

RES-e Regions

RES-e in Municipalities

INTRODUCTION

This document illustrates the current state of knowledge and interest concerning renewable energy sources for the generation of electricity among a sample of Ligurian municipalities, deemed representative of the broader situation across the Region as a whole, as well as the expectations and obstacles in relation to the use of such sources.

METHODOLOGY ADOPTED

The methodology adopted was a survey based on a 10-question questionnaire (see attachment) sent by ARE to the municipalities and regarding specific aspects connected to the current state of play in the field of electricity production from renewable energy sources.

The questionnaire was structured on various levels: the first part was designed to determine the level of knowledge and popularity among the interviewees (public administrators) of renewables with particular attention to technologies for the generation of electricity; the second part was aimed at finding out about the state of play with regard to the installations in the various municipalities surveyed; the last part illustrated the programmes and any short and medium-term objectives to be achieved by the various administrations interviewed in the area of RES-e. The focal point of the survey was the identification of the difficulties encountered by local administrators and barriers to the development of RES-e projects: to this end, interviewees were asked, on the basis of their personal experience and awareness, to state the main obstacles confronted and the type of support that they would like to receive for the promotion of renewable energy.

The interviews were conducted by ARE Liguria in July and August: the brief questionnaire was devised and ten Ligurian municipalities were contacted. Some of the sample took part in telephone interviews while others filled in the questionnaire sent to the technical departments of the relevant public administrations. The municipalities selected for the interviews were chosen insofar as representative of the Ligurian territorial context in the four Provinces comprising the Region; accordingly, both coastal and mountain municipalities were included in the sample,



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they varied considerably in size, and some had RES installations while others did not.

This means, for example, that the places contacted comprised small towns like Montoggio, cities such as Genoa, municipalities active in the promotion of RES-e technologies like Massimino (to name just one), as well as municipalities such as Ospedaletti, which, while interested in renewable energy, have not yet implemented any measures in this direction.

THE SAMPLE

The sample used for the interviews was designed so as to be representative of the Ligurian territorial context, which by its very nature includes municipalities of different types: those selected were situated on the coast and in the hinterland, and comprised densely populated towns as well as small rural cities, with public administrations that are receptive to renewable energy to varying degrees, evenly spread among Liguria's four Provinces (Genoa, Imperia, La Spezia and Savona).

THE OPINIONS

Opinions of the municipal administrators on the subject of renewable energy sources

Most of the interviewees were broadly in favour of the use of renewable energy sources for the generation of electricity and were reasonably familiar with the prevailing regulatory framework. In addition, it emerged that there was widespread interest in increasing the production of electricity from renewables at both Regional and municipal level; indeed, those interviewed said they were confident of being able to implement this type of strategy within their respective administrations in coming years.

Not surprisingly, the level of awareness of issues and aspects related to the use of RES-e technologies is uneven: while the increased production of electricity from renewable sources is seen as a necessity, it is also true in some cases that local administrators point out that the renewable energy assessments they have carried out highlight the need to introduce not only organisational measures but also financial incentives from the tiered layers of government (Provincial, Regional, State, European Union).

Opinions of the interviewees on RES-e technologies

Those interviewed say they are basically in favour of RES-e technologies, although they stress that such plants should be introduced to the local context in

each municipality in a way this is consistent with the available environmental resources.

In this regard some administrators express reservations about the possibility of setting up certain types of installations in their municipalities.

As regards the details of the single technologies, concerns were voiced about the possible environmental impact of large-scale wind power plants, in particular in relation to their effect on the landscape.

In other cases it was found that there was a lack of adequate information in relation to mini- and micro-hydro plants; on the other hand these plants are much appreciated by many Ligurian administrations, which have had very positive experience with mini-hydro and found it easy to install. Some of the people interviewed also expressed a certain degree of interest in the possibility of their administrations adopting technologies harnessing biomass and photovoltaic solar energy.

Public acceptability, as perceived by local authorities

Although a fair percentage of administrators feel confident about the amount of public interest in renewable sources, most of those interviewed agree that the prevailing mood is one of scepticism or indifference in relation to the possibility of producing electricity with RES-e technologies. According to the interviewees, the reason for this attitude is local citizens' belief that this type of technology is particularly expensive and requires specific technical expertise.

EXPERIENCE AND PROJECTS

Experience with RES-e plants

Local administrations have adopted – or at any rate, considered adopting – measures for the generation of electricity from renewable sources in the recent past: in some cases the feasibility studies have remained on the discussion table, while in others they have led to the introduction of mainly photovoltaic (and solar thermal) installations. The installation of photovoltaic panels, in particular, has also been carried out in some cases by private sector operators but, as is the case with solar thermal collectors, the most common applications are in municipal buildings such as schools and swimming pools, where the public administrations often apply for national and Regional tenders for the issue of cofinancing and non-repayable equity contributions.

In the view of the administrators the lack of greater activism is due to the paucity of financial resources on the part of the individual administrations, which are unable to make allocations for the promotion of renewable energy in their financial statements precisely on account of this shortage of funds.



Strategies for the future and targets in the field of energy

Despite not having precise strategies for the future, among Ligurian municipalities' set energy objectives is an increase in electricity production from renewables of up to 300% on the existing level. The relevant policy will be implemented by the administrations in differing ways: in some cases it will be the municipality itself that promotes and introduces measures for the harnessing of, say, forest biomass, while in others the administration will arrange incentives for the private sector with the provision, within the framework of the municipal building regulations, of benefits for RES-e installations.

The municipalities surveyed offer a wide variety of situations in relation to the installation of RES plants: some of them are virtually devoid of such plants, whereas others have experimented over the years with different types of plants, including photovoltaic, solar thermal (the most common) and biomass, the latter constituting a source of interest for the future for several administrators.

BARRIERS ENCOUNTERED AND SUPPORT REQUESTED BY THE MUNICIPALITIES

Barriers

It emerges from the interviews that, while they are already active in the field of renewable energy, the municipalities encounter a number of difficulties in implementing RES-e installations locally for a series of reasons mainly linked to the following factors:

- **Financial Aspects:** the economic problem is keenly felt by administrators, who complain of the dearth of municipal resources and point to the need for more funding
- **Administrative Procedures:** in some cases the respondents complain about the lengthy authorisation procedures
- **Grid Access:** contact with Enel Distribuzione (the incumbent electricity utility) is not always easy and the time required to obtain a grid connection is sometimes longer than it is supposed to be. However, in most cases connection to the distribution grid is not a significant problem.
- **Opposition from public opinion:** only one municipality points to significant resistance on the part of local citizens; in general the public is in favour of the installation of this type of technology.

In addition, in some cases a certain degree of sluggishness was detected in relation to the introduction of renewable energy measures linked to the inertia of

some administrators or, at any rate, their reluctance to implement the relevant procedures. Accordingly, many municipalities believe that the success of such measures depends both on strong political-administrative will at the tiered levels of government and on significant support from public opinion.

The above-mentioned difficulties are of course expressed by interviewees whose administrations have prior experience of RES-e plants, or have at least tried to implement procedures for their installation.

Support

Having identified the main barriers to the development of the renewable energy market, the interviewees point to two main lines of support which they would like to receive in order to stimulate this type of technology: one concerns funding, as already mentioned, while the other is of a technical nature, in particular in relation to the feasibility and design stages.

CONCLUSIONS

It emerged from the interviews that municipal administrators believe it is vitally important for them to act in tune with the consensus of public opinion; the local citizens often say they are theoretically in favour of the diversification of energy sources, but at the same time express their uncertainty when it is planned to build renewable energy plants locally, especially if they are large-scale installations.

A prerequisite for the diffusion of RES-e technologies among the individual municipalities is the raising of public awareness of the benefits of renewable energy: this could be brought about by drawing public attention to the advantages of such installations above all in terms of environmental costs and reduction of carbon dioxide emissions. At the same time it would be advisable to launch a public awareness campaign with information about “renewable” plants that are already in operation and the potential of this form of energy.

Finally, the public administrations interviewed spoke of the need for incentives and/or funding to set up plants powered by renewables insofar as it is unlikely, especially for the smaller municipalities, that a public administration will bear the costs of commissioning such installations.

In this context particular importance is attached to economic and management solutions such as third party financing or project financing whereby, notwithstanding the public ownership of the plants, the latter are built and run by means of private cofinancing, thus ensuring a viable return on the investment for the private sector and – at the same time – guaranteeing economic benefits for the public administrations.



QUESTIONNAIRE

1. *What do you think about the generation of electricity from renewable sources? Are you:*

In favour / Against / No opinion

2. *In your opinion should the proportion of electricity generated from renewables be increased in your Region in coming years?*

Yes...../ No.....

3. *Are you interested/involved in the production of electricity from renewable sources in your municipality?*

Yes...../ No.....

Has your administration carried out any assessments of the local energy situation and the possible use of renewables? If so, what type?

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4. *Have you heard about the following RES-e technologies? What's your opinion of them?*

- Wind power.....
- PV (photovoltaic).....
- Biogas.....
- Biomass CHP.....
- Mini/Micro-hydro.....

5. *Does your municipality have installations based on renewable technologies?*

Yes...../ No.....

- *If so, what type? And is your municipality directly involved in these installations?*

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▪ *If not, why not?*

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Would you be in favour of using installations based on renewable technologies? If so, what type?

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6. *Have RES-e measures been planned for the future?*

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7. *What do you think is the opinion of your municipality's citizens in relation to the installation of plants using renewable energy?*

Positive...../ No opinion...../ Negative.....

8. *What do you believe is the main obstacle to the development of the renewable energy market?*

- Financial Aspects.....
- Administrative Procedures.....
- Grid Access.....
- Opposition from public opinion.....
- Other.....

9. *What type of support would you like to have in the field of RES-e installations? In the assessment of their potential for your municipality or in the form of practical assistance with setting up the installations?*

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What type of events, courses, information... are you interested in?

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10. *For example, what do you think of the idea of holding of a one- or two-day seminar for municipal representatives and local stakeholders? Would you be interested in attending? What subjects would you like to be on the agenda?*

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Are you interested in receiving information about RES-e projects in your municipality?

Yes...../ No.....