

The role of urban planning towards energy saving policies

An Italian Overview

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Introduction

Several urban authors (among others: [1]; [2]) argue that the energy performance of housing and transport sectors is closely related to the urban patterns and that the improvement of the efficient use of non-renewable resources has to cope with the urban shape and size, the population density and the microclimate conditions. Following both urban planning and ecologic literature (among others: [3], [4]), cities, to become more resilient [5], need to adopt planning and design strategies that allow them to develop their capacities to better respond and adapt to the economic, social, and physical stresses. Spatial planning can be the strategic framework where both mitigation and adaptation measures are positioned in the broader perspective of sustainable development.

In the first paragraph, Italian energy planning framework and instruments will be analyzed, starting from the national law as far as meaningful examples at local level (Municipal Energy Plan). In the second one, a new approach in energy planning within municipal boundaries, developed inside an EU driven initiative (Sustainable Energy Action Plan – Covenant of Mayors) will be introduced, thanks to the sample case of Genoa. Lastly, open questions, concerning the future implementation of ordinary MEPs and the role of SEAP in spatial planning evolution and urban sustainability pursuing, are discussed.

1 - The Municipal Energy Plan in the Italian framework

In Italy the issues concerning climate change and energy efficiency have been dealt with since the first years of the 1990s through a new regulative framework. It is due to the law n. 10 of 1991, one of the main instruments that at the local level seeks to improve the energy efficiency of urban areas, the MEP. Its regulation and main

design has remained virtually unchanged over the past 20 years and mainly tied to the building scale.

It is evident that the general trend and the innovative cases describe an instrument that hardly fits into a specific category, but it embraces both energy and urban policies, going into all problems inherent energy in built environment. With such a “plan”, the analysis needs to consider the complexity using different levels of knowledge and sources, combining energy and urban considerations with economic and planning ones. The analysis of the ability of Local Planning Authorities to adjust and improve the energy performance of urban areas with the municipal energy plan is the subjects of this section. The analysis process follows the different phases to which generally the plan is divided, the actions proposed and the tools to implement them. According to an interdisciplinary approach, [6] three criteria are identified for the performances of actions and implementation tools in accordance with the literature.

The first criterion is economic efficiency. Efficiency is often referred to when comparisons are made between the behavior of the market and the government in the case of public intervention to correct externalities replacing the same market. Obviously it is not only whether objectives are achieved efficiently, but also if a policy instrument contributes to the achievement of all the defined goals. Thus, the second criterion is, in our case, environmental effectiveness. Lastly, the policy integration (vertical and horizontal) criterion is considered.

The analysis presents the ambiguity and contradiction between the current planning practice in Italy concerning energy issues and the institutional and academic debate around Europe, highlighting the main problems in the different phases of the Municipal Energy Plan. The evaluation however emphasizes some cases where innovative manners to deal with energy in the urban environment are developed. These virtuous processes call attention to the potential to change the planning and administrative culture, in terms of actions, tools and analysis for urban energy efficiency and sustainability, but also regarding the integration between different instruments to implement the policy.

2 - A new energy planning approach: Genoa and its SEAP

The fight against climate change pushed the European Union to define, in the last decade new, strong and efficient objectives to protect the environment and improve life condition in urban centres. The publication of the Green Paper Energy “A European Strategy for Sustainable, Competitive and Secure Energy” in 2006 made the problem of the energy efficiency and the exploitation of renewable energy sources, the focus of the EU policies in the field; tool that was rapidly followed in 2007 by the proposal of an Action Plan for Energy Efficiency (2007-2012) and a SET plan (Strategic Energy Technology plan). Afterwards, the EC introduced the SEAP (Sustainable Energy Action Plan), as the operative instrument (made up of two main parts: a Baseline Emission Inventory and an Action Plan) of the Covenant of Mayors, with the aim of make formal the engagement of the European Cities in the 20% reduction of CO₂ emissions. Italian experience of SEAPs, voluntary undertaken by more than 900 Italian Municipalities, and the specific approach given

by the City of Genoa, that successfully submitted its own SEAP to the EC in August 2010, must be taken as an occasion to discuss around the opportunity of evolution of the Italian energy planning framework. Genoa proposes an integrated strategy able to take into account existing urban (general and sector-based) plans at different level, regulatory framework, local, national and European funding opportunities in the field of energy, innovative technologies as well as political willingness of the local Government, etc; what makes it coherent with the vision that the City of Genoa wants to pursue for its future developments as expressed into the new Municipal Regulatory Master plan (PUC -Piano Urbanistico Comunale 2011) elaborated in accordance with the strategic vision of the SEAP.

What is the advancement we can try to extract from the Genoa experience that could give a contribution in driving/addressing the future of the Italian energy planning system? In this case, the Municipal Energy Action Plan became one of the actions the SEAP of Genoa, that proposes to adopt it as a crucial step towards energetic sustainability. The question is open; the opportunities which could be given by the relationship between the SEAP and the MEP are the subject of a broader discussion. This follows the same interdisciplinary approach proposed in the previous section for the normative instrument of MEP to easily compare the process and the outcomes, in terms of economic efficiency, environmental effectiveness and integration of the methodology.

3 – Open perspectives

Referring to the purposed issues, some interrogatives coherently come up around the incidence of the analyzed case-study and its future outcomes.

One of these concerns the role of SEAP as a possible evolution of the Municipal Energy Plan introduced by the national law of 1991: some innovations posed by the implementation of the new action plans can be taken as interesting points of cultural advancement from both administrative and practical points of view. Also monitoring and approval mechanisms, foreseen in SEAP-case, could represent new evaluation tools in the traditional planning process, whereas inserted in the implementation of MEPs.

Moreover, the approach carried out by the European Sustainable Action Plans, if thought as a successful initiative apt to be proposed in a wider vision of local competences in fact of energy, need to be, if in case, located within the national planning framework. At this point, several levels of planning are possible: strategic, regulatory or operational. Furthermore, a broader debate around planning reformation law is spreading all over Italian Regions, which have been, in the recent years, protagonists of innovative experiences, especially dividing the masterplan into structural and operational contents.

SEAP volunteer subscription underlines the special commitment by local entities in the environmental field: finally, starting from the large accordance given to Covenant of Mayors by municipalities, some reflections on the particular role of city pressing towards national level in the Italian context can be drawn.

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