



Second Level: Methodology for the preparation of the Plan

Defining a Local Action Plan devoted to the EE refurbishment of the public building stock owned by a Local Authority moves after having defined the baseline review and the energy catalog and energy database of public buildings (Step 3 of the Toolkit).



Devising and implementing a sustainable energy policy is a challenging and time-demanding process that has to be systematically planned and continuously managed. It requires collaboration and coordination among various departments in the local administration, such as environmental protection, buildings and infrastructure management, budget and finance, procurement, etc. One of the challenges for success is that the Action Plan 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 their everyday life (management of the local authority's assets, internal and external communication, public procurement...).

Developing an Action Plan requires first of all to identify specific targets and objectives.

The target is represented by the group of buildings which the local authority intends to include in the action plan: some buildings might step out of the Action Plan because of their good performance and/or maintenance condition, because of a lower energy consumption, because of less representativeness or because of specific management contracts that do not make easy the development of EE & RES action, etc.; all these aspects should be expressed and made clear at the starting point of the Action Plan. It should also be reminded that the energy retrofit of public buildings is expected to have significant effects at involving citizens in the refurbishment of their own buildings (exemplary measures adopted by the local authority help to extend the action plan from municipal buildings to the whole buildings sector).

The objectives represent the goals expected to be reached by the Action Plan, like the reduction of a certain percentage of the energy consumption or of the energy costs by the whole building stock, or the increase of production of RES by a defined level, or the number of buildings refurbished at a high level of performance, or the level of reduction of CO2 emissions, or the level of application of a specific technology, etc.

Targets and objectives should be based on the indicators selected in the baseline review.

Targets and objectives should follow the principles of the SMART acronym: Specific, Measurable, Achievable, Realistic, and Time-bound.

The core part of the Action Plan relates to the policies and measures that will allow to reach the objectives that have been set. Different kinds of actions and measures may contribute to the achievement of the objectives.

Actions should be evaluated and modulated according to:

- available technologies
- time required for implementation
- costs and investments
- financial opportunities and incentives
- barriers and risks.

Actions should be based as much as possible on “real numbers” reported in the baseline review or further data collected specifically for the purpose of the evaluation of the actions.

Elaboration of an Action Plan can become a complex analysis, especially when the number of buildings to be managed is high (more than 20-30 buildings); thus it is important to suggest a few steps to be followed.

Step 1: define the measures for each building

Follow the indications in STEP 3-4 of the Toolkit to identify measures to be implemented on the buildings of the target of the LAP.

A first discussion among municipal departments is needed at this stage of the work, so that potential measures proposed by the energy audit (energy/environment department) are verified with the public works department.

Step 2: define the Scenarios

The further steps in the elaboration of the action plan should be the following ones:

- sum up all measures and see the results in terms of savings, renewable energy generation, costs and payback time and all other indicators defined by the Municipality at the “target & objectives” stage of the work;
- compare the results with the defined objectives (results usually differ from the objectives);
- start modulating the actions in order to achieve the defined objectives.

Modulating the actions usually brings to different possible Scenarios. Scenarios may just differ because of prevalence given to specific technologies or because of the number of buildings involved or because of the payback time of the group of buildings considered, etc.

Actually, the different scenarios could be elaborated in order to give adequate answers to different requests, like:

- time required to implement all foreseen actions
- how many groups of buildings may be identified for an adequate budget and payback time (in order to prepare a public tender for ESCOs)

- can demonstrative refurbishments of buildings (Class A, zero emission) be included in a group of buildings? Or do they need to be considered separately because of total budget required? which quota should in case be covered by public funds in order to accelerate the high performance renovation of a number of public buildings?
- Which minimum requirements can be set in the tender (in terms of EE & RES levels and specific components to be renovated)?
- Which amount of savings could be guaranteed to the local authority?
- etc.

At this stage of the work, timelines, financial schemes, actors and different tenders must be included in the work of analysis.

A thorough discussion and exchange of opinions among the local authority departments, together with the political side, should follow the elaboration of the different scenarios, in order to adopt one of them or reformulate the process according to new requests. Preparation of an action plan for municipal buildings thus requires particular attention and involvement of all required municipal departments (at least public works, purchasing/tenders, environment/energy).

Step 3: define the final Scenario (= Action Plan)

The process described at Step 2 will be concluded by formalizing a final Scenario that will become the Action Plan of the Municipality.

The final Scenario will result as an harmonization of the different point of views and discussion elements proposed by the decision makers and the municipal departments.

The final Scenario will contain:

- the different measures for each building
- required investments
- proposed actors (*Energy Service Companies (ESCOs)*)
- type of tender/tenders (*Energy performance contracting (EPC), Third Party Financing (TPF)*)
- national grants or contributions by EU programs, loans for interest by the EIB (if any)
- timing
- roles of different municipal departments foreseen in the implementation of the Action Plan.

Step 4: adoption of the Action Plan

The adoption of the Action Plan requires at least a declaration of intents by the political board. However, any more formal act is strongly recommended in order to get stronger commitment by the Administration. The best solution is the approval of the Action Plan at the Municipal Council level.

If the Municipality has already implemented its SEAP (Sustainable Energy Action Plan) or its Energy Plan (for the whole city), the Action Plan for the Municipal buildings might be considered as part of a wider (and already running) process, thus remaining at a less committed level. In this case it is recommended to formalize the integration of the municipal buildings Action Plan within the SEAP or the Energy Plan.

Step 5: implementation and monitoring of the Action Plan

Implementation of the Action Plan will require to put in practice all the aspects considered at a formal level.

Monitoring and feedback of the administrative process, as well as of the execution of actions and obtained results should be implemented and will help the local authority in the following years to improve the Action Plan for its buildings.

In particular, commitments and obligations of the contractors, in terms of energy efficiency, should be verified and penalties should be applied in case of unsatisfactory results. On-site verifications during construction are advisable (e.g. thick insulation which is not placed adequately will not be very efficient).

It is fundamental that an inter-departmental group of people work together to develop and monitor the action plan. Collaboration of different departments should improve in the years, as more experience is acquired.