



ACTIVITY 1.2

REVISION OF LOCAL ENERGY PLANS THROUGH INVOLVEMENT OF CITIZENS AND OTHER STAKEHOLDERS (INDUSTRY, NGO)

**DT1.2.1 STATUS QUO ANALYSIS OF LOCAL
ENERGY PLANS - Municipality of Forlì (IT)**

**Version 2
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Deliverable DT1.2.1 - Municipality of Forlì

Status quo analysis of the local Sustainable Energy Action Plan (SEAP) - Piano d'Azione per l'Energia Sostenibile (PAES)

Introduction

At the beginning of ENES-CE project, local energy and climate action plans are assessed, and interviews are taken with local stakeholders, to gather information about the progress of the local mitigation and adaptation actions.

The existing energy plans in partner municipalities are revised in terms of their data quality, proposed projects, their economic and GHG emission savings.

Summary

The Municipality of Forlì approved the SEAP (Sustainable Energy Action Plan - PAES: Piano d'Azione per l'Energia Sostenibile) in 2011; as a planning instrument, it was addressed to the whole citizenry aiming the environmental and energetic sustainability. The actions adopted are intended to influence the energy consumption in every sector of the activities related to the territory (residential, transports, industries, services, agriculture). The implementation of the SEAP is the main activity established in the frame of the Covenant of Mayors to fulfil the 20-20-20 goals in energy efficiency, renewable energy and reduction of greenhouse emissions.

The Municipality of Forlì, through its Office for the Environment and its in-house society FMI s.r.l., in charge for several energy and mobility issues, is in this phase monitoring the SEAP and revising the plan to define the next SECAP (Sustainable Energy and Climate Action Plan). Therefore, the analysis of the existing SEAP's *status quo* is the first step of the roadmap to the approval of the SECAP.

The existing SEAP is organized in 4 areas of interest: **Zero emissions energies, Refurbishment of buildings and energy systems, Effective services, Mobility**. For each area, several actions have been implemented.

The lack and the dispersion of the information related to each action among many different offices and stakeholders prevents from accomplish a full operation of monitoring of the processes and the results. Summing up the collected data, not every action is at an appropriate pace and for most of the points of the plan, the need of involvement of external experts, stakeholders or citizen groups is very important.

It can be noteworthy highlighting that the most difficult actions to monitor are the ones related to wider groups of citizens and, in particular, to their own buildings and energy systems.

During the period of reference some actions have been abandoned (i.e. Action 1.5 Geothermal Energy), mainly because the technology of reference could not grant as many profits as forecasted during the ideation stage of the SEAP or because it was not possible to employ enough financial and human resources.



The evaluation parameters used in the SEAP's *status quo analysis* are the following:

Progress of the action

- 1 - Not started
- 2 - Minimal progress
- 3 - Progress at an appropriate pace
- 4 - Will be completed in a short time
- 5 - Completed
- 0 - Do not know

Data quality the action based on

- 1 - Inadequate
- 2 - Adequate
- 0 - Do not know

Importance of the action in reducing the city's CO₂-emissions / adaptation to climate change

- 1 - Moderate
- 2 - Very important
- 3 - Indispensable
- 0 - Do not know

Need for involvement of external experts / stakeholders / citizen groups

- 1 - Not needed
- 2 - Required
- 3 - Indispensable
- 0 - Do not know



AREA 1: ZERO EMISSIONS ENERGIES

Action 1.1

Name of the action: **Municipal photovoltaic systems**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO₂-emissions / adaptation to climate change (0-3): 2

Need for involvement of additional experts / stakeholders / citizen groups (0-3):2

Name the specific expert / stakeholder / citizen groups required: FMI srl, external technical planning

What sort of extra information is needed to improve the effectiveness of the action? Building energy auditing

Name the concrete proposed/ongoing projects along this Action Refurbishment of schools and other buildings

Action 1.2

Name of the action: **Private photovoltaic systems**

Progress of the action so far (0-5): 1

Data quality the action based on (0-2): 1

Importance of the action in reducing the city's CO₂-emissions (0-3): 2

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: Technical planning

What sort of extra information is needed to improve the effectiveness of the action? Technical and financial support

Name the concrete proposed/ongoing projects along this Action Energy Help Desk

Action 1.3

Name of the action: **Biomasses energy systems**

Progress of the action so far (0-5): 2

Data quality the action based on (0-2): 1

Importance of the action in reducing the city's CO₂-emissions (0-3): 1



Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: Technical support and roundtables on the issue with stakeholder and citizen

What sort of extra information is needed to improve the effectiveness of the action? Technical and financial support

Name the concrete proposed/ongoing projects along this Action none

Action 1.4

Name of the action: **Enhancement of the organic waste**

Progress of the action so far (0-5): 3

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO₂-emissions (0-3):3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: Alea srl, internal technical office, environmental associations

What sort of extra information is needed to improve the effectiveness of the action? Communication campaign on circular economy

Name the concrete proposed/ongoing projects along this Action Door to door selected waste collect

Action 1.5

Name of the action: **Geothermal energy**

Progress of the action so far (0-5): 1

Data quality the action based on (0-2): 1

Importance of the action in reducing the city's CO₂-emissions (0-3): 0

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 0

Name the specific expert / stakeholder / citizen groups required:

What sort of extra information is needed to improve the effectiveness of the action?

Name the concrete proposed/ongoing projects along this Action



AREA 2: REFURBISHMENT OF BUILDINGS AND ENERGY SYSTEMS

Action 2.1

Name of the action: **Refurbishment of public thermal systems**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO₂-emissions (0-3): 3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: FMI srl, HSE spa, Emilia-Romagna Region, GSE

What sort of extra information is needed to improve the effectiveness of the action? Building energy auditing, financial incentives and public funding

Name the concrete proposed/ongoing projects along this Action Refurbishment of public building and use of the POR-FESR 2014-2020 funding and "Conto Termico2.0" from GSE.

Action 2.2

Name of the action: **Refurbishment of public buildings and equipment**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO₂-emissions (0-3): 3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: FMI srl, HSE spa, Emilia-Romagna Region, GSE

What sort of extra information is needed to improve the effectiveness of the action? Building energy auditing, financial incentives and public funding

Name the concrete proposed/ongoing projects along this Action Refurbishment of public building and use of the POR-FESR 2014-2020 funding and "Conto Termico2.0" from GSE.

Action 2.3

Name of the action: **Refurbishment of electrical systems**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO₂-emissions (0-3): 3



Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: FMI srl, HSE spa, Emilia-Romagna Region, GSE

What sort of extra information is needed to improve the effectiveness of the action? Building energy auditing, financial incentives and public funding

Name the concrete proposed/ongoing projects along this Action Refurbishment of public building and use of the POR-FESR 2014-2020 funding and “Conto Termico2.0” from GSE.

Action 2.4

Name of the action: **Refurbishment of the existing buildings of the urban pattern**

Progress of the action so far (0-5): 2

Data quality the action based on (0-2): 0

Importance of the action in reducing the city's CO₂-emissions (0-3): 3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: technical planning, use of incentives, consumers purchasing groups

What sort of extra information is needed to improve the effectiveness of the action? Technical and financial support

Name the concrete proposed/ongoing projects along this Action Energy Help Desk

Action 2.5

Name of the action: **Refurbishment of private thermal systems: micro-cogeneration**

Progress of the action so far (0-5): 0

Data quality the action based on (0-2): 0

Importance of the action in reducing the city's CO₂-emissions (0-3): 0

Need for involvement of additional experts / stakeholders / citizen groups (0-3):3

Name the specific expert / stakeholder / citizen groups required: Technical planning

What sort of extra information is needed to improve the effectiveness of the action? Use of energy

Name the concrete proposed/ongoing projects along this Action none



Action 2.6

Name of the action: **Awareness campaign on electrical utilities and consumption**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO2-emissions (0-3):2

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: consumers purchasing groups

What sort of extra information is needed to improve the effectiveness of the action? Technical and financial support

Name the concrete proposed/ongoing projects along this Action Energy Help Desk

AREA3: EFFECTIVE SERVICES

Action 3.1

Name of the action: **Increase of the “door-to-door” selective waste collection**

Progress of the action so far (0-5): 3

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO2-emissions (0-3):3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: Alea srl, internal technical office, environmental associations

What sort of extra information is needed to improve the effectiveness of the action? Communication campaign on circular economy

Name the concrete proposed/ongoing projects along this Action Door to door selected waste collect

Action 3.2

Name of the action: **Reduction of the individual undifferentiated waste rate**

Progress of the action so far (0-5): 3

Data quality the action based on (0-2): 2



Importance of the action in reducing the city's CO2-emissions (0-3):3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: Alea srl, internal technical office, environmental associations

What sort of extra information is needed to improve the effectiveness of the action? Communication campaign on circular economy

Name the concrete proposed/ongoing projects along this Action Door to door selected waste collect

Action 3.3

Name of the action: **District heating HERA system**

Progress of the action so far (0-5): 3

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO2-emissions (0-3): 2

Need for involvement of additional experts / stakeholders / citizen groups (0-3):3

Name the specific expert / stakeholder / citizen groups required: FMI srl, HSE spa, municipal roundtable

What sort of extra information is needed to improve the effectiveness of the action? Growth of the district heating net

Name the concrete proposed/ongoing projects along this Action Net development, increase of the use of the FMI's Solar concentration plant in Villa Selva

Action 3.4

Name of the action: **Refurbishment of the traffic light systems**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO2-emissions (0-3):2

Need for involvement of additional experts / stakeholders / citizen groups (0-3):3

Name the specific expert / stakeholder / citizen groups required: FMI srl, HSE spa, municipal roundtable

What sort of extra information is needed to improve the effectiveness of the action? Traffic lights census



Name the concrete proposed/ongoing projects along this Action refurbishment of public illumination

Action 3.5

Name of the action: **Forest areas**

Progress of the action so far (0-5): 3

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO2-emissions (0-3): 3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 2

Name the specific expert / stakeholder / citizen groups required: environmental associations

What sort of extra information is needed to improve the effectiveness of the action?

Name the concrete proposed/ongoing projects along this Action Urban forestation

AREA4: ZERO EMISSIONS ENERGIES

Action 4.1

Name of the action: **Modal shift**

Progress of the action so far (0-5): 4

Data quality the action based on (0-2): 2

Importance of the action in reducing the city's CO2-emissions (0-3):3

Need for involvement of additional experts / stakeholders / citizen groups (0-3): 3

Name the specific expert / stakeholder / citizen groups required: FMI srl, START ROMAGNA spa, citizen

What sort of extra information is needed to improve the effectiveness of the action? Communication and advertising campaigns

Name the concrete proposed/ongoing projects along this Action Sustainable Mobility



Additional input from stakeholder interviews:

During the phase of the SEAP's *status quo analysis* some stakeholder gave its contribution answering to the interviews provided in the frame of the INTERREG project ENES-CE. The detailed document is available with the *DT1.2.2 Needs assessment for the establishment of energy groups in each Municipality*, the main recommendations provided by the stakeholders are the needs of organizing roundtables and having a municipal guidance.