







3.GUIDE FOR DEVELOPING THE MITIGATION AND ADAPTATION PLAN

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3. Guide for developing the Mitigation and Adaptation Plan

We have seen in step 1 and step 2 how to develop a GHG emission inventory and how to evaluate the different policies that a Municipality can implement to reduce CO_2 emissions.

At this point your Municipality is ready to develop the Mitigation and Adaptation Plan. The main objective of this guide is to assit your municipality in:

• Developing a plan that includes all interventions that can reduce GHG emissions at municipal level;

• Involving municipality's different sectors in understanding what they can do to reduce GHG emissions at local level;

• Setting targets and specific responsibilities to make easier monitoring results;

3.1 The Process

In order to accomplish these objectives the LAKS project has developed a "typical process" to follow and three tools to assist step by step the Municipality in drafting the final document. The main actions are included in the following table

STEPS	ACTIONS
A. Management	A1 Establishment of a Mitigation and Adaptation Plan office
B. Planning	B1 Examination of GHG emission report and Policy evaluation B2 Target setting and Long term visions definition
	B3 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
	B5 Plan presentation to relevant stakeholders
	B6 Approval of the Plan

3.2 The Tools

Three operative tools have been developed to assist municipalities during this process:

TOOL	FORMAT	WHAT IT IS	HOW TO USE IT
The Mitigation and Adaptation Plan draft tool	Excel document	 This tool is <u>an Excel</u> <u>file</u> that has been developed to assist partners in developing their plan by guiding the municipality in listing all intervention that will be included in the plan and divide them in long term and short term actions. It also help start to identify c o2 emission reduction and responsible for each action It takes into account all sectors included both in the GHG Inventory and in the Economic Impact Report 	It is useful in particular during Action B4 while your municipality start collecting potential interventions to be included in the plan by analysing: • Interventions already included in other municipality's plans • Feedbacks coming from different sectors • Feedbacks coming from councillors • calculation of co2 reduction for each intervention
Methodologies for calculating CO ₂ reductions	Word document	This tool include some relevant methodologies to calculate co2 reductions deriving from the experience of the LAKS project	 It can be used for calculating co2 reductions coming from the interventions selected to reduce co2 at local level and verify the distance to target These methodologies are examples used by LAKS cities that can be adapted to several local contexts
Mitigation and Adaptation Plan format	Word document and ppt format for slideshow presentations	 This tool is a word format that you can use as starting point to draft your plan This format assist your municipality in drafting a Plan that takes into account all the main information necessary to have an exhaustive document and make it approved by the city council It includes the format for each project's technical description 	Once you have defined in the excel draft tool the interventions you can use this template to write your plan. You have to adapt the contents to your local context but use it as a basis for the realization of your plan. Spaces are left blank in order to adapt introductions and sectors to each specific contexts. Figures used can as well been adapted by using the ppt format attached.

A. Administrative structure

A1. Establishment of a Mitigation and Adaptation Plan office

The development of a Mitigation and Adaptation plan requires collaboration and coordination between various departments in the local administration, such as environmental protection, land use and spatial planning, economics and social affairs, buildings and infrastructure management, mobility and transport, budget and finance, procurement, etc. In addition, one of the challenges for success is that this process should not be conceived by the different departments of the local administration as an external issue, but that it has to be integrated in each department daily activities.

For this reason a strong coordinating structure is needed. A clear organisational structure and assignment of responsibilities in fact are prerequisites for the successful and sustainable implantation of MAP. The structure should involve key actors that are already involved in the administrative structure dealing day by day with all the sector included in the MAP: energy, buildings, urban planning, green areas, mobility, industrial and agricultural policies, water and waste management etc. Depending on the particular context it could be useful to involve also municipality's companies working in these sectors (if any) as: local energy provider, water provider etc. As an example of simple organisation structure, two groups may be constituted:

- a. A steering committee, constituted by politicians (e.g Energy councillors, urban planning councillor, mayors etc). Its mission would be to provide strategic direction and the necessary political support to the process.
- b. One working group constituted by the energy planning manager and key persons from various departments of the local authority (other technicians, green areas experts, mobility managers etc.). Their task would be to undertake the actual MAP elaboration and follow up work, to ensure stakeholders' participation, to organise monitoring, to produce reports, etc.

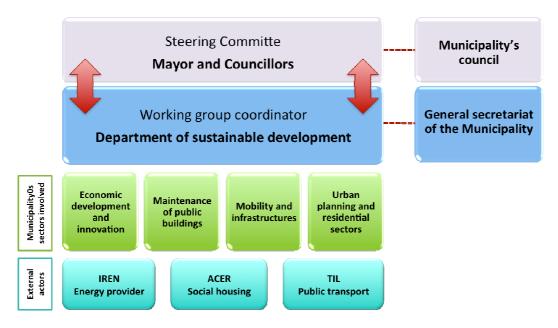
TIPs:

- Try to use organisational structures that have already been created for other related policies (energy management unit, local Agenda 21 coordination, etc.);
- Choose a MAP coordinator that have a wide network and support within the Municipality in order to have enough influence during the entire process on both other sectors and councillor;
- Choose a MAP coordinator that have demonstrated strong leadership and commitment to the issues related to climate change;
- Include in the staff one energy expert dedicated to data collection and CO₂ calculations issues;
- Take into consideration the possibility to organize a specific training targeted to the MAP staff in order to homogenise the knowledge on technical issue;
- Develop of a flow chart, indicating the various interactions between departments and actors in order to identify the adjustments that may be necessary to the local authority's organisation;
- Depending on your municipality's size and staff availability, you may benefit from the assistance of external support. It is even possible to subcontract some specific tasks (e.g. data collection, calculation of co2 reduced by selected interventions, document updating etc.) or to use interns (Masters or PhD students).

LAKS TOOLS:

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	-
Methodologies for calculating CO ₂ reductions	-
Structure for the Mitigation and Adaptation Plan	You can start using the Structure for the Mitigation and Adaptation Plan in order to compile Chapter 1 on the organizational structure and develop your MAP staff flow chart following the suggestions included in the ppt (slide n° 4)

An example: Padova's administrative structure



B. PLANNING

B1. Examination of GHG emission report and Multi-criteria policy assessment

.The purpose of this step is to establish a clear picture of 'where we are', a description of the city's current situation in terms of energy and climate change.

If you think it can be useful to have a more comprehensive outlook of your municipality a SWOT analysis can be an useful strategic planning tool that can be applied in MAP development. Based on the findings of the GHG emission report and on the Multi criteria policy assessment, it allows determining the Strengths and Weaknesses of the local authority in terms of energy and climate management, as well as the Opportunities and Threats that could affect Process. This analysis can help to define priorities when devising and selecting actions and measures.

TIPs:

- Before starting take into account all the plans and policies that you have already developed and carefully analyze the GHG emission inventory to select sectors that need priority action;
- Evaluate all the possible policies that could be included in your plan by looking at the Multi-criteria policy assessment and select the most relevant or applicable to your context;
- Do not forget the work you have already done, the GHG emission report and the multi-criteria policy assessment are operative tools to take into consideration at this point.

LAKS TOOLS:

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	
Methodologies for calculating CO ₂ reductions	
Structure for the Mitigation and Adaptation Plan	

B2. Long term visions definition and Target setting

The long term vision is the guiding principle of your municipality's work for the Mitigation and Adaptation Plan. 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.

You have to select the target and the time span for reaching your emission reduction taking into account these considerations.

We suggest to consider the Covenant of Mayors' commitments, (i.e. it should imply that the 20% CO2 emission reduction in the 2020 target will be reached (at the minimum) as a basis on which you can build on. Do not worry if you have difficulties in setting this target, also a lower commitment can be a good starting point for a long term process.

The following step to undertake is the definition of your GHG emission reduction target, expressed as % of reduction on total emissions of the baseline year selected. This step is fundamental for a successful plan. In order to select a feasible target it is important to evaluate the potential of GHG emission reduction of your municipality and the political commitment and willingness. Depending on the local context you can choose an overall emission reduction target or a per-capita emission reduction.

Once the overall target is well established, it is necessary to translate it into more specific objectives and targets, for the different sectors in which the local authority intends to take action.

TIPs:

- The target you select needs to be feasible and shared with key decision makers of local administration and relevant stakeholders;
- Choose either an absolute reduction or a per capita reduction depending on your local context (e.g. rapid population growth or decreasing population);
- Choose a long term vision that is realistic but provides something new, add real value and break some old boundaries that do not have real justification any more. It should describe the desired future of the city and be expressed in visual terms to make it more understandable for citizens and stakeholders;
- Choose targets and objectives that are: Specific, Measurable, Achievable, Realistic, and Time-bound.

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	Sheet 1 "General Objectives": Compile sheet 1 with your overall target and translate it into tot tons of CO2 to be reduced by the year selected. This amount of CO2 will be the starting point to calculate the percentage of emission reductions achieved by each project selected by your municipality (rows 4 to 13). Write your long term vision.
Methodologies for calculating CO ₂ reductions	. • (
Structure for the Mitigation and Adaptation Plan	Start to draft Chapter 2 with the long term vision of your municipality and target setting. You can also adapt to your context and add here some picture from ppt (slide n° 2,3,5)

LAKS TOOLS:

An example: Reggio Emilia's target setting

Baseline year	200	0
Total emissions (ton CO ₂)	1.375.000	
	% (compared to baseline year)	Ton CO2
GHG emission reduction target	-21,9%	300.000
GHG emission reduction already obtained through interventions implemented from 2000 and 2008	-9,7%	134.000
Distance to target to be accomplished by 2020 (2009-2020)	-12,2%	167.000

B3. Assurance of technological and financial 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 entire process can be therefore coherent with accountability standards that foreseen in stakeholder engagement one of its pillars (see box on Accountability 1000).

Essential is the selection of local stakeholder that can be useful for the implementation of municipality's strategy. The ideal process foresees the following steps:

• Mapping of stakeholders and different degree of involvement:

The first step is to identify the main stakeholders. The stakeholders are those:

- Whose interests are affected by the issue;
- Whose activities affect the issue;

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- Who possess/control information, resources and expertise needed for strategy formulation and implementation;
 - 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:

DEGREE OF	METHODOLOGIES
Information	Brochures, newsletters, advertisement, exhibitions, site visits.
Feedback	Telephone hotline, website, public meetings, teleconferences, surveys and questionnaires, staffed exhibitions, deliberative polls.
Involvement and consultation	Workshops, focus groups, forums, open house.

- <u>Selection of relevant stakeholders for involvement and consultation</u>: choose in your local contexts actors that have the technical and/or financial competencies that can be strategic to design the intervention of the mitigation and adaptation plan and that therefore can be involved at higher degree, some of them might be:
 - o financial partners such as banks, private funds;
 - ESCOs Energy Service companies;
 - o institutional stakeholders like chambers of commerce;
 - o chambers of architects and engineers;
 - energy suppliers, utilities;
 - transport/mobility players;
 - o private/public transport;
 - o renewable energy industries;
 - other business offering innovative technologies that might be applied in the plans (e.g. smart technologies for energy efficiency etc..)
- Organization of working groups with selected stakeholders: these working groups should be activated at the very beginning of the process in order to involve key actors from the beginning of the plan. The idea is to build a step by step partnership between the municipality and the local business, in particolar those that can spread new tecnlogoies and solutions and that can insert in the plan new solutions or projects. It is important to share with them the priorities and what they will be willing to finance, the technological innovation they can develop, the type of renewable energies on which is better to focus on etc. The key aspects of this process is that it guarantees the feasibility of the projects that will be included in the plan and it allows to actively involve these crucial actors. In addition to that

their involvement can also lead to positive drivers for local economic innovation in terms of green economy.

Key actors that should be involved are the financial institutions and other organizations that would provide resources should be involved

• <u>First selection of feasible projects:</u> the output of these working groups should be the shared definitions of projects that can be included in the plan in the following actions. Define with the participants the projects that can be included in the plan.

TIPs:

- Involve new actors and actively look for interesting experiences already implemented in your local context;
- Do not focus only on the usual contacts;
- Focus groups have to be carefully planned in order to have effective results:
 - Choose experienced facilitators for the meetings management;
 - Define a precise programme of workshops and plan accurately the working sessions (e.g, 1° meeting: project objectives, what is the MAP, what you need from them etc.; 2° meeting: the interventions they already implement to reduce co2 emissions, new feasible projects, way for financing these projects etc.);
 - Define the outputs of each meeting.
- Some stakeholders can have conflicting interests: in this case it is advisable to
 organise preliminary meetings for each particular group separately to
 understand the conflicting interests before bringing them together.
- Build up a continuous stakeholder engagement with frequent updating, peer review in order to maintain a strong link for the entire process with relevant actors and make them being feeling part of the process.

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	During focus groups you can start using this tool by including in the columns the first ideas for future projects to be implemented to include in the plan. (see sheet 2 and 3)
Methodologies for calculating CO ₂ reductions	
Structure for the Mitigation and Adaptation Plan	Include in Chapter 1 all the relevant stakeholders that have been actively involved in the process

Focus: The AA1000 Stakeholder Engagement Standard (AA1000SES)

In the *AA1000 Framework Standard* published in 1999, AccountAbility first introduced the principle of *inclusivity*. *Inclusivity* is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability. *Stakeholder Engagement* is a tool that organisations use to help them achieve *inclusivity*. To support the achievement of inclusivity, guidance on how to design and conduct stakeholder engagement was included in the 1999 AA1000 Framework Standard. By 2005, this early guidance had evolved into the AA1000 Stakeholder Engagement Standard, the first international standard on stakeholder engagement to be published. While stakeholder engagement is not new, it is now accepted as crucial to an organisation's sustainability and success. To date, however, it has been difficult to fully understand what is good or poor quality engagement. The purpose of this standard is to establish the benchmark for good quality engagement.

Stakeholders are not just members of communities or non-governmentalorganisations. They are those individuals, groups of individuals or organisations that affect and/or could be affected by an organisation's activities, products or services and associated performance with regard to the issues to be addressed by the engagement. Stakeholder engagement then is the process used by an organisation to engage relevant stakeholders for a clear purpose to achieve accepted outcomes. It is now also recognised as a fundamental accountability mechanism, since it obliges an organisation to involve stakeholders in identifying, understanding and responding to sustainability issues and concerns, and to report, explain and be answerable to stakeholders for decisions, actions and performance.

Quality stakeholder engagement must:

- be based on a commitment to the AA1000APS principles;
- clearly define the scope;
- have an agreed decision making process;
- focus on issues material to the organisation and/or its stakeholders;
- create opportunities for dialogue;
- be integral to organisational governance;
- be transparent;
- have a process appropriate to the stakeholders engaged;
- be timely; and
- be flexible and responsive.

Engaging with the individuals, groups of individuals or organisations that are affected by or can affect an organisation's activities, and responding to their concerns makes organisations perform better. It increases their knowledge and contributes to their license to operate.

Quality stakeholder engagement can:

• Lead to more equitable and sustainable social development by giving those who have a right to be heard the opportunity to be considered in decision-making processes;

• Enable better management of risk and reputation;

• Allow for the pooling of resources (knowledge, people, money and technology) to solve problems and reach objectives that cannot be reached by single organisations;

• Enable understanding of the complex operating environments, including market developments and cultural dynamics;

• Enable learning from stakeholders, resulting in product and process improvements;

• Inform, educate and influence stakeholders to improve their decisions and actions that will have an impact on the organisation and on society; and

• Contribute to the development of trust-based and transparent stakeholder relationships.

B4 Development of the Plan

This action is the core of the entire process as it foresees the development of your Municipality's Mitigation and Adaptation Plan. In order to describe how an ideal process should be implemented we have divided this action in four steps that are not listed in chronological order as they can be undertaken at the same time.

Before starting this part, you have to decide how to divide your 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). This is crucial to make a feasible plan and to define timing, expected CO_2 reductions and financial investments.

1. Recognition of already implemented actions

The first step is to review all the actions that your Municipality has already planned from the baseline year to the year you have selected for you target. These actions can be both already implemented or just planned.

In order to revise the document you have to select and analyze the plan depending on your local context, some documents that might include projects related to CO₂ savings that might be useful are:

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

In addition to that it might be useful to organize focused interviews to identify the interventions already implemented both by the local administration and by relevant stakeholders. For what concerns your municipality it might be useful to define meetings with councillors in order to check with them if what you have found in official documents is still valid.

TIPs

• Remember to always refer to the source from where you have found the interventions (official documents, plans, pages etc.);

• Select only those actions that have been specifically described (timing, indicators, expected results, responsible etc) and that are still valid;

• When you meet the councillors make sure that you already have a list of interventions to check with them;

• At the end of this process calculate the overall emission reductions already obtained (starting from baseline year) thanks to already implemented projects and calculate the distance to target. This percentage has to be covered by the new interventions your municipality will commit to implement

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	Sheets 2 "Government operations" and 3 "Community": Define short period and long period time span and complete relevant columns with the precise years dividing projects from those directly implemented by the government on its own properties (sheet 2) from those implemented in the wider territory that might see the collaboration of other local stakeholders (sheet 3). Start completing in sheet 2 and 3 the columns and insert relevant projects either in "Interventions already implemented" (columns AB to AI) or "Short term interventions" (columns F to Q). You have to compile for each interventions all the cells in order to have the most complete information on the project. Sheet 1 "General objectives": after calculating emission reductions obtained complete rows 14 to 16 in
Methodologies for calculating	order to highlight the current distance to target
CO ₂ reductions	If in the plans is not already included use the methodologies used by LAKS projects to calculate CO ₂ reductions coming from selected interventions.
Structure for the Mitigation and Adaptation Plan	

2. Definition of short term and long term actions

At this point, you have to start identifying new interventions that can contribute to CO₂ emission reductions at local level. This part can be realized with different and complementary methods:

- Start with the list of feasible interventions you have identified during the multi-criteria policy assessment;
- Integrate any interventions that has emerged from the workshops with stakeholders (see Action B3);
- Organize interviews with relevant secision makers (e.g. Urban planning, energy, mobility councillors etc.) in order to define with them project interventions.

TIPs

• When you meet the decision makers make sure that you have already developed a list of proposed and feasible interventions to be implemented in the local context;

• Organize the meetings in order to also update decision makers on the development of the project;

• In this phaseit is fundamental to work with all municipality's sectors, coordination among all actors is a key aspect for the successful implementation of this action;

• Identify specific deadlines in order to define which interventions will be realized in the short term and which are foreseen just in the long run;

• Directly involve the mayor to add specific projects because in this action the most critical aspect is that probably the target cannot be reached with a first round of projects defined with councillors. If this is the case the support of the mayor can help in meeting all councillors again, highlighting that the committed target has not been reached yet and that they need to identify integrative strategies to reduce CO_2 emissions.

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	 Sheets 2 "Government operations" and 3 "Community": After each interview or focus group update the tool with all the project and interventions that has emerged. Start completing in sheet 2 and 3 the columns and insert relevant projects either in "Short term" (columns F to Q) and "Long term" (columns T to AC). Divide projects from those directly implemented by the government on its own properties (sheet 2) from those implemented in the wider territory that might see the collaboration of other local stakeholders (sheet 3). You have to compile for each interventions all the cells in order to have the most complete information on the projects. Sheet 1 "General objectives": Once you have
	listed all the interventions start to calculate the overall emission reduction obtained and check the distance to target
Methodologies for calculating CO ₂ reductions	Use these methodologies to calculate CO ₂ reductions coming from selected interventions.
Structure for the Mitigation and Adaptation Plan	

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 councillors and to the mayor.

At this point you can start drafting the final version of your plan using the word document format attached.

In the plan, after the first introduction chapters, you have to start listing all the interventions you have selected and a goal for each sector. At the end of the plan in attachment for each action foreseen in the short period and in the long period you have to complete a template identifying, at least:

- Sector

- Intervention description
- Responsible
- Timing (end-start, major milestones)
- Cost estimation
- Estimated energy saving/increased renewable energy production
- Estimated CO₂ reduction

In this part you can decide to aggregate interventions coming from different sectors of the government operations segment and community segment in order to make the plan easier to read and more communicative. A possible sector aggregation can be done following the example of Padova and Reggio Emilia (from 15 sectors to 5 areas of intervention). In any case, you are free to develop your own aggregation in accordance with the necessities of your local context.

An example: sectors aggregation in Padova and Reggio Emilia

NEW AGGREGATED AREAS	SECTOR	SEGMENT
1. New low-carbon energies	Local production of renewable energy (municipality) Local production of renewable Energy (community)	Government Community
2. A greener and more efficient city	Public buildings Residential sector Green areas	Government Community Government
3. Smart services	Public lighting Water	Government Government
	Waste (municipality) Waste (community)	Community Community
4. A city in movement	ement Municipality's vehicle fleet Other transports	
5. A low-carbon economy	Industrial sector Agricultural sector	Community Community
5. A low-calbon economy	Commercial and institutional sector Green Public Procurement	Community Government

TIPs

- For the focus group with decision makers it can be useful to prepare a short power point identifying for each sector the main projects, consequent CO₂ emission reductions, political and technical responsible, timing etc;
- Try to draft the plan with a strong communicating approach in order to make it an easy to read document that can be diffused also to your citizens;
- Decide if you prefer to limit in the first part the description of projects to just a simple statement as all the technical information of the plan are included in attachment in the tables with projects description;

Clearly number the projects so that there is a clear correspondence with technical description in attachment;

TOOL	WHAT YOU CAN USE IT IN THIS ACTION
The Mitigation and Adaptation Plan draft tool	-
Methodologies for calculating CO ₂ reductions	
Structure for the Mitigation and Adaptation Plan	Use this template to draft your plan, follow the suggestions that are written inside the document in red and use the tables and figures that you think might be useful included in the ppt. Copy and paste the template for short term projects and the one for the long term projects for all the interventions you need to describe.

B5 Plan presentation to relevant stakeholders

<u>Presentation of the draft of the plan:</u> the stakeholders will be involved also at the end of the process when the map 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.).

TIPs

- For the focus group with stakeholders, prepare a short power point identifying for each sector the main projects, consequent CO₂ emission reductions, political and technical responsible, timing etc.
- Prepare to answer to the following questions that might arise:
 - How did you calculate co2 emissions in the inventory?
 - How did you calculate co2 emissions reduction?
 - Why did you choose that baseline?
 - o What kind of financial resources are available to implement the project?
 - Did you also take into account the increase of co2 emissions that will probably happen in your territory?

B6 Approval of the Plan

The last step is the final approval of the plan. In order to have a real political commitment and to make the plan becoming strategic for your municipality, Municipality's council approval is fundamental.

TIPs

- Make sure that relevant councillors and the mayor has already given their approval to the plan before the official council session;
- After the official approval you can consider to organize a conference to present the plan to a wider public inviting citizens, journalist etc.