



# PINEROLO

## Investment Project and corresponding activities

*Stefano Dotta*  
*15/04/2021*

Lead applicat:

Municipality of Pinerolo – 35,970 (population) - SECAP (2020-09-23) - Sustainable Urban Mobility Plan (SUMP)

Group:

Municipality of None – 8,009 (population) – SEAP (2012-11-26)

Municipality of Pomaretto – 998 (population) – SEAP (2012-09-24 / 2015-11-25)

From 2019 the three Municipalities are part of the first italian OIL FREE ZONE

Main objective of the Investment Project is to define IC for:

Energy efficiency in public buildings and street lighting

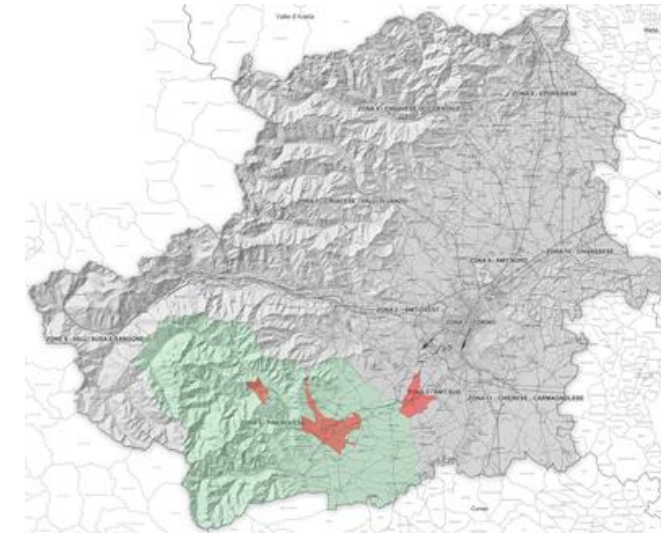
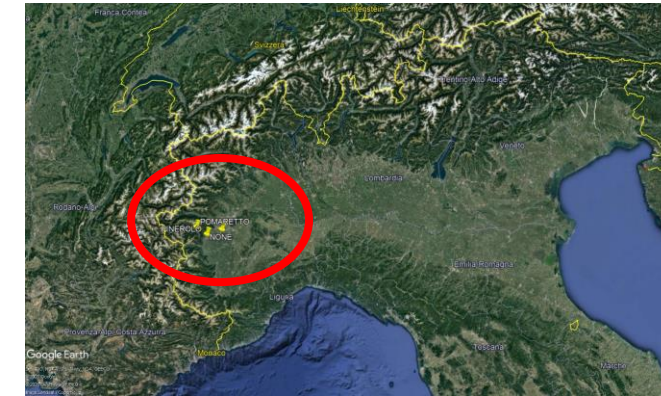
- Energy refurbishment (optimization and replacement) of 48 public buildings (38 Pinerolo – 10 None) mobilizing private investment through the implementation of EPC – bundling approach
- Replacement of obsolete lighting lamps with efficient (475 None) mobilizing private or public investment

Renewable Energy Source

- New Installation of building integrated PV systems (450 kWp Pinerolo – 60kWp None)
- New Installation of hydroelectric power plant in the aqueduct grid (21 kWp Pomaretto)

Sustainable Urban Mobility

- Replacement of urban public transport vehicles from diesel to electric, new installation of electric charging stations, expansion of bicycle network (new installation and optimization)



## Expected impacts of the investment project

Investment	RE generation (GWh/y)	Energy Savings (GWh/y)	Estimated cost (M€)
Buildings energy refurbishment		3.23	8.500
Buildings relamping		0.67	
Buildings integrated PV	0.64		0.765
Hydroelectric power plant	0.18		0.400
Energy efficiency of the public street lighting		0.14	0.119
Sustainable urban mobility		4.56	4.500
Total	0.82	8.60	14.284
	9.42		

## Planned activities for IC development

On going activities funding directly by the municipality of Pinerolo



- **Energy Management**
  - Monitoring of energy consumption
  - Monitoring of RES production
  - Monitoring of O&M service
  - Monitoring of Energy and O&M cost

- **Energy Audit of public buildings and street lighting to define:**
  - Energy saving potential
  - Energy efficiency measures
  - RES production
- **Economic analysis to define:**
  - Investment
  - Subsidy
  - Revenue
  - Economic indicators (SPT, NPV, IRR, DSCR)
  - Duration of EPC, Value of fee, economic savings
- **Legal analysis to define the most effective public procurement procedure to implement EPC and select ESCo**
- **Meetings with:**
  - Market operator (Companies, ESCos, Utilities) with the aim to assessing the interest of the market
  - Citizens with the aim to define investment in EE and RES useful to improve the functioning of public services and the implementation of Energy Communities
  - Banks and local financing institution

EUCF grant

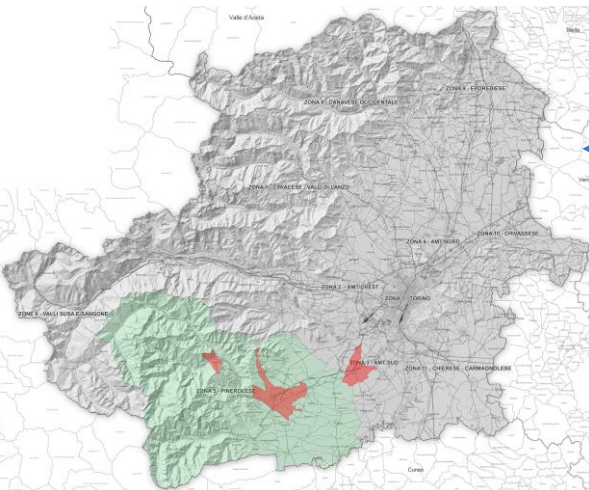
External Experts in Project Development Assistance (PDA)

Legal Expert in Energy Performance Contract, Public Private Partnership and Public Procurement



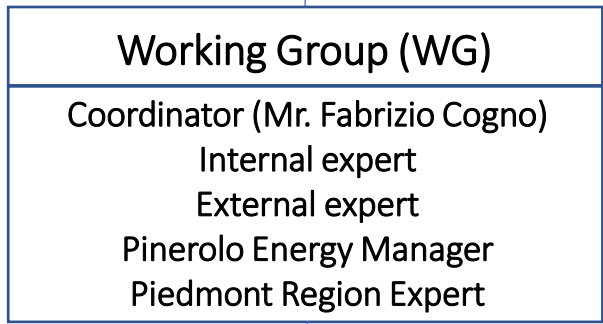
**Governance**

supported by



connected to

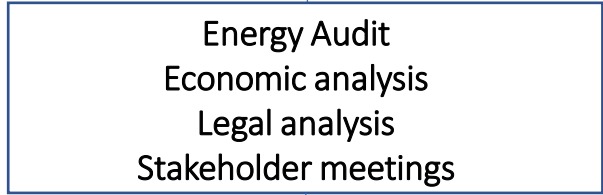
**Pinerolese**  
45 municipalities led by Pinerolo  
homogeneous territorial area in Piedmont Region and Metropolitan City of Turin  
28 of them are part of OIL FREE ZONE  
6 of them are part of an territorial energy community led by Scalenghe



report to



report to



replication up scaling





## Envisaged financing sources for IC implementation

### Public/Private investment thanks to previous experiences

- All three municipalities have experiences in using public investment ( ERDF managed by Piedmont Region, “Conto termico” a national scheme of support (a grant) for small-scale projects to improve thermal energy efficiency and to promote thermal energy from renewables)
- PPP for energy efficiency in street lighting (Pinerolo)
- EPC for public building and street lighting (Regione Piemonte – PDA project)

EPC tender for all public buildings (baseline cost 1,3 M€/y Pinerolo + None)

PPP/EPC or ERDF fund for street lighting

National Subsidy for RES implementing REC

PPP for electric charging stations grid

## First steps for IC development

1) Signing of Grant Agreement

First month

1) Tender to select external experts

2) Involvement of Piedmont Region and establishment of the Working Group (WG), Technical Committee (TC), Advisory Committee (TC)

Second month

Energy Audit....



Thank!

[stefano.dotta@envipark.com](mailto:stefano.dotta@envipark.com)

+390112257536