COMUNE di PADOVA
SETTORE AMBIENTE

Supported by
INTELLIGENT ENERGY
EUROPE

An inclusive peer to peer approach to involve EU CONURBations and wide urban areas in participating to the covenANT of Mayors

IEE/10/380/SI2.589427

D3.1 - Report on survey preparation

Work package: **WP3 – Institutionalization**

Partner responsible for D3.1.: Comune di Padova

Index

Overview of the Work package D3 "Institutionalisation"

The istitutionalisation of SEAPs means to make a participated action planning process enter the political sphere of the Municipality and to make the results of the process being approved by the Municipal Council and influence the following policy-making decisions.
The result of this institutionalisation path should be that new policies enter into force and affect the whole Municipal territory involving and directing consumers decisions, citizens choices and business strategies.
If a Municipality works only on its buildings and its patrimony, there is no chance to reach the 20-20 targets in due time. Institutionalisation, therefore, means for a Municipality to use a SEAP to 'go out' and reach out for the territory in a stable and monitorable way, through energy-related local policies with a cross-cutting approach.
Nevertheless, often times, energy-related policies are the results of policy-making decisions taken in different sectors/departments of the same Municipalities without concertation or even reciprocal information.
In order to avoid this situation in the future and to create the base for an easier inclusion of SEAPs in the policy-making process of partner Municipalities, the aim of this workpackage is to provide Trainee cities, but also Trainer cities, with a clearer view of the current energy related policies that exist or that are being discussed at local level, sector by sector, department by department.

Therefore Institutionalisation is necessary for collecting information and taking decisions useful for carrying out the successive activities in the best way.

Reports produced at local level will provide Municipalities with further information to develop an energy strategy.

Basic questions to be answered are:

- Which are the Municipality activity sectors affected by energy policies?
- What has already been done by now?
- What are the resources available as to sector personnel and skills

Technical insights must cover the following issues:

- What energy-related actions need to be taken to reach the 20-20 targets?
- Which are the most critical sectors?
- Which are the areas that need highest attention?

Political decisions to be understood:

- How energy-related policies could be integrated in a cross-cutting approach, according to territorial and programming economic tools?

Information to be collected from all Municipal sectors/departments:

- Who takes energy-related policy making decisions?
- What has already been done?
- What has been planned for the near future?
- What national/regional policies still need to be implemented at local level?
- What policies have been concerted with other sectors/departments?

- What are/have been the economic and social impacts of existing policies?
- Where possible, exchange of information with experienced Municipalities outside the partnership will be searched.

Municipal strategy development

According to each different situation, a Municipal strategy related to the 20-20 targets and the commitments of the Covenant of Mayors will be established and politically approved.

The main subject of the strategy is how the Municipality can provide an integrated, crosscutting approach toward energy policy-making through the development and implementation of a SEAP, through its political approval and its institutionalisation for the following years: agreements to ensure this should also be found at local level with the political opposition with a holistic approach, targeted on all Municipal sectors/departments and aimed at involving the territory as much as possible.

Municipalities will therefore develop strategies/commitments to be used during the project and to guarantee that 20-20-20 policies and programs are developed involving the overall municipality and have deep roots thanks to the integration of institutional policies and programs.

Report on Survey Preparation

The following document is a firs phase survey on what municipalities of the CONURBANT Consortium already have in their different local saituations in relation to energy related issues.
In the first part of the report (Cities of the consortium: state of the art and informations already collected) a brief collection of declarations collected by the different cities has been reported along with given informations on energy related policies and acitons to give an initial starting point with which starting an institutionalization of the path that leads to the implementation af a SEAP.
The second and third part of the document (conceptualised ad annexes) report the contents gathered from the partners in order to achieve the goal of presenting the SEAPS to the city Conucil for final approval: they deal therefore with issues to be considered in the processo of generating both the Baseline Emission Inventory and the SEAP: these issues must be integrated in the survey templates of Intitutionalization.

1. CITIES OF THE CONSORTIUM: STATE OF THE ART AND INFORMATIONS ALREADY COLLECTED

Municipality of Vicenza

Vicenza is currently working toward a several plans to develop a better city and to improve the quality of life for inhabitants, especially in the field of the environmental management, in which the measurement of the impacts of the urban policies is a relevant part of the programme of the City Council (i.e. over the past few years, the city has experimented and implemented a new system of goods deliverance, in order to attain a zero-emission goal in the historical down town).
In this plan, the environmental quality is an instrument in order to attract innovative companies, to promote the image of the city and to carry new investments, not only legacies to the productive field, but also to the instruction, mobility, culture, creativity, research.
Vicenza is moreover engaged to develop a new strategy towards the energy saving, particularly concentrated on the use of energy in the public buildings: this has a strong link to the implementation measures of SEAPs in the city and in the whole metropolitan (conurbation) area of the city.
In this context there is a high relevance and importance for Vicenza to develop strategies in order to decrease the pollution and towards a better use of energy, first of all to undersign the Covenant of Majors, secondly in order to achieve the goals of Covenant of Mayors.
The Municipality of Vicenza has two Directorate involved in these goals, “Direzione Ambiente” (Environmental Directorate) and “Direzione Lavori Pubblici” (Public Works Directorate)
Recently, the Municipality of Vicenza has opened a specific sector called “**Energy check management**”, to support, to orient and to inform citizens, enterprises, planners, and other operators, to the aim to promote a responsible use of the energy.
Moreover Vicenza is engaged today to build up a better awareness of urban and environmental policies with the conurbation towns, as – among others – Altavilla Vicentina, Dueville and Torri di Quartesolo, which are involved in CONURBANT.
The interest to produce a better knowledge, at local level, in energy planning is relevant. The City is particularly oriented to a better stakeholders involvement, in order to sign the Covenant of Mayors, a common goal for Vicenza and the other conurbation towns.

Municipality of Padova

All the actions and good practices that the Municipality of Padova -as and “expert City”- undertakes with its approved SEAP are put into five thematic areas:
- New zero CO2 energies, foresees the empowerment of the production of renewables
(reduction of 70.335 ton of CO2);
- A greener and more efficient city, allows the diffusion of energy efficiency in buildings and the
increase of green areas (reduction of 135.000 ton of CO2);
- Smart services and systems, smart grids, foresees the achievement of efficiency of

grids,
systems and services (reduction of 70.824 ton of CO2);
- A city that moves better, through mobility policies (reduction of 58.836 ton of CO2);
- A low emission economy, brings a reduction of 63.417 ton of CO2.
The same approach will be followed with the 4 conurbation cities (Vigonza, Ponte San Nicolò, Rubano, Noventa Padovana (TBC)
Moreover Padova is strongly committed in reducing its emissions by 2050 to at least -40% (at the moment the SEAP 2020 goal is about -21%) with an ambitious goal to carbon neutrality (2 tonnes CO_2 per person/year)

Municipality of Alba Iulia

As an expert city, the city has formally approved its SEAP the 29 July 2011, with the support of AMR (Romanian Municipalities Association and OER (Romanian Energy-Cities Network). The city formally commits to reduce the 24% of its CO_2 Emissions. Many good practices are planned: among them the refurbishment of roads add buildings and the introduction of RES (in particular PV) on public buildings. The next step is to widen the potential of the SEAP to the conurbation.
General Objectives of the City's SEAP 1) An energy efficient city that helps to reduce 20% of CO_2 emissions 2) Use of renewable energy efficient energy management 3) Environmental protection with less pollution and a better environment for residents 4) Increase of economic competitiveness 5) Creation of new jobs
In Alba Iulia the development vision to 2020 is improving the quality of life in the city non sustainable criteria. The vision will be realized with the fulfilment of the following actions: completion of 50 km of modernized streets, fulfilment of 30 ha of green areas, realization of over 20 km of bicycle paths and 10000 parking places, construction/rehabilitation of 6 bridges, potable water system covering the whole city and sewage system network assured for 90 % of the total area of the city.
Following the stakeholder dialogue process, Alba Iulia City Council, together with other local actors and under the supervision of the Alba County Council, participated in the establishment the agency ALEA, an institutional framework for implementation of future sustainable energy actions in the area. ALEA was created in April 2008 by the Alba County Council, the Alba Iulia City Council, and nine other public and private institutions, including local authorities, energy operators and NGOs. Working as a non-governmental organization, the agency contributes to the sustainable development of Alba County by improving the current state of energy efficiency, energy management and promotion of energy generation from renewable sources. ALEA will be in charge for monitoring and evaluation of Alba Iulia SEAPs indicators. This gives robust chances to implement to a conurbation level the goals of the CONURBANT Project.

Municipality of OSIJEK

This gives robust chances to implement to a conurbation level the goals of the CONURBANT Project. The City of Osijek as Member of European Sustainable Cities and Towns Campaign and Signatory of the Aalborg Charter 1998, is deeply committed to all the actions related to Sustainability in general and to Energy in particular. This is done according -among other references- to the national Energy

strategy states that ...”Croatia shall, through its energy efficiency policy and in accordance with EU goals, decrease in final energy consumption by 9% until 2016, in relation to average final energy consumption for the period 2001-2005.”...
Croatia has set for a goal to decrease final energy consumption by 10% until 2020, in relation to average consumption for the period 2001-2005
In the field of Energy efficiency the city is strongly active: it created in 2004 the Energy Agency for the promotion of energy efficiency in Slavonia and Baranja. In the city a passive solar house for demos and informations has been built (500 m^2+ 150 m^2 of educational premises)
The city's energy efficiency overall objective is to give a contribution to sustainable development through the improvement of the energy efficiency and reduction of the harmful gases emission into the atmosphere along with costs reduction. Specific goals are: 1) to enlarge capacities of the public administrations, building managers and other target groups related to sustainable development and the growth of energy efficiency 2) To create preconditions for the realization of self sustainable projects of the energy consumption reduction and enlargement of the energy efficiency of buildings 3) To inform both citizens and experts applying several methods and thus improve the level of knowledge and interest for the realization of energy efficiency activities.

Main thematic areas that could be developed and assessed in the creation of the Conurbation SEAP and the implementation of the Conurbant Project: Energy Efficiency Construction/Reconstruction, Primary Recycling improvement, Environmental education, Water supply Drainage system and other services, Public Transportation.

The geo-strategic position of the city (close to the regional markets of Hungary, Serbia, Bosnia and Herzegovina) gives the City (and the conurbation) the possibility to disseminate the goals and actions of the future Conurbation SEAP to international neighbours.

The City's and conurbation chosen baseline year for the BEI of the covenant is 2009.

Municipality of Palma de Mallorca

Located on the shores of the Mediterranean Sea, some 13 meters above the sea level, with a population of 405,318 inhabitants (2011), and an area of 213.63 km ², Palma de Mallorca is the largest city in the archipelago and the eighth of Spain in population. Its metropolitan area covers 11 towns with a population of 560,000 inhabitants.
The metropolitan villages are: They are the following: Andratx, Calvia, Puigpunyent, Esporles, Valldemossa, Bunyola, Marratxí, Santa Maria del Camí, Santa Eugenia, Algaida and Llucmajor
The **Municipality of Palma signed the Covenant of Mayors in the last plenary meeting of 2010**, with the unanimous approval of the council. It will have the support of the Balearic Islands Government.
After the completion of the inventory of emissions and SEAP (before the end of

2011), Palma will guide the implementation of CONURBANT to the municipalities of Palma metropolitan area which participate in the project: Andratx, Santa Maria, Puigpunyent, Esporles (these 4 towns represent a population of about 25,000 inhabitants).
These 4 towns are the base for Palma's strategy towards Conurbation Sustainable Energy Action Plans, namely: 1) Coordinated strategy with the four towns of conurbation 2) New technical office of the Environment 3) Improvement of sustainable mobility 4) installation of solar photovoltaic 5) Management of municipal facilities 6) Monitoring of real energy consumption by electric meters in municipal buildings

Municipality of Limassol

Lemesos – Limassol is the most important urban center in the south coast and the biggest and most important port in the island. Its population increased from 80 000 inhabitants of 1973 to the actual 228. 000.
The city center around the Market Area is currently going on a lot of works with the purpose of revitalizing the center.
From a productive point of view the town of Limassol is the biggest industrial center of the province: there are about 350 industrial units with 90 industry wares: the natural exploration of actions to minimize the emissions of this sector is therefore one of the key issues of this Conurbation future SEAP.
The Consortium that will guide the Conurbation to the creation of a CONURBANT SEAP is formed as follows: the municipalities of Limassol, Kato Poleimidia (the city already signed the adhesion the 10th October 2010), Mesa Yitonia and Yermasoyia
The supporting structure in Cyprus is the Union of Cyprus Communities that co-financed the establishment of the Cyprus Energy Agency which has been appointed as the executive agency for the promotion of the Covenant of Mayors.
The support of the Union of Cyprus Communities gave the chance to three municipalities of the Island to produce very detailed SEAPS (Paralimni, Larnaca, Strovolos): the approach the city and its conurbation will follow should be the same since since the Union gives a sure and locally coherent benchmark.

Municipality of ARAD

Local authorities of Arad have been active in trying to preserve the conventionally generated energy and also in trying to invest in producing renewable energy. They have developed several projects in the field of energy efficiency, energy saving, alternative sources of energy, environment protection, reduction of CO_2 emissions in the framework of a development strategy (the development strategy for Arad 2008 – 2013 and 2013 – 2020).
The city has activated a special action on efficient use of energy based on EU policies with the following main fields of intervention: 1) best use of local renewable natural resources (solar energy, underground waters, thermal water, biomass); 2) rational use of energy and energy saving; 3) reduction of carbon emissions; 4) public transport modernization (rehabilitation of the existing infrastructure, introducing new traffic lights, buying modern tramcars,,,); 5) traffic system improvement (mobility management, cycle planning...); 6) improvement of energy efficiency of buildings; 7)

development of efficient public lights 8) education and information.
Arad district heating perspectives have to be added to the previous points: I) energy production from renewable sources: municipal waste, biomass, solar, geothermal, II) energy recovery from wastewater, from cooling installations, etc..
These goals are the basis for the city's SEAP and for the extension of it to the conurbation area.
At a governmental scale the thermal rehabilitation program gives chances of CO_2 emissions reduction for the whole conurbation. The programme aims to increase the energy performance of old blocks of flats with 1) thermal insulation of the external walls; 2) replacement of the windows and doors; 3) thermal and hydro-insulation of the roofs and terraces; 4) thermal insulation of basements; 5) installations and equipment modernization, renovation works; 6) construction repairs. The target of the municipality for 2011 is to achieve the thermal rehabilitation for 103 associations of homeowners, including approx. 3000 households and to reduce the energy consumption under the value of 100 kw/h: it as to be extended in the period 2012-2014 both at a city and at a conurbation scale.

Municipality of Timişoara

The Municipality of Timişoara, with the support of the AMR (Romanian Municipalities Association) has already prepared its SEAP and the next step is the agreement of its implementation by local politicians.
The Climate Change Strategy and Strategic Action Plan regarding fighting, mitigation and adaptation measures against Climate Change effects in Timişoara was approved on 29th of June 2010, being a part of local government policy. Central to the definition of this framework is the recognition of the cross-sectoral nature of our environmental problems, the identification of relationships which exist between the environment and key sectors within the overall macro-economic framework, and the need for active and lasting community involvement and participation in environmental protection and natural resource management both at an urban and at a conurbation scale.
According to the 2008 CO2 emission inventory, Timişoara CO2 emissions were5,08 ton eq./per capita. The implementation mechanism and plan of the SEAP will be implemented by an ad-hoc appointed team: such an approach must be followed also for the implementation of the Conurbation cities to establish a long term, institutionalized stable energy planning.
Local emission target reduction for Timişoara having 2008 as a baseline is 20% to 2020.
Relevant sectors: 1) Capacity building for effective environment management, 2) Efficient resource use for increasing productivity, 3) Households efficiency programs, 4) Greener local transport, 5) Green procurement, 6) Waste management, pollution control and environmental health, 7) Environmental education, public awareness and participation.
Each sector has its own goals, and provides a list of specific activities and measures, which need to be undertaken within the next 5-10 years in order to achieve its goals.
Requirements to implement the City's and its Conurbation SEAP: 1) Establishing a strict procedure with deadlines (quality system could be a useful tool); 2) Good internal and external communication; 3) Organize the calendar of activities, meeting,

awareness campaigns with stakeholders; 4) Motivation of the stakeholders to carry out various activities; 5) Exchanging experience and best practices, networking; 6) Continuous informing of local council, citizens and interested parts about the implementation progress; 7) Continuous training programs.

Municipality of Salaspils

Salaspils is is a community of 22,000 people 18km far from the capital of Latvia Riga. Being so close to Riga, the nation's capital is a natural benchmark for local and conurbation Energy Policies. Moreover Riga was the firs European Capital to sign the "Covenant of Mayors" ad to approve the SEAP (the 6th July 2010). The ambitious reduction targets of Riga (-44%, Baseline 1990) should also be a reference point of Salaspils conurbation.

Main directions for sustainable energy development of the city have been set forth in the Action Plan, and these

directions have to be followed when planning and carrying out measures with respect to energy supply, modernisation of energy supply systems, including energy sources, improvement of service quality and in the area of energy consumption, increasing energy efficiency, planning and implementation of reduction of energy consumption, as well as incorporating renewable energy sources in the energy supply process of the city.

The conurbation of Salaspils will concentrate its efforts of CO2 emissions' reduction to buildings with actions related to efficiency in heating systems, new efficient constructions, renovation of apartment houses.

Municipality of Vratsa

District of Vratsa comprises ten municipalities – Vratsa, Borovan, Mezdra, Krivodol, Hayredin, Mizia, Byala Slatina, Oryahovo, Roman and 212.941 inhabitants (15.03.2011) with a total number of 23 populated settlements. The conurbation whole population is 212 941 inhabitants (15.03.2011): it includes 23 places - 1 town and 22 villages.

CONURBANT expected outputs and local commitment.
The Municipality of Vratsa expects to receive skills and knowledge on how to: 1) decouple economic growth from the use of resources; 2) support the shift towards a low carbon economy; 3) increase the use of renewable energy sources; 4) promote energy efficiency; 5) How to achieve the "20/20/20" climate/energy targets of EUROPE 2020 - European strategy for smart, sustainable and inclusive growth.
On the other side the municipality will integrate in an institutionalised and technically sound way its plans, projects related to energy consumption in order to achieve the requirements of the Covenant of Mayors and to be able to assess the environmental effects of plans/programmes on the conurbation. The Conurbation priority projects /that have relevance with Energy consumption/GHG emission) just ended or to be completed will be the important starting point in the creation of the SEAP. The following are some examples:

- Wastes: Construction of a new box of the regional landfill for solid waste and a separation installation
- road infrastructures: Vratsa - Botevgrad (upgrading the existing two lanes to four lanes expressway with a total length 31.5 km); Construction of a ring road as part of the TEN-T network - Stage 1 (construction of sections of the ring road in Montana, Vratsa and Gabrovo);
- Water cycle: . Project for the development of the water cycle of Vratsa municipality
- Energy infrastructures: Construction of the gasification system for domestic users in Vratsa
- Educational infrastructures: Creating and ensuring high quality public spaces through a complete renovation of part of the educational infrastructure in Vratsa municipality; External repairs and construction of a lift for the Day Care Center for children and adults “Zornitsa” - Vratsa; Establishment of a communal kitchen
- Logistics and emissions: Development of best practices for sustainable logistics

2. SURVEYS PREPARATION: a common approach for common templates

ANNEX 1

BASELINE EMISSION INVENTORY

Phase 1: BASELINE EMISSION INVENTORY (BEI)

Each local government (and Conurbation) must develop a Government Operations inventory of greenhouse gas emissions for a base year (e.g. 2005) and a Community emissions analysis for a base year (e.g. 2001) and prepare a 'business-as-usual' forecast of emissions trends for a forecast year (e.g. 2015).

To complete this phase the Government Operations inventory should include all the Government Operations sectors (also to ensure comparability of the results with other municipalities). If sectors can't be filled with data in the first inventory or community analysis, an action should be included in the SEAP to complete the gathering of data for the missing sectors.

For the development of a Baseline Emission Inventory the partners of IEE CONURBANT can use a rich variety of inventory tools, but to gather all the informations from a technical and political perspective, common proposed “Institutionalization” templates will be given.
The inventory tools have to be easy instruments to convert energy (or other not energy related) input data into GHG emissions on the base of national give emission factors. As a result, the tools give figures of emissions in tonnes (t) of carbon dioxide equivalent (CO2e), or tCO2e. CO2e is the internationally accepted unit for measuring the equivalent climate change impacts from CO2 and other greenhouse gases.

The informations needed to build a BEI (and consequently needed to feed the chosen inventory tool) can be divided into two segments:
1.Government Operations emissions segment
2.Community emissions segment

The two segments are sub-divided into sectors appropriate for local government, shown in the following table (tab. 1)

Tab. 1 – Local Government Sectors

Government Operations Segment	Community Segment
Buildings	Residential
Vehicle Fleet	Commercial
Public lights	Industrial
Water/Sewage	Transport
Other	Waste
	Other

All informations related to energy consumption must be asked to the appropriate offices.

General Data Management Issues

An important point to be kept in mind is to document the boundary decisions and data selection choices made in each case: always thinking about others in the future who may do the new BEI and needs to have clear orientation on availability of data.

Missing Data

The data collection process often highlights gaps in the data that is being collected by a local government. It may also allow to see inefficiencies in data collection systems being used. We suggest to keep a detailed record of these problems as they occur so that actions can be included in the SEAP to fix these problems.

Data Boundaries

The choice of data boundaries for the emissions inventory is sometimes a complex matter to resolve. Data for buildings and facilities that are owned and or operated by the local government need to be included in the Government Operations inventory. However, informations regarding other facilities not directly controlled by the local government, may be more difficult to be found.
This is why boundaries on what is in Government Operations and what is out must be specifically written in a brief – ad hoc – annex.
Also an equity share approach to the reporting of emissions on joint venture projects that are wholly owned and partially owned according to an equity shareholding should be pondered. If a local government has both operational control and an equity share, it should report 100 percent of the emissions but also record the percent equity share held in the operation.

Notes for Data Records

It is important that someone else can follow exactly what done in collecting and entering data to develop the inventory. Recording notes for each record shall be written to assist if result needs to be audited, or will help the person who has to complete a future re-inventory to measure the results of emissions reductions activities.

Phase 1.1: GOVERNMENT OPERATIONS EMISSIONS INVENTORY

The Government Operations Segment can be is sub-divided into a number of sectors: here under a general example for the analysis of local government emissions:

Tab. 2

Government Operations Sectors
Buildings
Vehicle Fleet
Street lights
Waste
Other

All informations related to the above fields must be obtained, both from technicians (figures and policies) and from politicians (figures and policies) with person-to-person interviews.

Selecting the Base Year for Government Operations

The base year for the Government Operations segment can be a calendar year, or a financial year to match with other reporting processes of council. Often the year 1990 is mentioned as base year, and the Covenant of Mayors suggests that this be used if possible. However, the most important factor that should influence the choice for a base year selection is quality/availability of data.

Sources of Government Operations Data

Buildings
Data Required: Energy supplied – kWh or fuel quantity used plus cost data, plus energy account or meter or connection number, for all local government owned and/or managed properties, and rented properties.
Possible Data Sources: Energy manager, Finance manager, Accounts department, Asset / Property manager, Electricity bills (invoices), Energy retailer

Vehicle Fleet
Data Required: Fuel quantity used, fuel type, fuel account numbers, fuel cost info
Possible Data Sources: Finance department, Fleet manager, Fuel source / fleet cards, Individuals with fleet vehicles

Public lighting
Data Required: Energy supply meter or unique connection number, kWh used and cost data for the local government owned and/or managed lighting of streets, traffic signals, parks, public lighting.
Possible Data Sources: Energy retailer, Traffic and Roads operational groups, Finance department, Electricity bills

Water/ Sewage

Data Required: Energy supply meter or unique connection number, kWh used and cost data for water and sewage pumping facilities. Also energy used for other fuels used in this sector, including recovered methane.

Possible Data Sources: Asset / Property manager, Energy retailer, Finance department, Electricity bills, Internal meters

Specific local sources

There may be other sources specific at local level that must be taken into consideration

Conclusions/Suggestions

It is important to ask each department for all the data required in a single request and to negotiate a time line to get data.

Phase 1.2: COMMUNITY EMISSIONS ANALYSIS

The Community segment can be summarised as follows:

Tab. 3

Community Sectors
Residential
Commercial
Industrial
Transport
Waste
Other

Selecting the Base Year for Community Data

The Community base year must be chosen according to data availability: it is often standardised for all local governments within each country.

Sources of Community Data

Community data typically come from available national or regional statistics and other sources of data: often they derive from statistical sources such as census data (proxy data, they follow a top-down approach). For all community sectors, local or regional energy usage and production data should be used to replace or supplement national proxy data whenever it can be shown that the local or regional data is of better quality.

On the contrary, community waste data can be usually found through in-house data sources, or regional data. The emission factor used for the Community waste sector should be developed from local audit information (if available), or the National Inventory Report for your country (if available) or IPCC standards for Europe.

Agriculture sector (and other non-energy sectors)

To develop a whole Climate strategy also non-energy sectors should be taken into account, such as agriculture: to calculate the non-energy agriculture sector emissions, the totals of numbers of animals and poultry must be considered.
Energy-related emissions from agriculture sector (e.g. buildings and transport) is already included in community data.

Local Energy Production

To avoid double entry of data and “double counting” of emissions from community energy production facilities a single Community – Local Energy Production worksheet has been added to record all local energy production activities.
In Europe, many community energy production plants are municipality-owned, but other privately-owned facilities should be added to this worksheet. For each energy production plant, percentage of municipality ownership shall be known to measure the shares of these emissions that have to be allocated to the Local Government.
Note that the Covenant of Mayors does not require the reporting of large energy production plants (larger than 20 MWth) that are already included in the European ETS.

ANNEX 2

DEVELOPING THE SEAP

The Development of the SEAP requires data gathering on policies that have been activated and will be activated at local level: this requires interviews to all local stakeholders (all politicians, local stakeholders, directors of departments, representatives of other institutions...). The process has to be parallel to the BEI data gathering process.

The Process

The process to be implemented can be read in the following table:

Tab. 4

STEPS	ACTIONS
Management	Establishment of a Plan office
Planning	Examination of GHG emission report and Policy evaluation Target setting and Long term visions definition
	Development of stakeholder support
	B4 Development of the Plan • Recognition of already implemented action • Definition of short term actions • Definition of long term actions • Calculating CO2 reduced for each action
	Plan presentation to relevant stakeholders
	Approval of the Plan

Management

1. Administrative structures: the Plan office

The development of a SEAP requires collaboration and coordination between various departments of the local administration (environmental protection, land use and spatial planning, economics and social affairs, buildings and infrastructure management, mobility and transport, budget and finance, procurement...). The success of the process is that the creation of the SEAP has to be conceived by the different departments of the local administration as an internal issue. That is why a strong (internal) coordinating structure is needed (according to the local context it could be useful to involve also municipality's companies/utilities).

Planning

1. Survey of GHG emissions and policy assessment

This phase tries to answer the question “we are we now?”, i.e. a description of the city’s current situation in terms of energy and climate change (a SWOT analysis can be an useful strategic planning tool too).
According to the figures found out with the GHG emission and on the policy assessment it is possible to determine the strengths and weaknesses of the local authority in terms of energy and climate management, as well as the opportunities and threats that could affect process: this survey helps to define priorities when devising and selecting actions and measures.

2. Long term visions definition and target setting

The long term vision is the guiding principle of the municipality’s work for the SEAP.
It points out the direction in which the local authority wants to head. A comparison between the vision and the local authority’s current situation is the basis for identifying which actions are needed to reach the desired objectives. The vision is the uniting component that all stakeholders can refer to, meaning everyone from leading politicians to citizens and interest groups.
A target and time span must be selected for reaching the emissions reductions, also with a “more than 2020” vision. Targets must be, moreover, Specific, Measurable, Achievable, Realistic, and Time-bound.

3. Support from local stakeholders

For a successful drafting and implementation of the Plan it is important to involve, since the beginning of the process, key stakeholders that can give either technological or financial support to those projects that will be included in the plan. The selection of local stakeholder is one of the fundamental steps for the implementation of municipality’s strategy. The ideal process is as follows:

3.1. Mapping of stakeholders and different degree of involvement:

The first step is to identify the main stakeholders. The stakeholders are those 1) Whose interests are affected by the issue; 2) Whose activities affect the issue; 3) Who possess/control information, resources and expertise needed for strategy formulation and implementation; 4) Whose participation/involvement is needed for successful implementation.
Mapping stakeholders is fundamental to select how to involve them in order to make it useful for the process. Depending on their role the involvement can be basically divided into three different segments:

1. Information: brochures, newsletters, advertisement, exhibitions, site visits;
2. Feedback: Telephone, website, public meetings, teleconferences, surveys and questionnaires, exhibitions, polls;
3. Involvement and consultation: workshops, focus groups, forums.

3.2. Selection of relevant stakeholders for involvement and consultation:

Actors – at a local contexts- that have technical and/or financial competencies that can be strategic to design the intervention of the SEAP, must be selected. Some of them might be:

- financial partners such as banks, private funds;
- ESCOs – Energy Service companies;
- institutional stakeholders like chambers of commerce;
- chambers of architects and engineers;
- energy suppliers, utilities;
- transport/mobility players;
- private/public transport;
- renewable energy industries;
- other business offering innovative technologies that might be applied in the plans (e.g. smart technologies for energy efficiency etc..)

3.3. Organization of working groups with selected stakeholders:

Working groups should be activated at the very beginning of the process in order to involve key actors from the beginning of the plan in order to help the creation of a step by step partnership between the municipality and the local business. Key actors that should be involved are the financial institutions and other organizations that would provide resources should be involved

4. Development of the Plan

One of the core of the entire process as it foresees the development of the Municipality's SEAP.

Before starting this part, the local body should decide how to divide the time span in actions to be implemented in the *short period* (more or less 3 years from the moment you start developing the plan) and the *long period* (depending on the year you have chosen for reaching your target).

4.1. Finding already implemented actions

It is a review of all the actions that the Municipality has already planned from the baseline year to the year selected for the target. These actions can be both already implemented or just planned. Some documents that might include projects related to CO_2 savings that might be useful are:

- energy plan;
- urban plan;
- mobility plan;
- green areas and parks plan

In addition to that it is necessary to organize focused interviews to identify the interventions already implemented both by the local administration and by relevant stakeholders. For what concerns municipality, institutionalization is accomplished with meetings with councillors in order to check with them if what you has been found in

official documents is still valid and to understand and include future political common visions.

4.2. Setting of short period and long term actions

After the above indicated review it is necessary to start identifying new interventions that can contribute to CO_2 emission reductions at local level. This part can be done by means of different and complementary methods:

- Start with the list of feasible interventions you have identified during the policies survey;
- Integration of interventions that has emerged from the workshops with stakeholders;
- New interviews with relevant decision makers (e.g. Urban planning, energy, mobility councillors and political opponents etc.) in order to define with them project interventions.

4.3. Drafting the plan

Before starting drafting the plan it is important to revise with all decision makers the main projects defined in order to have their final approval. This can be done with a specific focus group where the MAP staff can present the main results obtained to city councillors and to the mayor.

5. Presentation of the Draft SEAP to relevant stakeholders

The stakeholders will be involved also at the end of the process when the SEAP staff will present the first draft of the Plan to have feedbacks from them. This presentation can be done, accordingly to local strategy, by organizing multi-stakeholder focus groups or by organizing small focus groups with homogeneous groups of stakeholders (e.g citizens, actors involved in the working groups, energy providers, business representatives etc.).