

Status-Quo Assessment Report



Livorno Province, Lead Partner

Date, 23 February 2024
Rev. 1

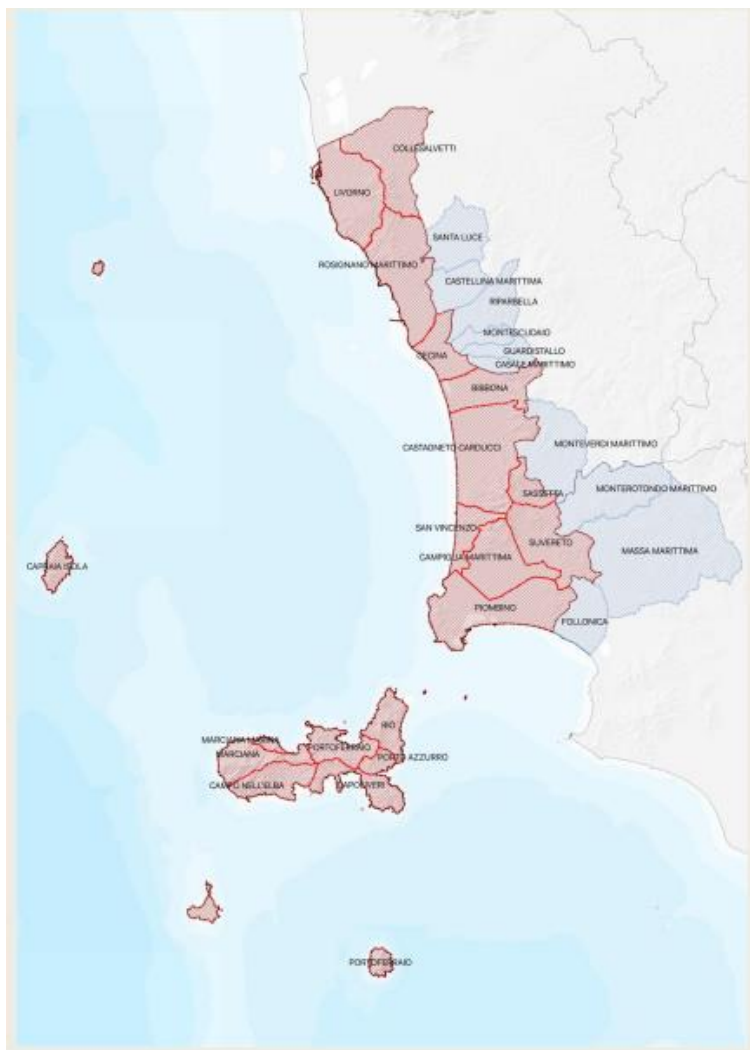
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1. General description of your Region and its Demography

1.1 Land area by type

The Province of Livorno has a territorial extension of 1213.72 km² which stretches along the Tuscan coast and overlooks the northern part of the Tyrrhenian Sea, and includes the islands of Elba, Gorgona, Pianosa, Capraia and Montecristo, in addition to the municipalities on the mainland.



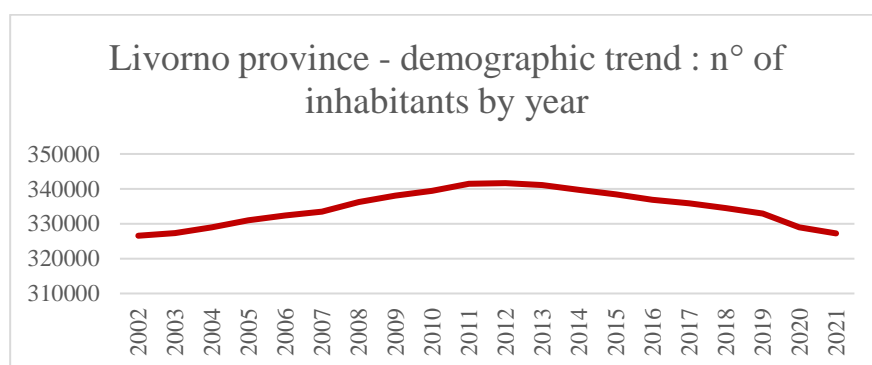
1.2 Population density (including population in urban areas/total)

The Province of Livorno is inhabited by 327,262 residents. It therefore has a population density of 269.64 inhabitants/km², which is higher than the national figure (196.102 inhabitants/km²). The province includes the municipalities of: Bibbona, Campiglia Marittima, Campo nell'Elba, Capoliveri, Capraia Isola, Castagneto Carducci, Cecina, Collesalveti, Livorno, Marciana, Marciana Marina, Piombino, Porto Azzurro, Portoferraio, Rio (created after the merger of the Elban municipalities of Rio nell'Elba and Rio Marina), Rosignano Marittimo, San Vincenzo, Sassetta and Suvereto. Among these, the main settlements in the area are the cities of Livorno (provincial capital, with about 154,483 inhabitants), Piombino (32,304 inhabitants), Rosignano Marittimo (30,072) and Cecina (27,898).

Municipality	Total area (Km ²)	Residents year 2021	Population density (inhabitants per Km ²)
Bibbona	65,68	3.172	48,29
Campiglia Marittima	83,28	12.538	150,55
Campo nell'Elba	55,79	4.706	84,35
Capoliveri	39,56	3.878	98,03
Capraia Isola	19,33	378	19,56
Castagneto Carducci	142,33	8.785	61,72
Cecina	42,52	27.898	656,11
Collesalveti	107,96	16.370	151,63
Livorno	104,50	154.483	1.478,30
Marciana	45,45	2.030	44,66
Marciana Marina	5,86	1.876	320,19
Piombino	129,88	32.304	248,72
Porto Azzurro	13,33	3.640	273,06
Portoferraio	48,48	11.864	244,71
Rio	36,52	3.315	90,77
Rosignano Marittimo	120,82	30.072	248,90
San Vincenzo	33,20	6.498	195,73
Sassetta	26,75	475	17,76
Suvereto	92,47	2.980	32,23
Total Province	1.213,72	327.262	269,64

1.3 Demographic trend

The demographic trend shows a constant decline in inhabitants compared to the previous decade, with the number of residents substantially equal to that recorded in the early 2000s. The demographic drop compared to 2011 is more pronounced than the national figure, since in the Province of Livorno a reduction of 0.04% was recorded, while at a national level the drop was more contained, limited to 0.011%.



Source. Livorno Province SUMP

1.4 Municipalities

The province includes the municipalities of: Bibbona, Campiglia Marittima, Campo nell'Elba, Capoliveri, Capraia Isola, Castagneto Carducci, Cecina, Collesalveti, Livorno, Marciana, Marciana Marina, Piombino, Porto Azzurro, Portoferraio, Rio (created after the merger of the Elban municipalities of Rio nell'Elba and Rio Marina), Rosignano Marittimo, San Vincenzo, Sassetta and Suvereto. Among these, the main settlements in the area are the cities of Livorno (provincial capital, with about 154,483 inhabitants), Piombino (32,304 inhabitants), Rosignano Marittimo (30,072) and Cecina (27,898).

1.5 Sectors of economic activities

The areas most affected by the presence of enterprises are the Livorno area (which includes almost a quarter of the businesses in the entire area of the Maremma and Tyrrhenian Chamber of Commerce), the Val di Cecina area, followed by the Colline Metallifere area, and finally the Archipelago. As far as the sectors of activity are concerned, the most prevalent is Wholesale and Retail Trade, to which 26.09% of the enterprises belong, followed by the growing sector of Construction (13.9%) and Accommodation and Food Services (11.9%). This last figure reflects the importance of the tourism and catering sector for the area.

The main companies in the province (employing more than 100 people) are located near Livorno (with some of them located between the port and the Collesalvetti pole), Rosignano, Piombino, Campiglia Marittima, along the SP16 between Bibbona and Castagneto Carducci, and Cecina (1 company only). Although in several cases the presence of these companies coincides with urban areas, there are instances located in areas that can be defined as extra-urban, which indicates the presence of poles of attraction, not only of work movements, but also of logistic traffic, in the extra-urban areas of the territory.

2. Regional Factors concerning the theme

The substantial presence of students, the elderly and the foreign population, from statistics available in Livorno Wide Area SUMP (draft) report - makes it necessary to take into account the **mobility needs** of those population groups, who are often unable, for reasons of income and/or demographic status, to use private cars/motorcycles for their travel needs.

2.1 Mobility

2.1.1 Description and data on current private vehicle fleet (non & electric ones) in Italy and in the city/area

The table below summarizes the status of electric vehicles, both public and private, in Italy for the year 2021.

Vehicle typology	E-vehicles registered in 2021		% of e-vehicles registration on total in 2021		E-vehicles circulating in 2021		% of e-vehicles circulating on total in 2021	
	EU**/**	Italy	EU**/**	Italy	EU**/**	Italy	EU**/**	Italy
Passenger car	2.263.495	136.854	19,2%	9,3%	3.501.558	231.421	1,2%	0,6%
Light Duty V.	69.416	3.602	3,5%	2,1%	142.097	9.621	0,4%	0,2%
Heavy Duty V.	1.582	11	0,5%	0,04%	13.801	809	0,2%	0,1%
Bus	3,777	183	10,8%	5,3%	7.472	744	0,9%	0,7%
Motorcycles	n.a.	6.233	n.a.	2,3%	n.a.	17.473	n.a.	0,2%
Motorbikes	n.a.	4.138	n.a.	20,5%	n.a.	n.a.	n.a.	n.a.
Bicycles	n.a.	295.000	n.a.	14,9%	n.a.	n.a.	n.a.	n.a.

(*) Data for EU+EFTA+UK

(**) Data for the year 2020

Table source: Politecnico di Milano "Smart Mobility report", 2022

In the Province of Livorno 205,717 vehicles were registered in 2021 against a population of 327,362. This makes the provincial motorization rate (expressed as the number of vehicles per 1,000 inhabitants) slightly lower than the national figure: 629 against 668. Both the national and provincial figures are, however, higher than the 2020 European average of 567 vehicles per 1,000 inhabitants, thus certifying a high use of private vehicles by the population.

Municipality	Registered vehicles	Motorisation rate
Bibbona	2.252	710,0
Campiglia Marittima	8.953	714,1
Campo nell'Elba	3.401	722,7
Capoliveri	2.817	726,4
Capraia Isola	273	722,2
Castagneto Carducci	5.985	681,3
Cecina	18.321	656,7
Collesalveti	11.100	678,1
Livorno	87.723	567,8
Marciana	1.442	710,3
Marciana Marina	1.217	648,7
Piombino	20.981	649,5
Porto Azzurro	2.511	689,8
Portoferraio	8.837	744,9
Rio	2.415	728,5
Rosignano Marittimo	20.608	685,3
San Vincenzo	4.376	673,4
Sassetta	406	854,7
Suvereto	2.086	700,0
Not defined	13	-
Total for the province	205.717	628,6

Source: A.C.I.

Of the registered vehicles, only 22,407 have a fuel supply other than petrol and diesel, so that only 10.9 per cent of the vehicles use energy sources with a lower environmental impact than 'traditional' vehicle types.

Municipality	Euro 0	Euro 1	Euro 2	Euro 3	Euro 4	Euro 5	Euro 6	Not envisaged	Not defined	
Bibbona	6,39	2,09	5,64	10,88	22,56	18,47	33,66	0,31	0,00	
Campiglia Marittima	7,36	1,60	6,56	10,42	24,03	18,90	31,00	0,08	0,07	
Campo Nell'Elba	6,50	1,38	7,56	12,47	23,90	19,55	28,52	0,12	0,00	
Capoliveri	7,45	2,34	7,74	12,60	23,39	17,00	29,32	0,11	0,04	
Capraia Isola	7,33	4,03	10,26	15,75	25,27	15,02	22,34	0,00	0,00	
Castagneto Carducci	7,97	1,85	6,17	10,66	23,54	18,30	31,28	0,18	0,05	
Cecina	6,23	1,32	4,71	9,99	23,85	18,34	35,35	0,13	0,07	
Collesalveti	5,86	1,20	4,17	8,34	22,28	19,82	38,10	0,21	0,02	
Livorno	5,90	0,93	3,58	7,71	23,44	19,15	39,03	0,17	0,09	
Marciana	7,00	2,08	6,38	9,85	26,14	18,17	30,37	0,00	0,00	
Marciana Marina	6,16	2,14	5,92	10,02	26,05	18,24	31,39	0,08	0,00	
Piombino	7,18	1,63	5,91	10,66	25,61	18,66	30,27	0,06	0,03	
Porto Azzurro	6,89	1,79	6,53	12,50	25,85	18,08	28,12	0,12	0,12	
Portoferraio	7,68	1,86	6,85	11,83	24,78	18,04	28,75	0,15	0,07	
Rio	8,12	2,19	8,20	11,97	25,47	15,86	27,95	0,17	0,08	
Rosignano Marittimo	6,29	1,35	5,04	9,38	24,05	18,96	34,73	0,15	0,05	
San Vincenzo	6,19	1,37	5,71	9,12	23,29	18,83	35,17	0,23	0,09	

Sassetta	23,65	4,68	8,37	9,85	19,46	15,02	18,97	0,00	0,00	
Suvereto	8,53	1,92	8,29	12,66	23,54	17,31	27,56	0,14	0,05	
Not defined	69,23	0,00	7,69	0,00	0,00	15,38	7,69	0,00	0,00	
Total for Livorno	6,46	1,30	4,82	9,21	23,86	18,83	35,31	0,15	0,07	

The phenomenon of a change in vehicle structure with regard to the relevant anti-pollution regulations is quite evident. Between 2017 and 2021, there was in fact a significant increase (129%) in EURO 6 vehicles at the expense of all other categories.

Type of fuel/power	2017	2018	2019	2020	2021	Growth rate
PETROL AND LIQUID GAS	10.490	10.699	11.216	11.497	11.958	14%
PETROL AND NATURAL GAS	5.485	5.404	5.334	4.584	4.338	-21%
ELECTRIC-HYBRID	591	824	-	-	-	-
ELECTRIC	-	-	35	121	302	763%
HYBRID PETROL	-	-	242	2.091	4.448	1738%
HYBRID GAS	-	-	229	492	492	115%
METHANE	-	-	-	702	854	22%

Finally, there is strong growth in some of the main alternative fuel modes (with the exception of petrol/methane vehicles), in particular electric and/or hybrid vehicles.

2.1.2 Description and data on charging infrastructures

At the end of the year 2018 there were **8.200 charging stations** in Italy, both public and private but open to public use (source: Politecnico di Milano "Smart Mobility report", 2019). The territorial distribution among the different regions was not homogeneous, Lombardia being the only region with over 1,000 stations; Lazio, Piedmont, Emilia Romagna, **Tuscany** and Sicily followed. Northern Italy was the area with the highest number of charging stations (51% of total) as well as "fast charge" ones (53%).

Public charging stations were 3.500 with a percentage increase of 23% over the previous year (such a trend is over 10% higher than the European corresponding rate). 20% of the charging stations were of "fast charge" type, which was in line with the European situation. The percentage increase in the number of fast charge stations was much higher than the "normal charge" ones (58% the former, 18% the latter) although absolute numbers were lower.

In Italy, in July 2022 there were 'only' an estimated **250** public access fast and ultra-rapid motorway recharging points, distributed very differently [in the various] across regions (source: Politecnico di Milano "Smart Mobility report", 2022). Refuelling infrastructures for alternative fuels varied little between 2020 and 2021, both in Italy and in Europe. [On the other hand, with regard to private access recharging, by the end of 2021, it is now estimated that there will be more than 15 million recharging points globally, of which about 70% will be installed at home] As for private-access charging, however, it is estimated that there will be more than 15 million charging points globally by the end of 2021, about 70 percent of which will be installed at home, with a strong growth in installations in 2021 in line with the growth of the electric car market. The ratio of home charging points to circulating electric vehicles stands at about 0.7, confirming the importance of private home charging for EV owners. In Italy there is a higher growth rate than globally: the more than **88,000** recharging devices installed in 2021 (+250% year on year, thanks primarily to the Superbonus) increase the installed stock at the end of 2021 to about **130,000 units**.

Considering recharging habits, about 70% of electric vehicle owners have a home recharging point and 9% benefit from it at work, so **only 21% rely exclusively on public recharging** (+14% on the previous year), which is nevertheless used, more or less assiduously, by 72% of the sample, particularly on urban roads (79%, +20% on the previous year), **places of interest** (74%, +11%), **public car parks** (68%, +18%), and extra-urban roads (35%, +16%). Regarding the degree of satisfaction with the public recharging infrastructure, almost 4 out of 10 users believe that it is not completely adequate (down by 6%) and, despite the extensive efforts of operators, that there are areas where it should be more present and characterized by greater power and reliability. The main effort should be concentrated on motorways and "**ultra-fast**" recharging (>100 kW). Above information can provide useful hints for designing energy hubs within the project.

2.2 Energy

2.2.1 Availability of renewable energy in the region. Share of renewable energy source in energy production

Geothermal energy, which is the most peculiar renewable source of Tuscany, satisfies at present 30,7% of Tuscan demand for electrical energy. This source of energy is expected to give crucial support to reach to provide crucial support in meeting the goal of RES maximisation.

In Tuscany 30% of final energy consumption is related to the industry, responsible for the emission of 13 million tons of CO₂ into the atmosphere.

The energy intensity of regional GDP has remained substantially available over the last few years. Just under a third of Tuscany's final energy consumption can be traced back to the transportation system: mobility and in particular road transport significantly contribute to atmospheric pollution, emission of climate-altering gases, and energy consumption at a regional level.

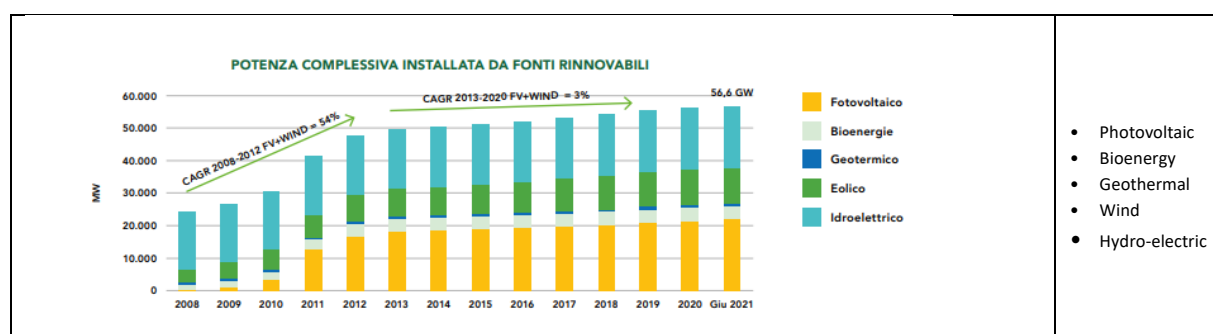
The 2030 Target (Repower-EU) entails that the ratio energy produced from renewable sources / total energy consumption should be 45%, [means for Tuscany region to move] implies for the Tuscany region a significant increase, from the current 19% to 45% in 7 years. In terms of renewables, a 45% target means: 3 GW of additional power (from 2.4 GW to 5.4 GW).

Photovoltaic energy production in Tuscany on 31 December 2022 (source: GSE) is summarised by the following basic indicators¹:

- no. of plants: 64,950 (25% on ground and 75% on roofs)
- surface occupied by ground-mounted plants: 462 hectares (1.82 hectares/MW)
- installed power: 1,016 MW
- total production: 1,067 GWh
- production from self-consumption plants: 654 GWh
- own consumption: 314 GWh
- % internal consumption: 48%.

2.2.2 National and regional energy market structure (e.g. energy production, electricity grids, transport of energy, energy delivery to customers, ownership and operation)

In Italy, renewable energy plays a significant role in energy production. According to the Annual Report of the Ministry of the Environment and Energy Security, more than a third of the electricity produced comes from renewable sources, with hydroelectric energy in the lead, followed by solar photovoltaic, bioenergy, wind and geothermal energy. In 2022, renewable energy in Italy generated over 100 TWh, covering approximately 38.4% of energy demand, with hydroelectric energy as the most widespread source, followed by photovoltaic, wind, bioenergy and geothermal energy. However, according to a global report, Italy is still one of the last in the world when it comes to renewables. The installed capacity of renewable energy plants in Italy now exceeds 56 GW, mainly due to the increase in the last decade of non-programmable sources within the Italian generation park (primarily solar and wind). Installed wind and photovoltaic power has increased from less than 5 GW in 2008 to more than 32.6 GW in 2020, of which about 21.8 GW related to photovoltaic plants and 10.8 GW to wind power plants (see Table below). Table of Installed power capacity from renewable sources (years 2008 to June 2021) ².



¹ Source – ARRR presentation to Promoter initial conference, 29 June 2023.

² Source: Milan Polytechnic - Electricity Market Report 2021

At the end of 2022, the cumulative installed power from photovoltaic systems in Italy exceeded 25 GW, reaching 25,048 MW, with an increase of 165% compared to 2021. During 2022, 205,806 new photovoltaic systems were installed, with a total power of 2,483 MW, a marked increase compared to the 937 MW in 2021. Every year, photovoltaic solar energy in Italy covers approximately 22% of the electricity produced from renewable sources, with an estimated production of over 20 TWh. As of May 31, 2023, all photovoltaic plants in Italy amounted to 1,390,264, with a total capacity of 26,901 MW. At the end of 2021, installed wind power capacity in Italy was 11.1 GW, placing the country sixth in Europe for installed capacity. Wind energy production in the same year was 20.92 TWh. According to 2020 estimates, the installed power from wind farms in Italy has exceeded 11 GW, and it is expected that the installed power can almost double by 2030. Italian wind production represents approximately 9% of national electricity production, with approximately 90% of the plants concentrated in the south of the country. The installed power of bioenergy electricity production plants in Italy is significant, with Lombardy in the lead, followed by Veneto, Emilia-Romagna and Piedmont. At the end of 2022, the total installed power in biogas electricity production plants was 4,093 MW, with Lombardy in the lead with 770 MW. In 2022, bioenergy generated approximately 17 TWh, covering 5.4% of national electricity demand. Bioenergy represents approximately 16% of total generation from renewable sources in Italy. At the end of 2022, the installed power from renewable energy sources in Italy was as follows:

- Photovoltaic Solar Energy: over 25 GW
- Energia Eolica: 11,1 GW
- Hydroelectric Energy: 21,816 MW
- Bioenergy (biogas and bioliquids): 4,093 MW

Energy production from these sources was approximately as follows:

- Photovoltaic Solar Energy: over 20 TWh
- Wind Energy: 20.92 TWh
- Hydroelectric energy: approximately 46 TWh
- Bioenergie: circa 17 TWh

The new European objectives on renewables include increasing the share of renewable energy in final energy consumption to 42.5% by 2030. This objective has been raised compared to the previous objective of 32% set by the 2018 directive. The European Union has also set itself the goal of reducing greenhouse gas emissions by 55% by 2030. In percentage terms, wind and photovoltaic together represent approximately 48.5% of total production, of which photovoltaic contributes 29.8% and wind 6.9%. Hydroelectric energy covers just over 32%, bioenergy 14.4% and geothermal energy 4.6%. These data indicate that Italy is making progress in producing energy from renewable sources, but further effort may be needed to reach the objectives set at European level.

2.2.3 Description of current state of Energy Communities in Italy and the region

Recent studies on Photovoltaics in Italy have revealed a trend of self-production and sharing systems at the local level through Energy Communities. There are **86 Energy Communities (EC)** operating in Italy, 30 of which are active, with another 60 in the process of being activated. They are mapped by Legambiente, which notes them mainly in Piedmont, Veneto, Emilia Romagna and Lombardy.

Extending the concept, there are also the **Sustainable Energy Communities** for self-production, self-consumption and sharing of renewable energy from electrical and thermal sources, which are integrated with larger clean technology plants.

The Province of Livorno is endeavoring to promote the setting up of n. 2 initial ECs, 1 in Elba island and another EC in the mainland.

The Action Plan formulated by Green Community “Arcipelago Toscano” in mid 2022 highlighted the following close relation among ENERGY - BUILDINGS – MOBILITY.

The starting point was recognized as timely: the search for energy efficiency of the individual building/structure and the production of energy from local RES, in order to optimise self-consumption. Included here are the efficiency upgrades of public lighting systems. These systems are included in CERs (Renewable Energy Communities) centered on the different municipalities and municipalities participating in the G.C.

The production of RES (and the efficient use of local resources) shall be directly connected to the sustainable mobility network: a land - sea - air transport network that, by exploiting interchange nodes and electric recharging hubs, allows not only the simultaneous use of the energy produced, but also the storage (energy accumulation) of the surplus in the electric vehicles that will thus benefit from the system.

Energy efficiency and its rational use is also dedicated to the efficiency of facilities such as: accommodation facilities, municipal and institutional buildings, marinas, farms, public lighting.

It is precisely tourism as an important resource of the Tuscan Archipelago that causes energy shortages in certain annual periods (summer). The electrification of consumption and transport (aimed at reducing the environmental impact) will have to be developed in parallel with the development of RES and the management of a network of recharging stations (a fundamental element for the transition). The application of mooring devices that enable energy recovery can contribute to the direct **metamorphosis of tourism dynamics**. This same technology can also be applied in the context of marinas, for the electrification of docks or in ad hoc offshore constructions for the optimisation of electricity. These possible applications and

interventions can be, if of interest to the territory, eventually planned with the relevant stakeholders and authorities (e.g. Port Authority, Park Authority, etc.).

2.3 Infrastructures as potential hubs

2.3.1 LOCATION OF SERVICES AND POLES OF ATTRACTION

2.3.1.1. LOCATION OF HIGHER EDUCATION INSTITUTIONS

Name	Address	Municipality	Enrolled students
Mag. "Palli"+ L.C. "Niccolini	via E. Rossi, 6	Livorno	635
"Enriques"	via della Bassata, 19/21	Livorno	1.335
"Cecioni"	via Galilei, 58	Livorno	1.959
I.T.C. " Vespucci" + I.P.S.C.T. "Colombo"	via Chiarini, 1	Livorno	1.395
ITG "Buontalenti+ ITN "Cappellini"+ I.P.S.I.A."Orlando"	via E. Zola, 6b	Livorno	674
"Galilei"	via Galilei, 66	Livorno	1.834
IPSCT "Polo" (con sez. ass. I.T.C."Cattaneo")	via Montesanto, 1	Cecina	902
ITI "Mattei+ IPSCT "Alberghiero"+ I.P.S.I.A.Solvay	via della Repubblica n.16	Rosignano Marittimo	1.041
"Fermi" (con sez. Liceo Classico e Ist. Mag.)	Via Ambrogi	Cecina	1.454
I.T.C. "Einaudi" + I.P.S.C.T. "Ceccherelli"	viale Michelangelo, 16/b	Piombino	605
LIC"Carducci" +IPSIA "Volta" + ITI Pacinotti	via della Pace 27/29	Piombino	1.095
L.C."Foresi" + sez.ass. L.S.+ IPSIA "Brignetti"	via C. Bini, 4	Portoferraio	736
"Cerboni"	Piazzale A.R. Buttafuoco,1	Portoferraio	474
ITC Attias	Via Marradi, n.132	Livorno	93
Liceo Linguistico Parini	Via Petrarca,5	Cecina	45
Liceo Linguistico Leon Battista Alberti	Via A. Pertini,25	Piombino	22
Liceo Linguistico Leon Battista Alberti	Via A. Pertini,26	Piombino	42
Liceo scient.ad indirizzo sportivo Gemelli 2.0	Via Mazzini,11	Cecina	-

The leading secondary schools are located in the main urban centres of the province: Livorno, Rosignano, Cecina, Piombino and Portoferraio. These institutes also indicate the number of pupils enrolled.

Given the concentration of schools on the coastal strip and in the most populated areas, it can therefore be said that these centres play a key role in attracting the demand for mobility of students living in the non-urbanised areas of the province.

2.3.2. Buildings and other premises (public)

2.3.2.1 HOSPITAL CENTRES

The main provincial hospital centres are listed below and for each one the main areas from which they attract users/patients are specified, excluding the municipalities in which they are located. The need to travel to the health centres was reported by the provincial municipalities and the municipalities belonging to the neighboring non-provincial inland areas.

- 1) Cecina Hospital: Attracts users from the municipality of Santa Luce (PI)
- 2) Livorno Hospital: attracts users from the Municipality of Marciana Marina, Rio, Campo nell'Elba
- 3) Portoferraio Hospital: Attracts users from the municipality of Marciana Marina
- 4) Piombino Hospital: attracts users from the municipality of Marciana Marina, from Rio
- 5) Portoferraio Hospital: attracts users from the municipality of Rio, from Campo nell'Elba

2.3.2.2 OTHER PUBLIC BUILDINGS

Partial information - coming from Green Community "Costa degli Etruschi" survey carried out in mid-2023 - provide an updated representation of buildings which could potentially support energy-related initiatives. See Annex 2.

2.3.3. Buildings and other premises (private)

Such potential set of infrastructures could be potentially strengthened /enlarged by the availability of privately owned buildings and other infrastructures such as commercial centers, industrial premises, parking areas, tourism-related units such as campings, hotels etc.

2.3.4. Open areas

Similar information coming from Green Community “Costa degli Etruschi” survey carried out in mid-2023 provide an updated representation of open areas which could potentially support energy-related initiatives.

Bibbona	4	Campo sportivo	160	
Bibbona	5	Aree adibite a parcheggio (in prossimità sede comunale)		1200
Bibbona	7	Aree adibite a parcheggio (in prossimità campeggio comunale)		5800
Campiglia Marittima	13	Campo sportivo	680	1400
Castellina Marittima	7	Campo sportivo	200	700
Cecina	4	Campo sportivo (complesso)	1844	10314
Guardistallo	10	Aree adibite a parcheggio		270
Riparbella	4	Campo sportivo	161	3000
Riparbella	1b	Terreni, Aree boschive, ecc.		578 ettari
San Vincenzo	9	Campo sportivo	900	
San Vincenzo	11	Campo sportivo	182	
San Vincenzo	12	Campo sportivo		
San Vincenzo	13	Campo sportivo	180	
San Vincenzo	14	Campo sportivo	508	
San Vincenzo	15	Campo sportivo	47	
San Vincenzo	16	Campo sportivo	60	

3. Stakeholders

The stakeholders originally listed in PROMOTER project Application Form were:

1. Tuscany Region, Department of Infrastructure and Transport
2. Municipality of Castagneto Carducci, head of Green Community Ambito Costa degli Etruschi (15 municipalities)
3. Municipality of Portoferraio, head of Green Community Arcipelago Toscano (8 municipalities)

The list, beside the regional authority, basically covers the main public institutions in the provincial territory plus some additional (external) municipalities included in the local public mobility network.

Other relevant stakeholders can be added, namely:

4. Local public authorities, on individual basis, with their departments of Energy, Mobility and Transport
5. Territorial development agencies and NGOs
6. Transport companies in the different sub-sectors (public and private)
7. Energy producers/distributors/consumers, in particular any already structured energy communities
8. Banking/financial institutions potentially able to support policy improvement actions
9. TCI service providers
10. Institutions engaged in mobility and green energy R&D
11. Sectoral and general media

The Working Tables set for the formulation of the Wide Area SUMP appears, in turn, the ideal setting for PROMOTER Stakeholder Table as well.

Describe strategies for their mobilization and ongoing involvement in the project Phases 1 & 2

Local players have a strategic role in a successful implementation of Phase 1 and 2, provided that they are involved in all main activities both joint and local. They can assist in expressing the partner’s demand for externally-originating experiences

to help filling up the gap between the present conditions and the targeted ones in the various fields. In return, they can help documenting local experiences of potential interest and benefit to other partners.

Their participation to the planned study visits and workshops will constitute a significant opportunity for their competence building. During Phase 1 they can sponsor and facilitate the formulation of specific actions where they can propose themselves as possible main implementers or co-implementers. During the same Phase 1 and in Phase 2 they are expected to cooperate in executing any specific action expected to be carried forward beyond the project end date.

4. Legislative and financial environment in support to renewable energy initiatives and energy communities

4.1 National legislation, regulations etc.

The transposition of the RED II directive into the Italian legislative framework takes place in two phases. Initially, an experimental phase is inaugurated through the approval of three acts: the legislative framework configured by Article 42-bis of Decree Law 162/2019, as converted by Law 8/2020, the regulatory model configured by ARERA Resolution 318/2020/R/eel, and the incentive system approved by the Ministerial Decree of September 16, 2020. The second phase, aimed at final transposition, consists of:

- Legislative Decree 199/2021, which definitively implemented RED II;
- Integrated Text for Diffuse Self-Consumption, annexed to ARERA Resolution 727/2022/R/eel, regulates the operating mechanism and the valorization contributions due to self-consumed energy within the allowed configurations.
- Decree No. 414 of the Minister of the Environment and Energy Security of Dec. 7, 2023, effective Jan. 24, 2024, defined the new modalities for granting incentives, aimed at promoting the implementation of plants powered by renewable sources included in configurations of energy communities, groups of self-consumers and remote self-consumers.
- For the full implementation of the regulations contained in this decree, the terms and requirements for access to the service (GSE) are lacking.

Therefore, the mechanism for the valorization and incentive of shared energy from plants powered by renewable sources, initiated with the entry into force of Decree-Law 162/19 (Article 42bis) and its implementing measures, such as ARERA's Resolution 318/2020/R/eel and Ministerial Decree of September 16, 2020, ends its application 60 days after the entry into force of the decree approving the Operating Rules as provided by Decree 414/23

4.1.1 Experimental phase: Decree Law 162/2019, Resolution 318/2020 and the Ministerial Decree of September 16, 2020

Article 36 of RED II set June 30, 2021, as the deadline for member states' legislation to comply with its provisions. Italian legislation initially provided for this with Decree Law 162/2019 converted by Law 8/2020. In particular, Article 42-bis of the decree is dedicated to the implementation of the provisions contained in Articles 21 and 22 of EU Directive 2018/2001 it authorizes and regulates an experimental phase regarding collective self-consumption from renewable sources and the establishment of renewable energy communities. This article introduces a number of conditions to be met by these legal entities, including the following points:

- The total capacity of the plants participating in self-consumption must not exceed 200 kW;
- Self-consumption plants must come into operation after March 1, 2021 (entry into force of L. 8/2020);
- The withdrawal and feed-in points: in the case of RECs must be under the same medium-voltage/low-voltage transformer substation, and in the case of self-consumption collectors must be in the same building or condominium;
- The parties involved must use the existing distribution network.
- The shared energy is equal to the minimum between the energy fed into the grid and the energy consumed by the subjects in the community in one hour.
- Relations among self-consumers acting collectively and among REC members must be governed by a private law contract that identifies a single entity, which represents the union and manages relations with vendors and the Gestore dei Servizi Energetici (GSE).

In addition, the decree law mandates ARERA ('Autorità di Regolazione per Energia, Reti e Ambiente) to adopt measures aimed at regulating: the role of DSOs (Distribution System Operators) and the TSO (Transmission System Operator) in the implementation of the modalities for implementing the configurations; the identification of tariffs to be applied; the establishment of a continuous monitoring system; the involvement of public administrations in the creation of renewable energy communities renewable and other forms of self-consumption.

Finally, the decree establishes the criteria under which the Ministero dello sviluppo economico (MiSE) must prepare the tariff to incentivize the remuneration of renewable source plants. This tariff must: be provided by the GSE, reward self-consumption

and storage, and ensure return on investment. The MiSE has provided in a decree dated September 16, 2020 to identify said tariff (art.3) in amount of:

- 100 €/MWh in the case of collective self-consumption plants
- 110 €/MWh in the case of renewable energy community.

The planned incentive tariff is configured as a feed-in-premium, that is, a premium that is added to the sale price of energy on the market. The purpose of the incentive, according to the provisions of Decree Law 162/2019, is to move toward replacing the on-site exchange mechanism (net metering)

In 2020, with Resolution 318/2020/R/eel ARERA, on the basis of the provisions of Decree Law 162/2019, initiated on a transitional basis the economic regulation of electricity shared by groups of self-consumers of renewable energy and RECs, defining the regulation model and incentives to be recognized. The Authority therefore decided to use a virtual regulation model, which provides for the disbursement of economic benefits according to the self-consumption of the energy produced and which consists of the return of certain components on the same.

Thus, this virtual model provides for the GSE to dispense the "shared electricity valuation and incentive service for the configurations of: groups of self-consumers of renewable energy acting collectively and RECs. Therefore, for each kWh of shared electricity and for 20 years, the GSE recognizes a unit fee of about €8/MWh in the case of RECs and about €10/MWh in the case of collective self-consumers. To this contribution is added the tariff provided by MiSE.

The procedures for the disbursement of these subsidies and compatibility with other facilities, are governed by the Technical Rules for Access to the Electricity Valuation and Incentive Service, published by the GSE on December 22, 2020 and subsequently updated on April 4, 2022.

4.1.2 Legislative Decree 199/2021

Legislative Decree 199/2021 definitively implements EU Directive 2018/2001, introducing substantial changes to the regulations on self-consumption from renewable sources introduced by Article 42-bis of Decree-Law 162/2019. These changes make it possible to overcome some of the critical issues that emerged during the experimental phase previous.

Article 8, dedicated to updating the regulation of incentives for the energy sharing, defines the characteristics of the plants that will be able to access financing:

- renewable source plants with a maximum allowed capacity of less than 1 MW.
- plants must be subtended by the same primary substation.

Renewable energy communities, on the other hand, are addressed in Article 31. Picking up on what was established in RED II, it proclaims as the main objective of RECs the pursuit of environmental, economic, and social benefits for the community and its members. Without prejudice to the centrality of social goals over financial and economic profit, additional activities in which RECs can engage are envisaged with respect to the areas of home automation, electric vehicle charging, energy efficiency, ancillary services and flexibility, as well as take on the role of retail companies. In addition, the article broadens the range of entities authorised to participate in RECs by adding individuals, SMEs and territorial entities, research and training organisations, entities religious bodies and third sector entities.

With respect to energy production and sharing, it is specified that: for the purpose of energy shared energy only the production of renewable energy from facilities in the availability and under the control of the community; self-produced energy must be used as a priority for instantaneous self-consumption; excess energy can be stored and sold.

Finally, of particular importance are the provisions contained in Article 32 regarding the way in which self-consumption configurations interact with the energy. End customers are given the opportunity to:

- retain their rights as end customers including the ability to choose their own seller;
- withdraw from the existing configuration at any time, subject to the payment of any fees stipulated in the contract in the case of withdrawal early;
- Identify an entity responsible for sharing the shared energy, who may also have the task of regulating the buying and selling of excess energy excess and the relationship with the GSE.

The table below provides a summary of the main differences between the transitional regime and the final regime of Renewable Energy Communities in Italy:

Interest in Renewable Energy Communities as useful tools for pursuing the energy transition and abatement of pollutant emissions based on the European goals toward 2050, was reaffirmed by the allocation of 2.2 billion from the M2C2 - Renewable Energy, Hydrogen, Grid and Sustainable Mobility chapter of the Piano Nazionale di Ripresa e Resilienza (PNRR) to the funding of RECs and self-consumption. This support is intended to "focus on areas where the greatest socio-territorial impact," identifying as specific recipients "Public Administrations, households and micro-enterprises in municipalities with less than 5,000 inhabitants, thus supporting the economy of small municipalities, often at risk of depopulation, and strengthening social cohesion".

4.2 Tuscany regional regulations

The Region of Tuscany has issued in 2022 two provisions on energy communities:

Council Resolution no. 336 of 21.3.2022, having acknowledged that, to date, Renewable Energy Communities are scarcely widespread throughout the country and that no significant experiences have yet been activated in Tuscany, promotes them by immediately supporting the creation and dissemination of communities, ensuring, in an initial phase, support both in terms of animation, dissemination, communication and in the operational terms of producing guidelines and standard acts. The Renewable Energy Communities are thus considered a strategic tool for the Tuscan pathway to Ecological Transition in order to achieve the objectives of energy conversion towards renewable energy sources and climate neutrality set out in Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for the achievement of climate neutrality and amending Regulation (EC) No.401/2009 and Regulation (EU) 2018/1999 ("European Climate Regulation") by setting a binding target for the European Union to reduce greenhouse gas emissions by at least 55 per cent compared to 1990 levels by 2030;

- useful to achieve the goals set by the National Integrated Energy and Climate Plan, prepared with the Ministry of the Environment and Land and Sea Protection and the Ministry of Infrastructure and Transport;

- to counter the spread of energy poverty and decrease energy supply dependency.

The Resolution mandates the competent Regional Directorate to define the best possible forms of collaboration with the GSE, Gestore Servizi Elettrici (Electric Service Manager), as well as with other public bodies and universities for the purpose of promoting the dissemination of CERs, also assigning the company ARRR S.p.A. a specific activity of animation/diffusion of energy communities through special communication campaigns, so as to guarantee direct support to the Region itself.

Council Resolution No. 367 of 6.4.2022 instead concerns the approval of the proposals for the Regional Programmes: European Social Fund plus 2021/2027 and European Regional Development Fund 2021/2027. In summary, this measure promotes within the ERDF Regional Programme renewable energies in compliance with Directive (EU) 2018/2001, including the sustainability criteria established therein" with the Actions related to energy production from renewable sources for public infrastructures, RSAs and enterprises also in the form of energy communities, redefining the budget to support them.

4.3 Financial incentives etc.

The Government, through the GSE, grants two remuneration components to ECs, amounting to approximately 17 cents per total kWh on the energy produced and consumed within the community. The two tariff components are as follows:

1. energy fed into the grid with Dedicated Withdrawal (at a unit price equal to the Hourly Zone Price),
2. shared energy (incentive of 12 cents per kWh).

Incentives for Renewable Energy Communities can be requested by applying for subsidies reserved for energy communities and collective self-consumption; applications can be submitted from the GSE website, where requirements, access procedures, contract outline and timeframe for disbursement of the incentives, recognised for 20 years at the following subsidised rate self-consumed energy:

100 €/MWh for collective self-consumption
110 €/MWh for renewable energy communities.

New incentives are awaiting approval: at the national level, new GSE technical rules updating the 2022 version of those used to access incentives are expected by the end of 2023. At the local level, on the other hand, individual regional calls for tenders are being issued to provide incentives for renewable energy communities (CERs).

As far as the new EC Decree is concerned, the proposed tariff incentive covers the entire country and can facilitate up to a total of 5 GW up to 31 December 2027. There is also a non-repayable subsidy for the installation of plants in municipalities with less than 5,000 inhabitants.

The operating rules for accessing the new incentives for Renewable Energy Communities (RECs) are expected after the summer 2023. The GSE is in fact entrusted with the task of drafting the technical provisions (with a web portal) for access to the widespread self-consumption service.

The EU approval of the EC Decree being awaited, the new ministerial contributions for self-consumption of renewables are still not applicable in the absence of clearance from Brussels.

Incentives for CERs do not apply to plants that receive other incentives for production from renewable sources (e.g. on-site exchange) benefit from the tax deductions provided by the 110% superbonus (up to 20 kW); instead, they can be combined with 50% tax deductions (building bonus) fall within the mandatory power quota pursuant to Legislative Decree 28/2011 are installed on the ground in agricultural areas.

They remain entitled to the fee provided for by ARERA Resolution 318/2020/R/eel for the entire power of the plant and to sell the electricity fed into the grid by the plant to the GSE.

The prohibition does not apply to:

- plants to be built on areas declared sites of national interest or on closed and restored landfills, quarries not susceptible to further exploitation for which the competent authority has certified the completion of environmental recovery and restoration activities
- agro-voltaic plants (according to the Ministry of the Environment guidelines of June 2022)

Decree 414/23 identifies two avenues to promote the development in the country of RECs:

- a valorization fee for self-consumed energy defined by ARERA (8 €/MWh)
- an incentive tariff on the renewable energy produced and shared for the entire national territory (Recognized from the moment of commissioning of the RES plant is between 60€/MWh and 120€/MWh depending power of the electrical system)

In addition, all renewable electricity produced but not self-consumed remains in the availability of producers and is valued at market conditions:

Power of the electrical system	Incentive rate
power < 200kW	80€/MWh + (0÷ 40€/MWh)
200 kW < power < 600 kW	70€/MWh + (0÷ 40€/MWh)
power > 600 kW	60€/MWh + (0÷ 40€/MWh)

For photovoltaic systems, there is an additional surcharge of 4€/MWh for regions in central Italy and 10€/MWh for regions in northern Italy.

Features:

- Access To The incentive: can be accessed until the 30th day after the date of reaching the 5GWp threshold, but no later than 31/12/2027
- Validity: equal to 20 years from the date of commercial operation of the plant or communication to the GSE
- Effective date: date of entry into commercial operation of the plant, if the application is submitted to the GSE within 120 days after the date of entry into operation of the plants, or date of receipt on the date of late communication
- Beneficiaries: CACERs duly incorporated as of the date of entry into operation of the plants that qualify for the benefit
- Eligible facilities: Facilities must be newly constructed. For upgrades to existing plants, incentives apply limited to the new section of plant attributable to the upgrade
- OPEN POINT: Discrepancy about the eligibility of plants. FAQ: plants that came into operation later than the effective date of Legislative Decree 199/2021. MASE: plants that came into operation after the establishment of the REC.

There is also a non-repayable grant of up to 40 percent of eligible costs, financed by the NRP and aimed at communities whose plants are built in municipalities under five thousand inhabitants, which will support the development of 2 GW in total.

Features:

- Renewable energy communities and systems of collective consumption, located in municipalities with a population of less than 5,000 inhabitants, will be eligible for the contribution of 40% to cover the costs incurred for renewable energy plants
- The start of the works for the plants must be after the date of submission of the application for Contribution
- Eligible installations must be operational within 18 months of the date of submission of the application and in any case no later than 30 June 2026
- Eligible expenditure shall also include pre-feasibility studies and expenditure necessary for preliminary activities, including the costs necessary to set up the configurations, up to a maximum of 10% of the investment value
- The maximum reference investment cost for the provision of grants shall be:

1.500 €/kwp for plants up to 20 kWp

1.200 €/kwp for systems with a power of more than 20 kWp and up to 200 kWp

1.100 €/kwp for plants with power exceeding 200 kWp and up to 600 kWp

1,050 €/kwp for plants with a power of more than 600 kW and up to 1,000 kW

5 S.W.O.T Analysis

The objective of S.W.O.T. analysis is to identify and describe regional:

- ❖ Strengths
- ❖ Weaknesses
- ❖ Opportunities
- ❖ Threats

to:

- determine where Livorno province stands on these four key strategic areas
- better outline what changes to make if, as and when needed.

<p>Strengths</p> <p>IN GENERAL, FOR THE COAST</p> <ul style="list-style-type: none"> ▪ Plurality of development engines (city, tourism, manufacturing) Strategic position in the Mediterranean and with respect to the European TEN-T ▪ Strategic position for Italian and European industrial/consumer basins ▪ Large local market basin (population, employees) ▪ Presence of major infrastructures (airports, port, railway, motorway) ▪ Urban areas with valuable functions (university/research centres, health) ▪ Tourist assets (cities of art, sea, environment) ▪ Presence of growing high-tech sectors (photonics, robotics, biomedical, green economy applied to production processes, etc.) Consolidated scientific and technological tradition applied Competitive real estate costs ▪ Consolidated applied scientific and technological tradition Competitive real estate costs ▪ Quality of life <p>IN DIFFERENT AREAS</p> <ul style="list-style-type: none"> ▪ Pisa-Livorno: coastal metropolitan pole; accessibility ▪ Piombino: manufacturing and tourism ▪ Elba: tourism ▪ Southern coast: tourism, agriculture, manufacturing 	<p>Weaknesses</p> <p>IN GENERAL, FOR THE COAST</p> <ul style="list-style-type: none"> ● Employment deficit ● Growth development gap ● Industrial crisis ● Weakness of alternative development engines (tourism, agriculture) ● Infrastructural deficit ● Shortage of space/areas to be reclaimed ● Environmental fragility ● Conflicting vocations/functions (tourism vs. manufacturing, logistics) ● Urban areas and tourist offer to be redeveloped (new tourists) Lack of institutional recognition of the urban coastal system ● Lack of inter-institutional cooperation for area policies ● High management costs for enterprises (energy, waste, transport) <p>IN THE DIFFERENT AREAS:</p> <ul style="list-style-type: none"> ● Pisa-Livorno: lack of recognition as coastal urban pole ● Piombino: excessive sectoral specialisation, environmental impact ● Elba: isolation, over-exploitation of rents ● Southern coast: infrastructural isolation, weak development engines
<p>Opportunities</p> <p>IN GENERAL, FOR THE COAST</p> <ul style="list-style-type: none"> ○ Growth in maritime traffic (goods and passengers) in the Mediterranean ○ Enhancement of East-West connections with respect to the European TEN-T ○ Growth in tourism demand ○ Development of network policies (enterprises, technological poles, tourist areas, cities of art) ○ Growth in innovative sectors (green economy as sustainable manufacturing, sustainable tourism, sustainable agriculture, energy efficiency, the Mediterranean model of sustainable building, securing the territory; but also health, culture, leisure) 	<p>Threats</p> <p>IN GENERAL, FOR THE COAST</p> <ul style="list-style-type: none"> ❖ Marginalisation of freight/passenger traffic in the Mediterranean ❖ Development of competing territories in the tourism sector (better price/quality ratio, greater attention to new tourists from the Middle East) ❖ Destructive competition between the Tyrrhenian axis (centred on PI-LI) and the central axis (centred on Florence) Lack of infrastructural adaptation ❖ Lack of territorial safety ❖ Lack of innovation in production processes (towards greater sustainability) ❖ Lack of resources for investment (austerity policies)

<ul style="list-style-type: none"> ○ New investment strategies: free-zone, crowd-funding, investor networks, PCP (Pre-commercial-Procurement) Identification of marketing strategies (Scientific Tuscany, Gateway to the region, Coastal Metropolitan Pole, ...) <p>IN THE DIFFERENT AREAS:</p> <ul style="list-style-type: none"> ○ Pisa-Livorno: growth of the metropolitan pole of the coast, infrastructure investments (port, strengthening of the Tyrrhenian axis and the Pisa-Florence axis, strengthening of the railway for local mobility) ○ Piombino: infrastructural investments (port), sustainable manufacturing, circular economy, productive diversification ○ Elba: air link, sustainable tourism, control of rents ○ Southern coast: strengthening accessibility towards PI-LI, strategic collaboration with PI-LI, links with the hinterland, export-oriented agriculture, role of elective residence 	<ul style="list-style-type: none"> ❖ Lack of cooperation due to administrative fragmentation <p>IN DIFFERENT AREAS: The same threats apply as for the coast as a whole</p>
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source: IRPET

6 READINESS MODEL INDICATOR: RESULTS

6.1. Summary of data and information plus considerations on present status to support in quantitative terms the contents in 4. above and other parameters

The Readiness Indicator Model proposed in Stage One of PROMOTER project has been implemented having regards to the provincial context.

The full table is enclosed (see Annex 1).

A summary of the main results is provided in the table below:

Category			
1. Legislative		2	2
2. Behavioural/ Organisational		3	4
3. Economic		2	6
4. Technological	2	3	2
5. Operation scope and environment. Other features	4	3	6
Total score	6	13	20

It is worth noting that Livorno province appears quite well positioned for the first 3 categories, while there are several indicator flags in the “red” zone for categories 4 & 5.

7 LP DEMANDS, GUIDING IDENTIFICATION/ DOCUMENTATION / TRANSFER OF EXPERIENCE (GOOD PRACTICES)

The methodological approach chosen in the project is to investigate the present conditions and earmark areas in need of more or less relevant improvements. Such assessment provides a useful guidance on how to convey specific demands to other partners on their topic experiences: experiences which may eventually assist Livorno partner to gradually fill in the gap between present conditions and targeted ones.

Based upon the initial assessment carried out, thus, the following expressed demands can be indicated in short. Good practices related to the following technological features will be, therefore, welcomed, as well as others on the various categories addressed:

Market supply	Equipment supply and installers available	Market difficulties due to equipment supply and installers unavailability	4.1	
Smart metering	Installed and operational	Smart meters still required to be installed and operating	4.4	n° of smart metering /total n. of consumer metering point
Grid connection	Adequate	Low capacity / Congestion of grids	4.5	Grid capacity installed
Data access and sharing	Developed platforms for local energy sharing and trading. Non-discriminatory role of DSOs	Platform/s absent. Discriminatory role of DSOs	4.6	n. of DSOs with platforms for local energy sharing and trading already developed
Software development and IT infrastructure for energy sharing using the public grid	In existence	Lacking	4.7	

A more detailed indication of experience quest coming from Livorno Province and other partner have been inserted in the folder “Experience Quest” ([Doc. PROMOTER_GP 5B-PR-8 Experience quest](#)).

8 FUTURE COOPERATION WITH OTHER PROJECTS

It is also worth mentioning of another Interreg Europe project, led by the Tuscany Regional Agency for Waste and Resource Management (ARRR), named REC4EU. PROMOTER should consider pursuing a synergic relationship with this and other similar projects. ARRR has contributed to Promoter initial event in Livorno on 29 June by presenting the main features of the RREC4EU project.

REC4EU project specific objectives are, in fact:

- Analyse and **address** technical, regulatory, economic, social **barriers** to RECs, focusing on territorial specificities (e.g. type of renewables, legal status of communities) and commonalities (e.g. means to involve stakeholders and deliver support)
- Identify **key regional policy aspects** to set up an integrated governance and support framework for creation and development of RECs
- **Design policy improvements** to develop an integrated governance and support system at territorial level, helping overcome identified **barriers**
- **Build capacity among** public authorities and stakeholders to implement support services to RECs
- **Implement policy improvements** (using own resources) and monitor their progress and impact.

The said project is expected, therefore, to well complement the synergy to be pursued by Promoter with other projects already earmarked in Promoter Application Form (sub-section C.3 - Project innovative character)

Annex 2 - LIVORNO PROVINCE | Buildings and other potential hub premises in the Green Community “Costa degli Etruschi”

2.a Municipal buildings

Comune	n° con assegni	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPERTI	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio per auto, giardini e parchi pubblici, servizi igienici?		
					SI	NO	S	N	E	O	TP	SI	NO	
Bibbona	1	Palazzo Comunale			SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	1	Palazzo Comunale	365		SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	2	Palazzo Comunale (Pretorio)	220		SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	5	Palazzo Comunale (Delegazione)	435		SI	NO	S	N	E	O	TP	SI	NO	
Castellina Marittima	1	Palazzo Comunale	200		SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	1	Palazzo Comunale			SI	NO	S	N	E	O	TP	SI	NO	
Riparbella	7	Palazzo Comunale	825		SI	NO	S	N	E	O	TP	SI	NO	Parco Carlo Alberto dalla
San Vincenzo	1	Palazzo Comunale	677		SI	NO	S	N	E	O	TP	SI	NO	Giardino pubblico
San Vincenzo	2	Palazzo Comunale (della Cultura)	325		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	3	Palazzo Comunale (Sala Consiliare)	596		SI	NO	S	N	E	O	TP	SI	NO	Giardino
Sassetta	1	Palazzo Comunale	60	230	SI	NO	SE	NO	E	O	TP	SI	NO	

2.b Schools

Comune	n° cor asseg	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPE	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio per giardini e parchi pubblici, servizi igienici?		
					SI	NO	S	N	E	O	TP	SI	NO	
Bibbona	2	Scuola	1000	300	SI	NO	S	N	E	O	TP	SI	NO	Aree a verde pubblico
Bibbona	2	Scuola	650	1680	SI	NO	S	N	E	O	TP	SI	NO	Aree a verde pubblico attrezzato
Campiglia Marittima	3	Scuola	170		SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	4	Scuola	230		SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	7	Scuola	1184	1650	SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	8	Scuola	3400	5000	SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	9	Scuola	1350	1700	SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	11	Scuola	800	850	SI	NO	S	N	E	O	TP	SI	NO	
Castagneto	2	Scuola	2030	2100	SI	NO	S	N	E	O	TP	SI	NO	Giardini e parchi
Castellina	2	Scuola	300	500	SI	NO	S	N	E	O	TP	SI	NO	
Castellina	4	Scuola	250	1000	SI	NO	S	N	E	O	TP	SI	NO	
Castellina	6	Scuola	200	300	SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	2	Scuola	460		SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	15	Altro (Scuola di musica)	40		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	1	Scuola	650		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	2	Scuola	650		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	7	Scuola	800		SI	NO	S	N	E	O	TP	SI	NO	
Riparbella	5	Scuola	970	539	SI	NO	S	N	E	O	TP	SI	NO	Parco Carlo Alberto dal
Riparbella	2	Scuola	936	1000	SI	NO	S	N	E	O	TP	SI	NO	Parco Carlo Alberto dal
Riparbella	6	Scuola	830 (su più	1500	SI	NO	S	N	E	O	TP	SI	NO	Parco aventura- ristora
San Vincenzo	4	Scuola	549		SI	NO	S	N	E	O	TP	SI	NO	Giardino
San Vincenzo	5	Scuola	1953		SI	NO	S	N	E	O	TP	SI	NO	Giardino
San Vincenzo	6	Scuola	1167		SI	NO	S	N	E	O	TP	SI	NO	Giardino
Sassetta	2	Scuola	210		SI	NO	SO	NE	E	O	TP	SI	NO	

2.c Gymnasium

Comune	N. CO ASSEG	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio per giardini e parchi pubblici, servizi igienici?		
					SI	NO	S	N	E	O	TP	SI	NO	
Castellina	3	Palestra	350	500	SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	3	Palestra	220		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	3	Palestra	800		SI	NO	S	N	E	O	TP	SI	NO	
Riparbella	3	Palestra	150		SI	NO	S	N	E	O	TP	SI	NO	Parco Carlo Alberto dall'
San Vincenzo	7	Palestra	959		SI	NO	S	N	E	O	TP	SI	NO	Giardino
Sassetta	3	Palestra	120	300	SI	NO	S	N	E	O	TP	SI	NO	

2.d Swimming pools

Comune	N. CO ASSEG	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio per giardini e parchi pubblici, servizi igienici?		
					SI	NO	S	N	E	O	TP	SI	NO	
Cecina	2	Piscina	1500	5200	SI	NO	S	N	E	O	TP	SI	NO	Parco pubblico
Piombino	4	Piscina	1500		SI	NO	S	N	E	O	TP	SI	NO	

2.e Recreational / cultural centres

Comune	n° colasseg	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio giardini e parchi pubblici, servizi igienici?		
Bibbona	3	Centro ricreativo e culturale	200		SI	NO	S	N	E	O	TP	SI	NO	Area a verde pubbli
Campiglia	10	Centro ricreativo e culturale	950	350	SI	NO	S	N	E	O	TP	SI	NO	
Campiglia	12	Centro ricreativo e culturale	170		SI	NO	S	N	E	O	TP	SI	NO	
Castellina	5	Centro ricreativo e culturale	250		SI	NO	S	N	E	O	TP	SI	NO	
Cecina	1	Centro ricreativo e culturale	2212		SI	NO	S	N	E	O	TP	SI	NO	Parco pubblico Ba
Guardistallo	5	Centro ricreativo e culturale	250		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	10	Centro ricreativo e culturale	992		SI	NO	S	N	E	O	TP	SI	NO	Giardino

2.f Sports hall

Comune	n° colasseg	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio giardini e parchi pubblici, servizi igienici?		
Cecina	3	Palazzetto dello sport	2275		SI	NO	S	N	E	O	TP	SI	NO	Parco pubblico
Piombino	5	Palazzetto dello sport	1000		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	6	Palazzetto dello sport	1000		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	8	Palazzetto dello sport	1279		SI	NO	S	N	E	O	TP	SI	NO	Giardino

2.g Sports field

Comune	n° colasseg	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di lavaggio giardini e parchi pubblici, servizi igienici?		
Bibbona	4	Campo sportivo	160		SI	NO	S	N	E	O	TP	SI	NO	Spoqliatoi Ca
Campiglia	13	Campo sportivo	680	1400	SI	NO	S	N	E	O	TP	SI	NO	
Castellina	7	Campo sportivo	200	700	SI	NO	S	N	E	O	TP	SI	NO	
Cecina	4	Campo sportivo (complesso)	1844	10314	SI	NO	S	N	E	O	TP	SI	NO	Parco pubbli
Riparbella	4	Campo sportivo	161	3000	SI	NO	S	N	E	O	TP	SI	NO	Servizi igien
San Vincenzo	9	Campo sportivo	900		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	11	Campo sportivo	182		SI	NO	S	N	E	O	TP	SI	NO	Area di perti
San Vincenzo	12	Campo sportivo			SI	NO	S	N	E	O	TP	SI	NO	Area di perti
San Vincenzo	13	Campo sportivo	180		SI	NO	S	N	E	O	TP	SI	NO	Area di perti
San Vincenzo	14	Campo sportivo	508		SI	NO	S	N	E	O	TP	SI	NO	Area di perti
San Vincenzo	15	Campo sportivo	47		SI	NO	S	N	E	O	TP	SI	NO	Area di perti
San Vincenzo	16	Campo sportivo	60		SI	NO	S	N	E	O	TP	SI	NO	Area di perti

2.h Warehouse

Comune	n° comuni	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di giardini e parchi pubblici, servizi		
Campiglia	6	Magazzino	1210	7000	SI	NO	S	N	E	O	TP	SI	NO	
Castagneto	3	Magazzino	600	1520	SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	8	Magazzino	375		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	8	Magazzino	5000		SI	NO	S	N	E	O	TP	SI	NO	
Riparbella	1a	Magazzino	183 (compresa	970	SI	NO	S	N	E	O	TP	SI	NO	Scuola media
Riparbella	8	Magazzino	141	180	SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	17	Magazzino	613		SI	NO	S	N	E	O	TP	SI	NO	Area di pertinenza
Sassetta	6	Magazzino	160	120	SI	NO	S	N	E	O	TP	SI	NO	

2.i Parking areas

Comune	n° comuni	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di giardini e parchi pubblici, servizi	
Bibbona	5	Aree adibite a parcheggio (in prossimità sede comunale)		1200	SI	NO	S	N	E	O	TP	SI	NO
Bibbona	7	Aree adibite a parcheggio (in prossimità campeggio comunale)		5800	SI	NO	S	N	E	O	TP	SI	NO
Guardistallo	10	Aree adibite a parcheggio		270	SI	NO	S	N	E	O	TP	SI	NO

2.l Waste collection area. Other fields.

Comune	n° comuni	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di giardini e parchi pubblici, servizi		
Riparbella	3	Centro raccolta rifiuti		300	SI	NO	S	N	E	O	TP	SI	NO	Servizi igienici
Riparbella	1b	Terreni, Aree boschive, ecc.		578 ettari	SI	NO	S	N	E	O	TP	SI	NO	Scuola media

2.m Others

Comune	n° col assed	DESTINAZIONE D'USO IMMOBILE	EDIFICIO COPERTO	AREA SCOPER	TIPO DI FALDA							Ci sono nelle vicinanze impianti di giardini e parchi pubblici, servizi io		
Castagneto	1	Altro (Capannone)	465	950	SI	NO	S	N	E	O	TP	SI	NO	Giardini e pa
Guardistallo	14	Altro (Cucine)	30		SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	15	Altro (Scuola di musica)	40		SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	16	Altro (Lavatoi)	60		SI	NO	S	N	E	O	TP	SI	NO	
Guardistallo	17	Altro (Caserma)	90		SI	NO	S	N	E	O	TP	SI	NO	
Piombino	9	Altro (Mercato coperto)	765		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	18	Altro (Teatro)	556		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	19	Altro (Comando polizia)	120		SI	NO	S	N	E	O	TP	SI	NO	
San Vincenzo	20	Altro (capannone)	200		SI	NO	S	N	E	O	TP	SI	NO	Area di perti
San Vincenzo	21	Altro (Cimitero)	2565		SI	NO	S	N	E	O	TP	SI	NO	Area di perti
Sassetta	4	Altro (Palazzo storico)	500		SI	NO	S	N	E	O	TP	SI	NO	
Sassetta	5	Altro (Caserma)	210		SI	NO	SE	NO	E	O	TP	SI	NO	