bath shows how, through working with transition groups, the Council could access additional capacity and technical expertise necessary to work directly on the field. The transition group liaises with community-led initiatives and on works and on the technical assessments, while the Council focuses on aligning the projects with the sustainability strategy, and according to local environmental, social and economic goals.

The cooperation with BWCE is also an investment opportunity with good return on investment from both a social and an economical point of view. Thanks to BWCE members and the allocation of surplus profits from BWCE, a £20,000 Community Fund has been set up to fund local projects helping to mitigate climate change and alleviating fuel poverty. In the future, a proportion of BWCE's surplus income will continue to be allocated in the Fund to support new projects in years to come.

Last but not the least, engaging the private sector also means fostering a **strong corporate social responsibility**, which in the medium and long term can result into large direct private investments, as in Bath.

3.4.4 Multi-level / cross-level engagement

Multi-level and cross-level exchanges are a key success factor in the roll out of sustainable energy actions. This inclusive approach to governance allows to cater for different views and expertise and, in some cases, to provide technical

capacity as well as financial capacity. The importance of a joint vision within the city or among several cities cannot be underestimated as both formal and informal partnerships can provide fertile soil for successful implementation, through joining capacity and expertise, as well as providing a more coherent vision for the city.

- Were several departments engaged? Was any management structure set up for such collaboration?
- What level of government was engaged?
- If more than one municipality was involved, what is the relation with the other local governments in the area? And with the region? Is there a history of collaboration?
- Did you consider any peer-to-peer exchanges?

In all the case studies analysed, the impact and support and **engagement of the national government** was very minimalistic. Although this is not a statement to the lack of support of either of the national governments reflected in these case studies, it is significant to note that none of the cities has referred to the national framework for support, technical or financial. In the case of Bath, the changes in national policies represented instead barriers and provided challenges to the roll-out of local sustainable energy strategy.

The importance of **multi-level governance between regional and local level** is exemplified by the case study on Sardinia, where the Region took the lead in support its municipalities, through providing support to single cities or to group of them. This approach not only provided technical support for different sizes municipalities (including very small one), but it also ensured in this way an **alignment between the regional energy policy and the local one**. The decision to offer **technical assistance instead of funding directly** the development of the local SEAPs proves to be a good investment for the future, with more informed municipalities that can decide on a self-directed manner about their sustainability pathways. This **capacity will also remain in the territory** creating new skilled municipal staff, making of this example a best practice with high replication potential.

The case of Sardinia also shows how the **collaboration between different sectors and agencies** within a Region can bring to successful implementation, such as the set up of an urban Development Fund, which all municipalities engaged can benefit from. The key to such collaboration is to **start the dialogue at the very beginning of the process**, to **find a common strategy and vision**.

To ensure such collaboration, **a strong political commitment** needs to be at the basis of the process. Through joining initiatives such as the Covenant of Mayors

and the Compact of Mayors, cities and regions publically embrace such a commitment for a medium to long term strategies on climate.

Collaboration among departments is also one of the strong features of successful projects such as the example form Bath, where the city deals with sustainability at 360°, **considering it a cross-cutting** issue affecting health, environment and urban planning.

Formal and informal partnerships among local governments are quite effective in defining a support network for implementation of action. Small municipalities can be brought together to combine their assets, capacity and strength in order to create a critical mass and approach the European Investment Bank, even for large investment. These type of projects, although very challenging, show a very high market replication potential thanks to the potential for inter-regional cooperation.

In the case of Bath, peers-cities, like Brighton, Swindon and Bristol address the national level together, but they also commission joint researches and surveys, sharing both the costs and the technical burdens, and learning from each other.

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5 Annex: Template for the Case Studies (example for task 1)

Name and brief description of the case study		
Member State(s) /		
Partner(s)		
Executing entity		
Timeframe		
Contact		
Additional information		

Summary

The case studies aim to give a brief summary of the outline of the municipality efforts and a brief introduction into the structure of the SEAP (task 1) or the structure of the financing (task 2), respectively.

The total length is dependent on the amount of input received by the approached 2-3 contacts, but should give an overview in a maximum of 3-5 pages.

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Criteria / Subcriteria		Description
Transparen cy (incl. knowledge		
transfer Participatio n (civil	Administratio n	
society / intra- administrati	Civil Society Businesses	

Criteria / Subcriteria		Description
on)	Political fora	
Horizontal Integration	Cooperation between different policy fields	
Vertical Integration	National Cross-Border	
Innovation		
For Regions: Communica tion to local municipaliti es		