

# SHREC

Interreg Europe



European Union  
European Regional  
Development Fund



SHREC seeks to contribute to a less carbon-intensive energy future by encouraging the use and facilitating the production of renewables by businesses, communities and households.

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## Regional Action Plan of Piedmont Region



Responsible partner: Piedmont Region – PP5

Authors: Silvio de Nigris, Barbara Girardi; Barbara Martignoni  
Technical support: ALOT srl

### Project Partners



Low-carbon  
economy


 SHREC  
Interreg Europe


Project acronym

**SHREC**

Project title

***SHifting towards Renewable Energy for Transition to Low Carbon Energy***

Project Number

**PGI06148**

Programme

**Interreg Europe**

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Project end date

**31/07/2023**

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## Introduction

### The SHREC Project

The SHREC project addresses the challenge of transition to a low carbon economy, in relation with renewable energy use of business and households facilitating them to invest in low-carbon, renewable energy measures reducing CO<sub>2</sub> producing activities and shifting to activities with low CO<sub>2</sub> footprint. Urgent need for a transition to a cleaner, more sustainable and less carbon intensive energy future is evident.

The project overall objective is to improve regional and national policies increasing the share of energy from renewable sources in the overall energy mix and encouraging and facilitating the production and use of renewables by businesses, communities and households aiming at less carbon intensive energy future.

Partners jointly work aiming at encouraging business investments into renewable energy and new innovative technologies and increasing involvement of energy consumers as active players. To achieve the project goals partners will look at possibilities to encourage technological development in renewable energy (support for business, industry to develop new technologies) as well as to use of social innovation concept to involve consumers (households, communities, industry, business representatives, public authorities) in the transition process shifting towards renewable energy production and consumption.

The main project outputs are: 57 interregional learning events, 8 Action Plans addressing 7 ERDF and 1 local policy instruments, at least 15 good practices will be analyzed and shared, 130 people will increase their professional capacities.

List of partners and Countries involved in the project.

- 1-LP Hanze University of Applied Sciences - NL
- 2-PP Slovak Innovation and Energy Agency - SK
- 3-PP Vilnius Gediminas Technical University - LT
- 4-PP South Muntenia Regional Development Agency - RO
- 5-PP Piemonte Region - IT
- 6-PP Mondragon City Council - ES
- 7-PP Auvergne Rhône-Alpes Energy Environment Agency (AURA-EE) - FR
- 8-PP Mid Sweden University - SE

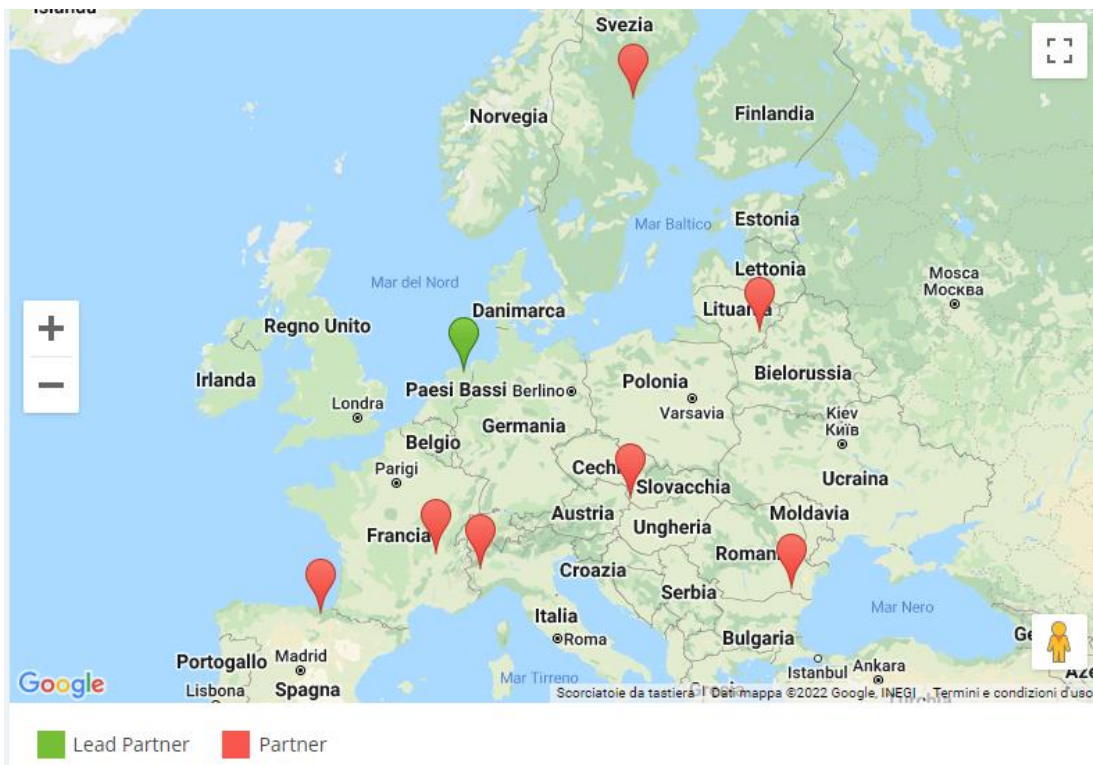


Figure 1 – SHREC partners and project Key Figures



## 1. General information

### Project

**SHREC - SHifting towards Renewable Energy for Transition to Low Carbon Energy**

### Partner organization

PP5 – Piemonte Region

### Other partner organizations involved

- Polytechnics of Torino
- Energy Center
- Environment Park
- Environmental Department of Piedmont Region
- Competitiveness of the economic system Department of Piedmont Region
- Local Authorities

### Country

Italy

### NUTS2 region

Piemonte

### Contact person

Silvio De Nigris

email address: Silvio De Nigris [silvio.denigris@regione.piemonte.it](mailto:silvio.denigris@regione.piemonte.it)

## 2. Policy context

### 2.1 Impacts

The Action Plan aims to impact

- Investment for Growth and Jobs programme for action 1
- Other regional development policy instrument for action 2

### 2.2 Name of the policy instrument addressed

#### ACTION 1

Piemonte Region - Regional Operational Programme (POR) ERDF 2014-2020, priority axis IV- Sustainable Energy and quality of life.

Self-defined performance indicators for the additional policy instrument by Application Form:

- CO2 emissions reduction (ton): 92

New Proposed Self-defined performance indicators the policy instrument

- Number of best Practices about energy buildings renovations funded by the European Regional Development Fund 2014/2020 and disseminated among stakeholders: n. 5

#### ACTION 2

Unique Strategy Document (DSU) for the EU programming Period 2021-27 (updated version sep.2021). Policy objective 2 - greener piedmont: climate and energy, natural resources and circular economy

Proposed Self-defined performance indicators for the additional policy instrument

- Number of local authorities and associations involved in the promotion and implementation of Energy Community in the Region: n. 4



## 3. Background

### 3.1 Regional Analysis on Policies and measures for the Transition to Low Carbon Energy

#### 3.1.1 The Regional framework context

The Piedmont Region has adopted the Regional Environmental Energy Plan on December 2021, at the conclusion of the review process aimed at enhancing the observations expressed during the consultation and Strategic Environmental Assessment process of the Proposal. This review was conducted in coordination and strategic connection with other regional planning and programming tools.

The planning document is setting mid-term targets (2030), in line with the objectives proposed at European level with the approval of the so-called Clean Energy Package that needs to be updated as soon as the Fit for 55 EU strategy will be set at National level.

The Plan selects as "main objectives" of the new regional energy planning cycle, the reduction of consumption and the gradual transition from natural gas to renewable sources. The main strategy set out in order to achieve the above targets, aims at reducing final energy consumption in the building and transport sector, as well as promoting the production from RES with attention paid to their environmental impact. The priority is, thus, given to RESs that do not require a combustion process, and consequently that have zero emissions, either for greenhouse gasses or for local pollutants.

The following strategic objectives have been defined:

1. increase of energy production from renewable sources for additional 494 Ktoe in 2030 (from the 2015 baseline) for a total production of 2,382 ktoe;
2. reduction of gross final energy consumption by approximately 1.960 ktoe with a target value of 8.645 ktoe in 2030. This target would be achieved with an expected reduction of about 30% in respect of the business-as-usual trend.
3. achievement by 2030 of a share of 27.6% of final energy consumptions produced by RES.

As already anticipated the above targets need to be updated in the next few years.

Back-to-back with the Regional planning activity few important laws have been endorsed by the Regional Council in the recent past, such as:

- the regional law updating a previous one about light pollution. This law introduces high standards, technical requirements for reducing light pollution or the consumption of energy resources.
- the law for the promotion of the Energy Communities. These are non-profit organizations, to which public and private entities can participate, established to promote the process of decarbonization of the economy and to facilitate the production, exchange and consumption of energy generated mainly from renewable sources, as well as promoting energy efficiency. Piedmont Region has been the first to approve such a kind of law in order to accelerate the creation of Energy Communities. With the adoption of the RED II, by the national

law n. 199/2021 the regional law has been substantially overcome. In any case, it was a good opportunity to launch pilot initiatives in the region and prepare the ground at regional level for the future implementation of energy communities.

### *DECENTRALISED REGIONAL OPERATIVE PROGRAMMES*

In Piedmont Region the Funds of the ROP ERDF belonging to TO4 - Supporting the shift towards a low-carbon economy in all sectors, are divided into seven Axis. In particular Axis IV (Sustainable energy and quality of life) is aimed, on the one hand, at reducing primary energy consumption by promoting actions on the heritage of public buildings and, on the other, at spreading innovations in the production system that lead to the adoption of technical solutions for a more rational use energy and increase the use of energy from renewable sources. The achievement of the Axis objectives is also measured in terms of greenhouse gas (CO<sub>2</sub>) reduction.

Piedmont Region is directly involved through its own functions in the implementation of the measures and in the allocation of funds. The allocation of public resources amounts to 193 million euros, divided almost equally between public entities and companies.

#### **3.1.2 Measures addressed to SMEs**

Regarding the measure activated for companies, with allocated resources amounting at 97M€, there are two performance indicators at 2023:

1. number of companies receiving support: the target is estimated in 234 companies;
2. annual greenhouse gas decrease: the target is estimated in 81,6 ktonCO<sub>2</sub>.

The incentives, partly with non-refundable funds (20%) and partly as subsidized credit (80%), finance:

- high-efficiency cogeneration plants,
- measures to increase the energy efficiency of production processes and buildings,
- the replacement of low efficiency systems and components with more efficient ones,
- the installation of new high efficiency production lines,
- the installation of plants for the production of energy from renewable sources.

From the beginning of 2018 it is worth noting that the interest of the companies has been gradually decreasing (currently the monthly average is 4 applications for an average request for facilitation for each request of around 140,000 €). For this reason, the Management Structure has ordered the temporary closure of the call for tenders starting from 31 July 2019 with the aim of operating a "restyling", without distorting the purpose of the measure.

After a consultation process implemented with the main trade associations, some sectors originally excluded have been included in the eligibility criteria (trade, packaging, industrial laundries, etc.).

As a consequence, the main KPIs for the measure in terms of number of financed companies and CO<sub>2</sub> emissions savings have been achieved.

### 3.1.3 Measures addressed to Public Authorities

The promotion of energy efficiency in public buildings was implemented through five calls, which financed at least the 80% of the proposed investments (adding a further 10% as a reward in the case of transformation buildings in nZEB), in support of:

- interventions in the health-hospital area with allocated resources of 16 M€;
- interventions on the real estate assets of the Piedmont Region with a budget of 4 M€;
- interventions of local authorities (municipalities, metropolitan cities, provinces and unions of municipalities), with an allocated budget of 24 M€ (for larger municipalities) + 20 M€ (for smaller municipalities);
- interventions in the field of social housing, with allocated resources of 10 M€;
- interventions to improve the efficiency of the municipal public lighting network, with a starting budget of 20 M€, which was increased by 8 M€ in 2021.

The interventions sought to reduce the energy needs of buildings (schools, municipal offices, sports facilities) and lighting systems from 20% to 80% of the starting energy consumptions, with a significant reduction in terms of costs and CO<sub>2</sub> emissions.

There are four performance indicators to 2023:

1. additional capacity for renewable energy production: the target is estimated in 7.3 MWp.
2. reduction of annual primary energy consumption in public buildings: the target is estimated in 54.932,7 MWh/y;
3. reduction of the annual emission of greenhouse gases: the target is estimated in 11.096 tCO<sub>2</sub>.
4. light points subject of the intervention: the target is estimated in 3.333 units.

The published calls have yielded quite differentiated outcomes. Several barriers have been identified during the implementation phase of the measures, such as: shortage of public resources for the co-funding, difficulties in the application of the procurement law, regional budget constraints which also slow down the payment of contributions by the Region to the beneficiaries. All those factors are bottlenecks that prevent the beneficiaries from implementing the actions in the foreseen timeframe. This required the need of prolongations to complete the projects and could lead to the resignation of some beneficiaries from the grant in the future. In particular, it is necessary to underline that the co-financing rate has been an issue when several additional not eligible expenses were required as "enabling interventions" (i.e. seismic adjustment, removal of architectural barriers, asbestos, etc.). Regarding the targets at the 31 December 2019, following partial results are available:

*Table 1- performance indicators to 2023 and results achieved by 31.12.2019 for the promotion of eco-efficiency in public buildings*

Indicators	Results (31.12.19)	Target	Percentage
additional capacity for renewable energy production [MWp]	4,5	7,3	61 %

reduction of annual primary energy consumption in public buildings [MWh/y]	39.143	54.933	71,2 %
reduction of the annual emission of greenhouse gases [tonCO <sub>2</sub> ]	7.599	11.096	68,5 %
light points subject of the intervention [n]	36.020	3.333	>1000 %

### 3.1.4 Cooperation with private stakeholders

Back-to-back with the management of regional structural funds, several initiatives promoting Public Private partnership have been launched with the aim at mobilizing private investments by using Energy Performance Contracts (EPC). Such contracts have been implemented in several different projects in the last few years in Piemonte Region. Some of the most outstanding examples have been coordinated and promoted by the Region itself in the framework of EU projects. In the following table, the list of implemented or promising projects is provided. All these initiatives have in common the bundling and pooling approach to achieve economies of scale and put on the market a pipeline of investments that can be fairly accepted by ESCOs. The EPCs are based on a guaranteed level of savings and with a sharing extra savings in case of overperformance. The contracts have a duration that can range from 13 to 15 years. A Measurement and Verification Plan, in line with IPMVP standard, is also presented in the tendering document and is an annex of the EPC. No specific financial tool has been offered to ESCOs, on the contrary the tender procedure allocated all the financing risk on the ESCO that must collect the financing provisions on the market or with own equity, getting direct access to available grants or incentives.

*Table 2– List of actions, investments and status of regional projects for energy efficiency through Energy Performance Contracts (EPC)*

Type of action	Investments	Status	Project
18 public buildings (5 Municipalities)	2.5 M€	Implemented and under management	2020Together
3.000 street light points (6 Municipalities)	2.4 M€	Implemented and under management	2020Together
7 public buildings (1 Research Institute)	1.5 M€	implemented	STEPPING
17 public buildings (10 Municipalities)	0.7 M€	Ongoing	STEPPING
25 public buildings	2.5 M€	Under preparation	STEPPING PLUS

## 3.2 Consumers at the heart of energy transition

### 3.2.3 Awareness and acceptance to actions for transition to low carbon renewable energy

In the Integrated National Plan for Climate and Energy, it is envisaged to share the national target (expressed as a share of consumption, in order to also stimulate energy efficiency) through a burden sharing system among the Regions, as experienced with reference to the 2020 targets for renewables. The breakdown of the target implies also the identification, by the Regions, of the areas to be made available for the construction of the plants powered by RES. It is foreseen to carry out an online and interactive census of the surfaces of the roofs of the built areas, which allows them to evaluate their potential energy generation. Given the fact that this would not be sufficient to reach the National RES target, it is envisaged to identify areas with an energy vocation, as not intended for other uses. This will be done in cooperation with regions and local Authorities and taking into consideration the need to avoid the use of greenfield. The identification of these areas will also be coupled with the coordinated development of plants, electricity network and storage systems, with authorization procedures made easier and faster.

This is a completely different approach to the one used in the past where the input was to identify the areas where it was not possible to install RES. By consequence, this new approach should promote participative processes that can push the territories to find solutions with an increased social acceptance.



*Figure 2 – meeting with Regional Stakeholders*

Communication would, thus, play a key role and new selling reasonings should be elaborated for the local communities. This will be a big challenge for the years to come.

Besides that, it is worth noting that during the elaboration of the Regional Energy Plan, it is a common practice to put in place consultation processes aimed at bringing together different stakeholders' perspectives on the energy issues. This is done in discussion

during roundtables where stakeholders are invited to discuss but also provide proposals for new projects and policies. In the next few years these activities must be reinforced and focused on specific topics, such as low carbon district heating systems, RES installations, energy communities, etc.

As far as communication campaigns for awareness raising are concerned, during the last years the Piemonte Region has implemented such actions focusing on the correct use and maintenance of heating systems. A precise adjustment and correct maintenance allow to significantly reduce the energy consumption and the related expense, leads to greater safety and reduces air pollution. This was the message that was conveyed through main media, including radio newspapers and poster campaigns in order to raise consumer awareness.

Finally, communication actions are implemented often back-to-back with project activities, mainly EU ones. Social media posts, website news are day by day implemented and public events are organized. Generally speaking, for events the main target audience is the public sector (local authorities, agencies and research institutes). An average of 3 or 4 events are organized per year.

### 3.3.3 Active involvement of energy consumers

#### *Energy Communities*

Renewable energy communities involve groups of citizens, social entrepreneurs, public authorities and community organizations participating directly in the energy transition by jointly investing in, producing, selling and distributing renewable energy. Thanks to the adoption of the Directive 2018/2001 by the National Law 199/2021, the renewable energy community concept can now be implemented. Generally speaking, we can define community energy as any project or initiative where people have ownership or a meaningful say in the running of renewable energy or energy related services. We also consider energy efficiency projects where the community is involved in collectively reducing their energy use as important community energy. The Italian legislation restricts the framework of the concept and it establishes that a renewable energy community is, as anticipated above, an aggregate of end users (domestic users, but not only) such as Citizens / families, SMEs and territorial bodies and local authorities.

The end users can therefore join a Renewable Energy Community (REC) that will get access to explicit (direct) incentives provided for by a National Authority (GSE).

REC members must own, or have the availability, of one or more power plants for generating electricity from renewable energy sources (RES). The self-production of electricity serves to cover, on an hourly basis, part or all of the consumption of the aggregate members. This portion of self-produced and self-consumed energy is called 'shared' and is what gives the right to the incentive provided for by current legislation (fixed at 110 €/MWh). All the members should be placed within the same high voltage transformation cabin. The maximum power that can access to incentives is fixed at 1MW. At least 70% of the RECs power should come from plants installed after March 2022. The distribution network enables the virtual aggregation of users, without the need to build

new private networks. In addition, each user who is a member of the CER continues to maintain its own supply contract through the selected retailer, drawing electricity from the distribution network.

In Piemonte several initiatives are ongoing and are envisaged to be created in the next few years. Indeed, this is a promising sector that needs to be promoted with a coordination action by the Region. The added value that the Region could bring is to create the enabling conditions for the realization of good projects connecting the topic of energy communities to energy poverty.

The members of the RECs (enterprises and public bodies) will be able to access the resources of the ERDF Regional Program 2021-2027 and in particular those destined for Policy Objective 2 “Resilient, greener and low-carbon Europe”. In all likelihood, the approval decision will be sent to the Region in the autumn, in order to allow the opening of the first calls in January 2023.

The Piedmont Region organized a public presentation event of the ERDF Regional Program 2021-2027 on Thursday 24th of March 2022. Under Priority II - "Ecological transition and resilience", 190 M€ will be available for "Energy efficiency and reduction of greenhouse gas emissions". The actions will concern energy efficiency in public buildings and businesses, energy efficiency and intelligent transition of the public lighting network and the promotion of efficient district heating. An additional amount of 58 M€ will be allocated to the "Promotion of the use of renewable energy in public buildings and companies". Finally, as regards the “intelligent transformation of electricity transmission and distribution networks”, the budget will be 15 M€. In-depth studies are underway between the regions and the competent National Ministry to clarify the aspects concerning the complementarity between the Recovery and Resilience Plan interventions and other facilitation tools.

## 4. Actions envisaged

### 4.1 Brief history of the Piedmont Region Action Plan

The Piedmont Region Action Plan is the result of the collaboration among the Piedmont Region with its different Departments and all the local and international stakeholders, such as Local Public transport authorities, SMEs, Enterprises, Universities and Research Centers in the field of energy transition and carbon neutrality.

The Region, with its technical support, drafted the Action Plan with the support of the stakeholder group. The stakeholder group participated to interregional experience and, through the regional workshop, had the chance to analyse the Good Practices and experiences of different SHREC partners.

Additional knowledge and good practices used to define SHREC Actions Plan were derived from exchange of experience (Interactives Workshops, Thematic Seminars related to the project topic, regional Stakeholder meetings, PPs meetings with the SHREC members) and Regional Analysis on Policies for the Transition to Low Carbon Energy in SHREC countries.

Due to COVID-19 pandemic, Piedmont Region opted to organize online several events to continuously update and involve regional and international stakeholders on project progress. In particular, Piedmont Region organized six online Regional Stakeholders Group meetings (on 22/04/2020, 09/07/2020, 19/11/2020, 25/02/2021, 27/04/2021 and 15/12/2021). Despite the organization online, these events went smoothly, were successful and well attended.

Moreover, the 4th project meeting, thematic workshop and interactive discussion on the good practices that were planned to take place in presence in Piemonte Region (PP05) in semester 3 were organized fully online. Despite the pandemic, these events were not delayed and were organized on 21st-22nd January 2021, as planned. As concern the thematic workshop “Energy Policies and Innovative Projects in Piemonte”, inclusive of the interactive discussion on the good practices, the Region tried to overcome limitations of online organisation and keep the event as interactive as possible by structuring it in smaller break out rooms and on-line surveys, in order to foster discussion and interactivity among participants, with a final plenary discussion closing the event.

As concern other meetings organized online by other PPs, PP05 easily attended all of them. In general, the impossibility to attend in presence most of the events affected and made more difficult the exchange of experience process and in particular the identification of inspiring Good Practices for the development of the Regional Action Plan. However, the Region recovered this lack also by using on-line policy platform and by checking other partners good practices proposal by the SHREC website. Moreover, during spring 2022 the two last rounds of exchange of experience (site visits) were organized in person, respectively in Spain and in France, in order to better present the regional experiences and to inspire all partners Regional Action Plans.

Here below the short list of stakeholders involved in the Piedmont Region Action Plan preparation including the list of Regional and International meeting organized by the



Region. The SHREC stakeholder group was always updated and implemented during Project lifetime.

### 1<sup>st</sup> Workshop of regional stakeholder group – hybrid (online and in presence)

Date: 22/04/2020

30 Participants: Regione Piemonte, Politecnico di Torino, Ireti, Enel distribuzione, Città metropolitana di Torino, Envipark, ENEA, Provincia di Cuneo, CE Valli Maira e Grana, CE Pinerolese - Comune di Scalenghe, CE Pinerolese - Comune di Cantalupa, CE Valle Susa  
Presentation of Four pilot Actions of Energy Communities in the Piedmont Region, focusing on Regulations, technical aspects and first results achieved.

### 2<sup>nd</sup> Workshop of regional stakeholder group – online

Date: 09/07/2020

130 Participants: 30 in presence and 100 online. Type of stakeholders: energy utility, national research institute, energy agency experts, as well as a senior consultant in EU projects management, Regions, Municipalities, SMES, Associations.

Meeting on “Energy community and storage”. The conference took place both virtually and in person, with 30 participants physically attending the event in Cuneo, and another 100 people connected via webinar. Given the importance of energy communities and storage in the roadmap for regional energy transition, the conference represented a great opportunity to present to such a wide public the objectives pursued by two European projects, SHREC and STORE4HUC, focused on the issue.

### 3<sup>rd</sup> Workshop of regional stakeholder group – online

Date: 19/11/2020

64 Participants: PIEMONTE REGION, AFP scarl di Dronero, Agenzia per l’Energia Alto Adige – CasaClima, ALOT Srl, AURA-EE, Comune di Bardonecchia,, DENERG - Politecnico di Torino, Diputacion de Girona, EDIS Srl, ENEA, Energy Center del Politecnico di Torino, Enti Rev srl ENVIRONMENT PARK, Fondazione LINKS, GRD, IREN, IRETI S.p.A. - Gruppo IREN, IRIS SRL, LA FORESTA Soc. Coop, Monticello D’Alba Municipality, Politecnico di Torino, Politecnico di Torino e CPE, Portacomaro Municipality, Ricerca sul Sistema Energetico - RSE Spa, Sant’Ambrogio di Torino Municipality, Scalenghe Municipality Sed Consul, Unione montana valle Maira, unione montana valle Maira, unione montana valle Susa, Venaus municipality.

“SHREC- meeting with regional stakeholders on energy communities”, focused on the update on the stages of advancement of Energy Community initiatives in the Piemonte Region, and the illustration of European examples of Energy Communities implementation.

### 4<sup>th</sup> Workshop of regional stakeholder group– online

Date: 25/02/2021

26 Participants: PIEMONTE REGION, Polytechnic of Torino, ENVIRONMENT PARK, IREN, IRIS Srl – Politecnico, CE Pinerolese, AFP scarl di Dronero, Unione montana Valle Maira, EDIS Srl, Unione Montana Valle Susa, Unione Montana Monviso, ENEL DISTRIBUZIONE

This meeting gave the opportunity to take stock of the development of the four Energy Communities (EC) ongoing projects In Piedmont region and to explore some of the challenges and problems they are facing, especially related to energy data availability and to the most appropriate legal status the EC should have. In particular, Piemonte Region invited to this meeting Enel Distribuzione (E-Distribuzione), the energy distributor company operating in

Piemonte, in order to have some detailed explanations about data acquisition, which is a crucial step in the setting up of the EC territorial energy balance.

#### 5<sup>th</sup> Workshop of regional stakeholder group– online

Date: 27/04/2021

35 Participants: PIEMONTE REGION, AFP scarl di Dronero, ALOT Srl, ARPA, CER "Energy City Hall" - Magliano Alpi (CN), Comune di Bardonecchia, Comune di Priola, Battifollo, Monasterolo Casotto e Montaldo di Mondovì, Edison SpA, ENEA, ENVIRONMENT PARK, Fondazione CRC, IRIS Srl – Politecnico, Kyoto Club, Municipality of Cuneo, Municipality of Magliano Alpi, Municipality of Monticello d'Alba, Piedmont Regional Council, Politecnico di Torino, Stp Srl, UCID, Ufficio ambiente energia Unioni Montane Valli Maira e Grana.

"SHREC- meeting with regional stakeholders on energy communities", focused on the update on the stages of advancement of Energy Community initiatives in the Piemonte Region, and the illustration of European examples of Energy Communities implementation.

#### 6<sup>th</sup> Workshop of regional stakeholder group– online

Date: 15/12/2021

27 Participants: Piemonte Region, Alot Srl, Comunità Energetica Valli Maira E Grana, Covenant Of Mayors, Energy Center Lab - Politecnico Di Torino

Environment park, gocer, iris s.r.l., municipality of Monticello d'Alba, municipality of Scalenghe, municipality of Venaus, Politecnico di Torino - energy center lab, politecnico di torino, ats comunità energetica del pinerolese, samso energy akademy, walden srl

"SHREC meeting with regional stakeholders on energy communities", focused on the transposition of the European RED II directive on Energy Communities in the Italian law and on the presentation of the Danish best practice of the Island of Samsø.

#### Interactive Workshops in Piedmont Region "Energy Policies and Innovative Projects in Piemonte" – online

Date: 21st-22nd January 2021

148 Participants. Type of stakeholders: energy utility, national research institute, energy agency experts, as well as a senior consultant in EU projects management, Regions, Municipalities, SMEs, Associations.

Several Topics addressed and related round table: Hydrogen initiatives in Piemonte, Energy Communities, Financing schemes using ERDF, Integrated District Heating System in Torino and its potential development, Organic waste biogas to methane + CHP + DHS, Energy Performance Contracts in Piemonte, Business models for building retrofitting: making thermal load electric towards energy self-consumption, Biomass initiatives.

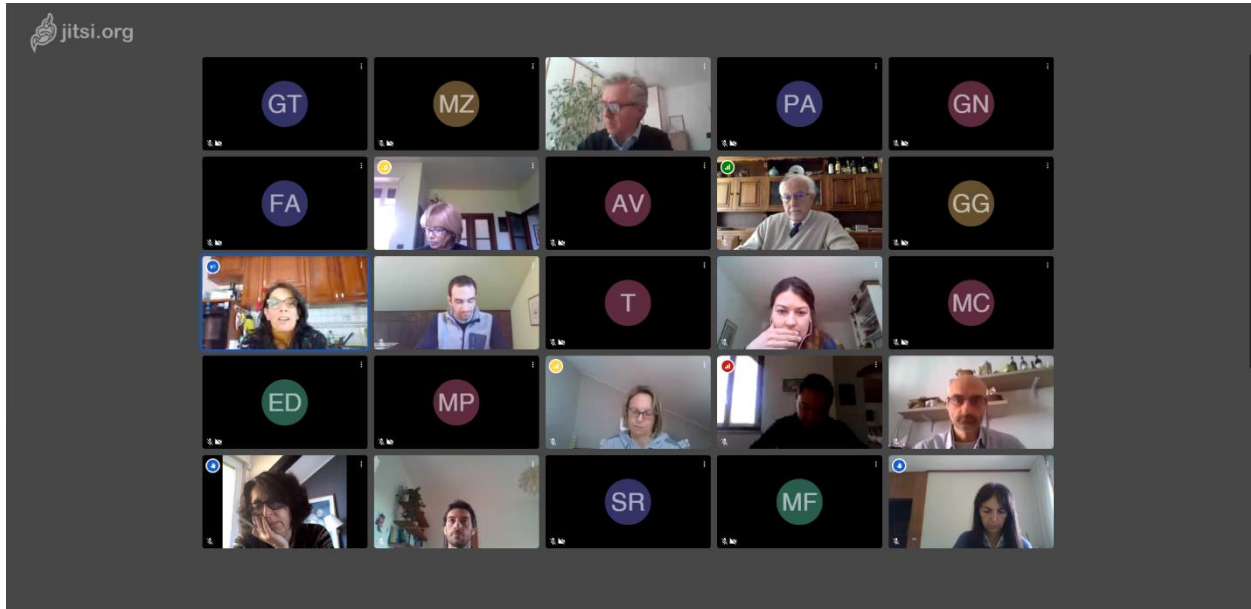


Figure 3 – on-line meeting with SHREC Regional Stakeholders

## 4.2 Actions for Piedmont Region

In the next the specific actions of Piedmont region Action Plan are included and are presented in the following paragraphs.



Figure 4 – Actions of Regional Action Plan of Piedmont Region

## 4.3 ACTION 1

### PROMOTION OF GOOD PRACTICES CO-FINANCED WITH THE ERDF 2014/2020 AND FURTHER DEPLOYMENT OF INVESTMENTS IN ENERGY EFFICIENCY IN THE PUBLIC SECTOR

#### 4.3.1 The Background and Source of Inspiration

During the project meetings and events in the project partners regions as well as in the meeting with the Regional Stakeholder Group of Piemonte Region, a lack of knowledge and information on sustainable energy transition emerged and this topic was discussed as a relevant issue. There are regions and municipalities where citizens and stakeholders are more aware of the advantages and opportunities of energy transition and are more inclined to invest in energy efficiency measures or to join energy communities, just to name a few examples. On the other hand, there are regions where public awareness should be increased and further actions should be taken towards this direction. In both cases, as the Energy Efficiency Directive (EED) – “Fit for 55” package points out there is an exemplary role of public authorities. Soon they will be pushed in this direction by an obligation to achieve an annual reduction of the energy consumption in the management of their buildings. This will ensure that the public sector fulfils its exemplary role retaining flexibility regarding the choice of energy efficiency improvement measures to achieve the required reduction of the final energy consumption. So far, the measures were implemented at a limited scale, and several limitations prevent reaping energy savings potential in the public sector. The public sector is responsible for around 5% of total Regional’s final energy consumption. For that reason, the public sector constitutes an important driver to stimulate market transformation towards more efficient products, buildings and services, as well as to trigger behavioral changes in energy consumption by citizens and enterprises. Furthermore, decreasing energy consumption through energy efficiency improvement measures can free up public resources for other purposes. Additionally, the lack of coordination and communication among all relevant stakeholders also emerged during thematic seminars and interactive workshops of SHREC project. It was registered that both public and private stakeholders, including final users and citizens, needs to enforce the exchange of knowledge and dissemination of all relevant activities and projects performed in the field of energy transition. In the first phase of SHREC project, Piedmont Region analyzed, capitalized and take inspiration from the following good practices through thematic seminars, interactive workshops and Interreg policy learning platform activities, to tackle the abovementioned challenges.

*Mellersta Norrland, Sweden (Sverige) (PP8)*

The University of Dalarna’s built up a Knowledge Transfer Partnership (KTP) at university level for the sustainable knowledge exchange in the energy field. KTP is a collaboration model used in the UK for 40 years and Dalarna University has worked with in Sweden for 10 years. The pilot with the five nodes is the first national project. KTP is a knowledge broker between SMEs and the academy, which in addition to young academics getting

jobs in the region's SMEs leads to spin offerings such as development of research, degree projects, internships, guest lectures, study visits.

*Közép-Magyarország, Hungary (Magyarország)*

Virtual Power Plant Programme – LOCARBO project - International research shows that the first step in improving energy efficiency is creating awareness, attention, rationalization, metering and checking energy consumption is capable of producing a 10% saving. Conscious energy consumption is cheap and hardly requires investment, only a change in attitude and corporate practices. These researchers catalysed the thought process by which the idea of Virtual Power Plant Programme was born. It aims to collect experience and practices, transform them into knowledge, motivate and award the best actors, cooperate with the relevant authorities.

*Sydsverige, Sweden (Sverige)*

Education of contractors – REBUS project - A two-day education every year to archive increased knowledgebase and commitment for the contractors as well as improved relationship between real-estate owners. The department of real-estate in the City of Helsingborg claims in the agreement with the contractors that there shall be a 2-day education every year, for the contractors working with the community buildings. To the education external expertise are used as tutors but also internal teachers for prioritization, guidelines, routines etc. The content has been both theoretical and practical, and innovative as well as inspiring. Even contractors themselves have been invited to be lecturers. The theme has been indoor environment, energy efficiency, systematic optimization of operation, lighting and lighting design.

*Ministry of Economy of Slovak republic (Slovakia) virtual thematic seminar on energy policies and innovations*

During two days, 20th – 21st October 2020, Slovak Innovation and Energy Agency (SIEA) organised Virtual thematic seminar, where several experts from the public and private sector presented the Slovak national policies in the field of renewable energy sources and climate change mitigation and tools used for their successful implementation. In particular, the Slovak National Energy and Climate Plan was presented with specific analysis for the carbon neutrality envisaged for 2050 and the contribution that each sector should provide. During the workshop CEPA - Friends of the Earth and Buildings for future Association presented several examples inspiring good practices and initiatives in Slovak Regions.

#### 4.3.2 Action

This action will consist in a series of communication and dissemination activities at regional level in order to spread and disseminate good practices co-financed with the European Regional Development Fund 2014/2020 related to the energy refurbishment of public buildings. This objective will be pursued through the capitalization and the dissemination of communication material produced by Piedmont Region on energy

efficiency projects implemented by local authorities (such as the brochure on the sustainable energy transition in Piedmont Region developed in the framework on the PROSPECT2030 Interreg Central Europe project). This action will include involvement of relevant stakeholders, dissemination of good practices on the institutional website of Piedmont Region and through dedicated workshops and networking groups. The meetings will be organized in collaboration with other regional activities linked to energy transition towards a low-carbon economy. In particular, it is very important to establish a solid synergy with the network of the Covenant of Mayors Initiative. Piedmont Region, and in particular, the Sustainable Energy Sector (PP5 SHREC partner), is the Coordinator of Covenant of Mayors for 339 Municipalities (so far the signatories in Piemonte Region). [https://eumayors.eu/about/covenant-community/coordinators/signatories.html?scity\\_id=11021](https://eumayors.eu/about/covenant-community/coordinators/signatories.html?scity_id=11021).

In 2021 the Covenant of Mayors renewed the commitment targets and time horizon of the adhering Municipalities. Signatory cities pledge action to support implementation of the EU 55% greenhouse gas-reduction target by 2030 and the adoption of a joint approach to tackling mitigation and adaptation to climate change. In order to translate their political commitment into practical measures and projects, Covenant signatories commit to submitting, within two years following the date of the local council decision, a Sustainable Energy and Climate Action Plan (SECAP) outlining the key actions they plan to undertake. Since most of the Municipalities of Piemonte Region need to renew their commitment, as their adhesion was done before 2020, it is time to restart the sustainable energy planning at local level with a clear commitment to carbon neutrality. It is, therefore, very important that the Local Authorities take up further action in their own properties under the Energy Efficiency First principle. More investments in the public sector are, thus, expected in the years to come, thanks to the National Recovery and Resilience Plan and the new Regional Operational Program. The knowledge and lessons learnt from successful stories and good practices should be disseminated more in order to ease their replication. Besides, as recommended by the recast of the energy efficiency directive, this should be a structural process with a clear program scheduled on the long run for the full deep renovation of all the public buildings. This process could be eased by providing webtools supporting the energy management system of local authorities and a standardized method to build a renovation plan for public authorities that should be included in their sustainable energy action plans.

#### 4.3.3 Sub-actions

Here below a list of indicative sub-activities of the action:

1. Monitoring of the impacts of existing renovated buildings best practices funded by the European Regional Development Fund 2014/2020
2. Dissemination of the collection of good practices to all relevant stakeholders and interested organizations from Piedmont Region with different media tools
3. Organization of workshops with the network of the Covenant of Mayors in the Region and other Municipalities in order to showcase the experience and lessons learnt from good practices

4. Promotion of the use of webtools to increase the capacity of Public Authorities to implement sound energy management systems
5. Development of a procedure to set the renovation plan for public authorities and fit it into an action description for Sustainable Energy Action Plans.

#### 4.3.4 Relevance

##### *Type 1: implementation of new projects*

This action will indirectly contribute to promote and capitalize results of the policy instrument addressed – 2014-2020 Piedmont Region ROP ERDF as concern investments in the sustainable energy transition related field. Moreover, the action will also contribute to promote Piedmont Region 2021-2027 ROP ERDF as funding instrument available for the development and financing of future projects and initiatives linked to sustainable energy transition as well as other funding sources such as the National Recovery and Resilience Plan. Therefore, these will contribute to increase stakeholders' awareness on past results and current tools through which is possible to finance energy transition related actions. Finally, the dissemination of the good practices will also contribute to raising awareness concerning energy transition and spreading results of SHREC project as well as other Piedmont Region's activities related to sustainable energy.

#### 4.3.5 Players involved

##### *Regional Authorities*

- Piedmont Region Managing Authority ROP ERDF 2021-2027 – Competitiveness of the Regional System Department. Role: coordination of overall regional activities.
- Piedmont Region – Environment, Energy and Territory Department: endorsement to this Action Plan and responsible of policy instrument improvement in relation to Sustainable Energy measures.

##### *Local Authorities*

- Piedmont Region Municipalities
- Anci and Uncem regionale
- Covenant of Mayors representative: support of the SECAP coordinator in the upgrading and monitoring of interested SECAPs

##### *Research Centres and Universities: Role scientific partners*

- Politecnico Di Torino
- Environment Park

##### *Energy experts, service providers, representative of Industrial sector:*

- ENEA - Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile
- Services providers for Municipalities



#### 4.3.6 Timeframe

Duration of the action: 1 year (May 2022 - April 2023)

- May 2022 – Fine tuning of the process to monitor of the impacts of existing renovated buildings best practices funded by the European Regional Development Fund 2014/2020, such as list the beneficiaries involved, specific format and deadlines for the collection of data, definition of specific calendar and numbers of workshops, definition of a sample for implementation of SECAP, selection of experts to be involved, etc.
- June-November 2022 – Collecting data from renovated buildings in the Regions funded by ERDF 2014-2020
- June 2022 – April 2023: organization of workshops in order to disseminate good practices, impacts achieved and future planning
- September – November 2022: Define a procedure to set the renovation plan for public authorities
- December 2022 - Develop a project sheet for Sustainable Energy and Climate Action Plans
- Activities to be carried out on a regular basis: Update of Piedmont Region institutional website; maintaining close connection with regional stakeholders' group in order to receive specialized feedback from experts in the field.

#### 4.3.7 Costs

Costs related to the implementation of the action: 1 year Staff costs – Piedmont Region Staff costs and dissemination activities related costs.

#### 4.3.8 Funding sources

For the implementation of the action, the Region will use its internal budget.

## 4.4 ACTION 2

### PROMOTION OF RENEWABLE ENERGY COMMUNITY IN THE PIEMONTE REGION.

#### 4.4.1 Background and Source of Inspiration

Here below a synthesis of some good practices shared by SHREC project partners during thematic seminars and interactive workshops that have inspired this action.

All these experiences gave the opportunity to analyse the feasibility of new methods, technology and business model to allow the local production and consumption of renewable energy and to the set-up and manage local energy cooperative and communities.

##### *Groningen, Netherlands (Nederland) (LP)*

- Groningen Seaports: Groningen Seaports stimulates renewable energy production for consumption by the industry in the ports.
- Grunneger Power: Grunneger Power is a local energy cooperative that has over 1000 members in the city of Groningen and neighboring villages, where it develops i.e. solar parks.
- Energie VanOns: Energie VanOns buys locally produced energy from local cooperatives and sells it to small end users.

##### *Centru, Romania (România) (PP4)*

- Bioenergy Villages (BioVill) – Increasing the Market Uptake of Sustainable Bioenergy: The project fosters the development of the bioenergy sector in selected target countries by strengthening the role of locally produced biomass.

##### *Auvergne, France (PP7)*

- A Community Mobile Wood Boiler In Mazet-Saint-Voy: Supply the commune of Mazet-Saint-Voy with renewable heat by mobilizing citizens' savings and the ADEME heat fund.
- Firewood district heating project in Sassenage: Community project supplying six municipal buildings with renewable heat

##### *Mellersta Norrland, Sweden (Sverige) (PP8)*

- Supply six communal buildings, 57 collective housing units, five individual houses and the offices of two businesses with renewable heating.

##### *Stakeholder's meeting - December 15th, 2021*

Samsø Energy Academy – experience of the Danish island of Samsø known as Denmark's Renewable Energy Island. The vision started from a competition by the Danish government to decide which island in Denmark – through the use of approved technology, broad popular support, and existing legislation – could become self-sufficient in the use of renewable energy within 10 years. The venture started in 1997 and was successful by 2007. With 11 onshore wind turbines and 10 offshore, Samsø has created a surplus of electricity which is supplemented by biogas and solar facilities.

Today, Samsø produces more energy than it uses. In order to become sustainable, it is important to invest in capacity building in order to teach people how to be sustainable. Very often energy transition is about big companies, while leaving common people apart. In the island of Samsø a common sense of belonging was created, this opened the road for further development of initiatives and projects.

*Modragon/ Arrasate site visit organized by PP6 Mondragon City Council from 27 to 29<sup>th</sup> May 2022*

### DEBAGOIENA 2030 - D2030 a Sustainable Development Network

Debagoiena 2030 initiative is a Sustainable Development Network in Debagoiena Valley (basque region) to activate the next transformation in one of the most productive and industrialized valleys of Spain (Per capita income: 25% above Spain; Industry Key areas: Automation sector, machine tool, electronics and telecom, r&d&i). the network can count on several public and private Agents Promoters, including the Municipality of Arrasate (partner in Shrec project) and it is based on the four-helix approach since it groups in a unique network the following institutions and partners: Public institution, Civil Society, Cooperatives, economic Agents, Private Sector and Educational stakeholders.

Debagoiena 2030 Vision: To achieve a smart, inclusive and climate-neutral Debagoiena by 2050 by deepening the community development of the region.

Debagoiena 2030 Mission: to promote a transformation movement with a community response to the global challenges of the 21<sup>st</sup> century, establishing connections between agents and citizens, influencing the world-view and the values of people, and promoting innovative initiatives and projects that have a relevant impact on the region.

Debagoiena 2030 Opportunity Areas: -Future of Work; -Energy; -Mobility; -Food; -Education; -Circular economy; -Inclusion; -Community empowerment and participation (Movement generation). 5 main pillars of D2030 model: 1) Communication, 2) Governance, 3) Evaluation & Learnings, 4) Networking, 5) Funding.

Here below some initiatives and energy related projects promoted by Debagoiena 2030 that were analyzed as a reference for this Action plan.

- 1) Model, test and measure results of a low-cost solution to improve the energy efficiency of homes, improve domestic comfort and reduce the CO2 footprint. (Especially for families with fewer resources.) Objective: •Prototyping and testament of the solution to housing rehabilitation •Improve home comfort.
- 2) Identify the ordinances and regulations that may be an obstacle to the development of the energy transition in each municipality and work among all the municipalities of the region. Objective: •Contribute to the expansion of renewable energy by identifying potential obstacles in regulations. •Disseminate and apply regulations that contribute to the expansion of renewable energies at the regional level.
- 3) Design an integrated solution for the integration of social inclusion in the energy field and the improvement of living conditions in public-private (based on the knowledge and

actions of each agent). Also that the designed solution arrives, at least, to piloting a town hall.

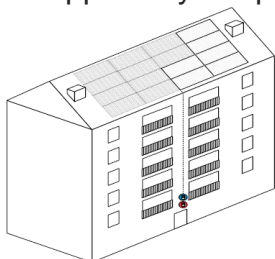
4) Publicize different models in terms of local energy creation in the region. Strengthen them and take advantage of the synergies that can occur. Here below some projects

- Ekiola(Leintz):Arrasate, Aretxabaleta,Eskoriatza,Leintz-Gatzaga
- Energy community: Bergara
- Municipal shared self-compsution: Elgeta
- Shared self-comsuption: Antzuola
- Shared self-comsuption: Oñati
- Shared self-comsuption: Arrasate (Gelma)

#### Energy Communities pilots: Initiative of “Etxean Arrasaten-GIDA” photovoltaic installation

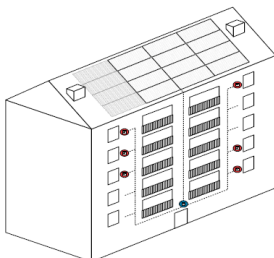
The initiative FV\_Etxean seeks to promote the implementation of energy generation facilities from renewable sources in homes in Arrasate. First, an information campaign was proposed, to try to raise awareness, but also to show citizens practical itineraries on the generation and use of renewable energy in homes.

Option 1) Photovoltaic installations for condominium common services. Part of the energy consumed by the neighbor's community (elevator, stair lights, garage...) would be supplied by the photovoltaic panels installed on the roof.



*Figure 5 – option 1*

Option 2) Photovoltaic installations for particular homes. Part of the energy consumed by some neighbors in their homes were supplied by photovoltaic panels installed on the roof of the building, as long as the neighbors would allow it. The surface occupied by the installation is proportional to the share that each member has.



*Figure 6 – option 2*

#### 4.4.2 Action

With the Directive for the promotion of renewable sources n. 2018/2001 (RED II) the “Renewable Energy Communities” concept have been introduced in the EU legislative framework.

There are several reasons behind the development of such concepts. Energy communities can help citizens and local authorities invest in renewables and energy efficiency. The participation of citizens in renewable energy projects may also overcome social acceptance at the local level. Community-owned projects allow citizens to finance sustainable energy investments that deliver local economic benefits, social cohesion, and other priorities such as improving the energy efficiency of housing or reducing energy poverty.

An increasing number of local authorities are encouraging and supporting the active role of citizens and local communities in the energy transition of regional territories to ensure benefits for all relevant actors.

Designing adequate public interventions at the local level is key but there is no one-size-fits-all solution to trigger the creation of energy communities locally. The level of public participation and the type of actions required vary significantly depending on the specific context of each city and town. There is also a need to strengthen the technical and financial capacities of local actors to support citizen-led initiatives in the field of energy.

For small and citizen-led actors like energy communities, additional challenges are registered: lack of information, limited access to finance and incentives, difficulties in aggregating small interventions, difficulties in managing the public participation and engagement, and establishing effective governance and decision-making structures. These challenges become concrete barriers for the development and widespread of Energy Communities all over Europe.

Piemonte Region, as a front runner of the initiative, issued the first Italian Law on Renewable Energy Communities (RECs) in 2018 that underlines the role of Local authorities as REC’s promoter and prosumer. According to this Law, several pilot initiatives, such as the Municipality of Barge, Municipality of Villar Pelice, Monviso energy Community association, Valli Maira and Grana Energy Community, ATS pinerolese community, Val Susa and Municipality of Malignano Alpi, have been launched and the SHREC project has played a crucial role in terms of governance for the coordination of such initiatives. In fact, in the framework of SHREC project several stakeholders’ meetings and international thematic seminars and workshops were organized, both to promote the exchange of knowledge among regional and international actors in relation to pilots’ experiences and to capitalize successful initiatives from abroad to be evaluated in the regional territories.

Nowadays, under certain circumstances RECs can benefit of national economic support. The “shared” electricity (equal to the minimum, on an hourly basis, between the electricity fed into the grid by the production plants and the electricity taken from the consumers who are relevant for the configuration) is rewarded for 30 years with an incentive of 110 €/MWh. The adoption of the RE Directive in the national legislative framework (D.lgs 199/2021) opened the way for further development of the RECs, allowing for wider

aggregations and more power installed. This enables market conditions for attracting private investments. As a matter of fact, several municipalities are receiving economic offer to join/develop a REC. Most of these offers are based on financial and economic strategies that are not maximizing the potential social and environmental benefits that the REC should introduce.

Therefore, the main objective of the action 2 is to implement a regional strategy that can guide the decisions of Local Authorities and that support them in the promotion of new REC projects. This strategy will be based on the evaluation of business models that guarantee the economic and financial sustainability of the RECs while tackling the challenges of energy poverty and energy transition. The potential benefits associated with the launch of a REC should be guided as much as possible by public sector also to guarantee the support of most vulnerable side of civil society. The regional strategy and related sustainable business plans should influence the management of grants and financial resources that the Region is going to manage for the current programming period (ERDF 2021-2027).

Moreover, the Region could involve in the process some investors and financial partners, such as foundations and banks, to allocate some additional funds to give non-repayable grants to interested municipalities for the implementation of Energy community.

The instruments elaborated by the Region, while developing the abovementioned strategy, will be available on dedicated section of website and will be diffused among all municipalities of the Region, also exploring synergies with the Covenant of Mayor Initiative, where the Piemonte Region acts as territorial coordinator.

#### 4.4.3 Sub-actions

Here below a list of indicative sub-activities of the action:

1. Define strategic alliances with key stakeholders for the development of sound business cases for the promotion of public lead Renewable Energy Communities (Research Institutes, DSOs, Bank Foundations, etc ..)
2. Implement a market analysis on the existing REC business cases
3. Develop business cases for the promotion of public lead Renewable Energy Communities that incorporates technical, economic, financial, environmental and social aspects
4. Elaboration of a guideline addressing Municipalities willing to promote the RECs in its locality. This can be implemented in synergies with the Covenant of Mayors Initiative
5. Coordinate the evolution of public lead REC project in the Region and Collect data from existing RECs
6. Organization of promotional and dissemination actions

#### 4.4.4 Relevance

Type 1: implementation of new projects

Action 2 is consistent the majority of objectives concerning energy sector identified in Piedmont Region ROP ERDF 2021-2027 (under preparation) and National Partnership Agreement (PA) for Cohesion policy programme 2021 – 2027.

The Piedmont Region ROP ERDF 2021-2027 is under definition at regional level, following the National Partnership Agreement (PA) with Eu commission. At Regional level is nowadays available The Unique Strategy Document (DSU) for the EU programming Period 2021-27

[<https://www.regione.piemonte.it/web/sites/default/files/media/documenti/2021-09/DSU%20STRADEF%209%20luglio%202021.pdf>].

Both Instruments, national PA and DSU, include specific objectives on Energy efficiency and Energy Community. Concerning National Partnership Agreement (Energy Specific Objective 2.I,2.II, 2.III), in relation to renewable energy support, is stated that the diffusion of heating districts and the creation of energy communities should be encouraged, to enhance benefits on environmental, economic and social local levels. The priority is to promote energy efficiency and the development of renewable sources, by encouraging public private partnerships initiatives, energy performance contracts involving ESCO and / or using financial instruments. DSU guidelines clearly states that concerning the production of renewable energy will be supported activities in favor of systems based on self-consumption and the creation of energy community of local authorities (municipalities and their forms associative) and private individuals, also in association. Moreover, concerning Rural development, will be supported activities favoring the construction of sustainable and local energy chains, based on waste, effluents and biomass, and energy communities' constitution, within regional farms, also with participatory methods and investments.

This action constitutes a clear thread between the present Action Plan and the new programming period both on National and Regional Level, since it promotes new measures and projects that favor the diffusion and economic sustainability of Energy Communities among Piedmont Region Municipalities.

Moreover, this action is also in line with:

- Strategic approach of Regional Environmental Energy Planning (PEAR)
- PNRR (national recovery and resilience plan) that allocates 2.2 billion euros to support energy communities in municipalities with fewer than 5,000 inhabitants.
- EU Energy Efficiency initiatives of adaptations and mitigations promoted by the Covenant of Mayors initiatives and with the
- RED II (Renewable Energy Directive II) transposition on National law.

#### 4.4.5 Players and stakeholders involved

##### *Regional Authorities*

- Piedmont Region Managing Authority ROP ERDF 2021-2027 – Competitiveness of the Regional System Department. Role: coordination of overall regional activities.

- Piedmont Region – Environment, Energy and Territory Department: endorsement to this Action Plan and responsible of policy instrument improvement in relation to Sustainable Energy measures.

#### *Local Authorities*

- Municipalities of the Piedmont Region
- Anci and Uncem regionale
- Covenant of Mayors representative: support of the SECAP coordinator in the upgrading and monitoring of interested SECAPs

#### *Research Centres and Universities: Role scientific partners*

- Politecnico Di Torino - Energy Center Lab
- Environment Park

#### *Energy experts, service providers, representative of Industrial sector:*

- ENEA - Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile
- GSE – Gestore dei Servizi Energetici
- RSE – Ricerca Sistema Energetico
- DSOs – Distributor System Operators
- Service providers of Municipalities

#### 4.4.6 Timeframe

Duration of the action: 1 year (May 2022 - April 2023)

- May – June 2022: Definition of strategic alliances with key stakeholders for the development of sound business cases for the promotion of public lead Renewable Energy Communities (Research Institutes, DSOs, Bank Foundations, etc...)
- June 2022: Implementation of a market analysis on the existing REC business cases
- June – September 2022: Development of business cases for the promotion of public lead Renewable Energy Communities that incorporates technical, economic, financial, environmental and social aspects
- September 2022 – October 2022: Elaboration of a guideline for an action that would address the activity of a Municipality willing to promote the RECs in its locality. This can be implemented in synergies with the Covenant of Mayors Initiative
- May 2022 – April 2023: Coordination of the evolution of public lead REC projects in the Region and Collect data from existing RECs
- May 2022 – April 2023: Organization of promotional and dissemination actions

#### 4.4.7 Costs

Costs related to the implementation of the action: Staff costs – Piedmont Region Staff costs – 1 FTE for 1 year (technical position) and 1 external expert (economic modelling and energy efficiency and procedure experience)



#### 4.4.8 Indicative Funding Sources

For the implementation of the action, the Region will use internal budget that will be used to influence the use of Structural Funds.

## 5. Roadmap for Actions Implementation

Here below a roadmap for the implementation of actions 1 and 2, including deadlines, the responsible of action implementation and milestones. This roadmap together with the Gantt chart (following chapter) will be used for the monitoring phase of Action Plan in Phase2 of the project implementation.

### **ACTION 1**

Table 3 List of sub-activities, deadline, responsible and milestone for action 1

Sub-activities	Deadline	Responsible	milestone
<b>Fine tuning of the process to monitor of the impacts of existing renovated buildings best practices funded by the European Regional Development Fund 2014/2020</b>	May 2022	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M1 - Detailed workplan of the action
<b>Collecting data from renovated buildings</b>	November 2022	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M2 – mapping of data (data sheet)
<b>Organization of workshops in order to disseminate good practices, impacts achieved and future planning</b>	April 2023	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M3 - Organization of at least 3 workshop (1 each 4 months)
<b>Define a procedure to set the renovation plan for public authorities</b>	November 2022	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M4 - Detailed procedure for the renovation plan
<b>Develop a project sheet for Sustainable Energy and climate Action Plans</b>	December 2022	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M5 - Sample to be included in the Sustainable Energy and climate Action Plans update and monitoring process
<b>Activities to be carried out on a regular basis: Update of Piedmont Region institutional website; maintaining close connection with regional stakeholders' group in order to receive specialized feedback from experts in the field.</b>	May 2023	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> <li>Web master of Piedmont region</li> </ul>	M6 - Update of the Piedmont region Website, at least 3 times (1 each 4 months)

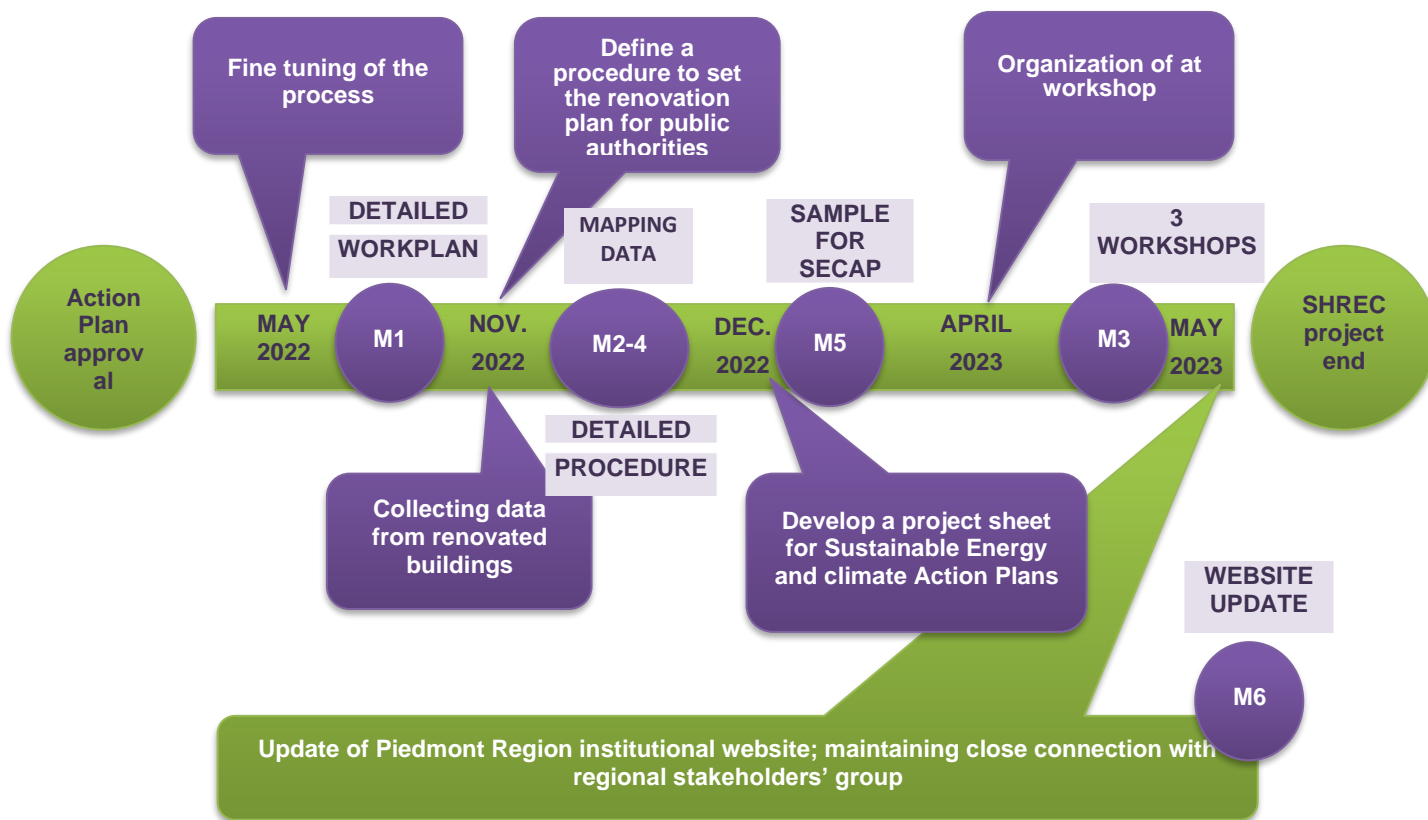


Figure 7 – Road map of Action 2 implementation in SHREC phase 2

## ACTION 2

Table 4 List of sub-activities, deadline, responsible and milestone for action 2

Sub-activities	Deadline	Responsible	milestone
<b>Definition of strategic alliances with key stakeholders for the development of sound business cases for the promotion of public lead Renewable Energy Communities (Research Institutes, DSOs, Bank Foundations, etc...)</b>	June 2022	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M1 - At least 3 strategic alliances agreed
<b>Implementation of a market analysis on the existing REC business cases</b>	June 2022	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> <li>1 external expert</li> </ul>	M2 - 1 market analysis
<b>Development business cases for the promotion of public lead Renewable Energy Communities that incorporates technical, economic, financial, environmental and social aspects</b>	September 2022	<ul style="list-style-type: none"> <li>1 external expert</li> </ul>	M3 - At least 3 business cases developed
<b>Elaboration of a guideline for an action that would address the activity of a Municipality willing to promote the RECs in its locality. This can be implemented in synergies with the Covenant of Mayors Initiative</b>	October 2022	<ul style="list-style-type: none"> <li>1 external expert supported by the staff of the Region</li> </ul>	M4 - 1 guideline elaborated
<b>Coordination of the evolution of public lead REC project in the Region and Collect data from existing RECs</b>	April 2023	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> <li>1 external expert</li> </ul>	M5 - 1 mapping of data
<b>Organization of promotional and dissemination actions</b>	May 2023	<ul style="list-style-type: none"> <li>Piedmont Region Staff – 1 technical position</li> </ul>	M6 - At least 3 activities of disseminations organized

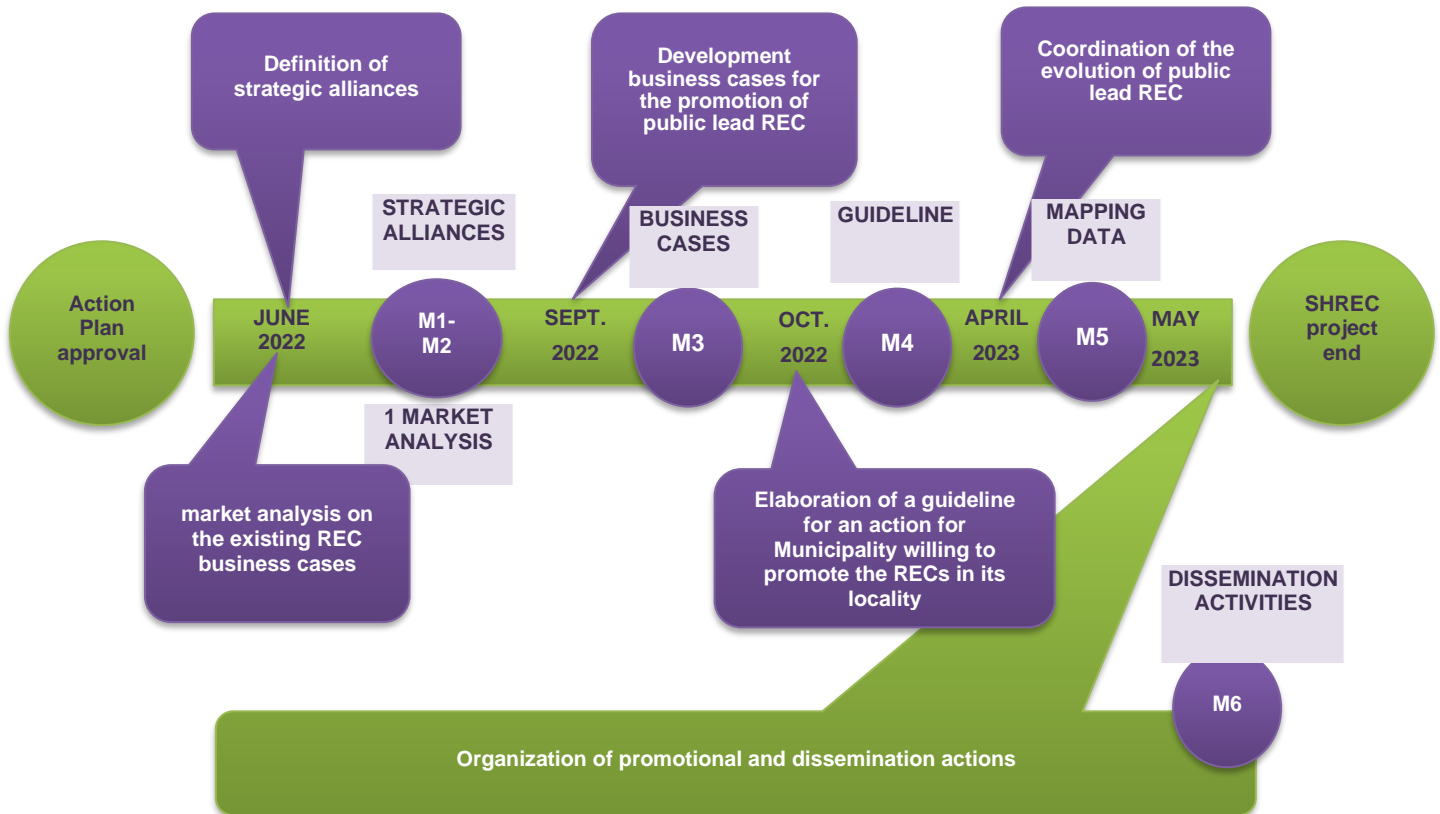


Figure 8 – Road map of Action 2 implementation in SHREC phase 2

## 6. Gantt chart

POLICY INSTRUMENTS ADDRESSED														
ACTION 1 Piemonte Region - Regional Operational Programme (POR) ERDF 2014-2020, priority axis IV- Sustainable Energy and quality of life.														
ACTION 2 Unique Strategy Document (DSU) for the EU programming Period 2021-27 (updated version sep.2021). Policy objective 2 - greener piedmont: climate and energy, natural resources and circular economy														
Actions	sub-activities	Months												
		05/22	06/22	07/22	08/22	09/22	10/22	11/22	12/22	01/22	02/22	03/22	04/22	05/22
1. PROMOTION OF GOOD PRACTICES CO-FINANCED WITH THE ERDF 2014/2020 AND FURTHER DEPLOYMENT OF INVESTMENTS IN ENERGY EFFICIENCY IN THE PUBLIC SECTOR	Fine tuning of the process													
	Collecting data from renovated buildings													
	Organization of workshops in order to disseminate good practices, impacts achieved and future planning													
	Definition of a procedure to set the renovation plan for public authorities													
	Development of a project sheet for Sustainable Energy Action Plans													
	Activities to be carried out on a regular basis: Update of Piedmont Region institutional website; maintaining close connection with regional stakeholders' group in order to receive specialized feedback from experts in the field.													
2. PROMOTION OF RENEWABLE ENERGY COMMUNITY IN THE PIEMONTE REGION.	Definition of strategic alliances with key stakeholders for the development of sound business cases for the promotion of public lead Renewable Energy Communities (Research Institutes, DSOs, Bank Foundations, etc...)													
	Implementation of a market analysis on the existing REC business cases													
	Development of business cases for the promotion of public lead Renewable Energy Communities that incorporates technical, economic, financial, environmental and social aspects													

POLICY INSTRUMENTS ADDRESSED														
ACTION 1 Piemonte Region - Regional Operational Programme (POR) ERDF 2014-2020, priority axis IV- Sustainable Energy and quality of life.														
ACTION 2 Unique Strategy Document (DSU) for the EU programming Period 2021-27 (updated version sep.2021). Policy objective 2 - greener piedmont: climate and energy, natural resources and circular economy														
Actions	sub-activities	Months												
		05/22	06/22	07/22	08/22	09/22	10/22	11/22	12/22	01/22	02/22	03/22	04/22	05/22
	Elaboration of a guideline for an action that would address the activity of a Municipality willing to promote the RECs in its locality. This can be implemented in synergies with the Covenant of Mayors Initiative													
	Coordination of the evolution of public lead REC project in the Region and Collect data from existing RECs													
	Organization of promotional and dissemination actions													

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- IN-DEPTH ANALYSIS IN SUPPORT OF THE COMMISSION COMMUNICATION COM (2018) 773, **A Clean Planet for all A Europeans** long-term strategic vision for a prosperous, modern, competitive and climate neutral economy, European Commission, Brussels 2018
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Stefania Crotta

Director of Environment, Energy and Territory Department

Date: \_\_\_\_\_

Signature: \_\_\_\_\_