Location study
Planned own sites Sarno

Address : Via Sarno-Striano 84087 Sarno

Simulation for :

4 ultrafast charging points (max power: 150 kW)

Brand : Planned own sites

ChargePlanner
a solution by RetailSonar

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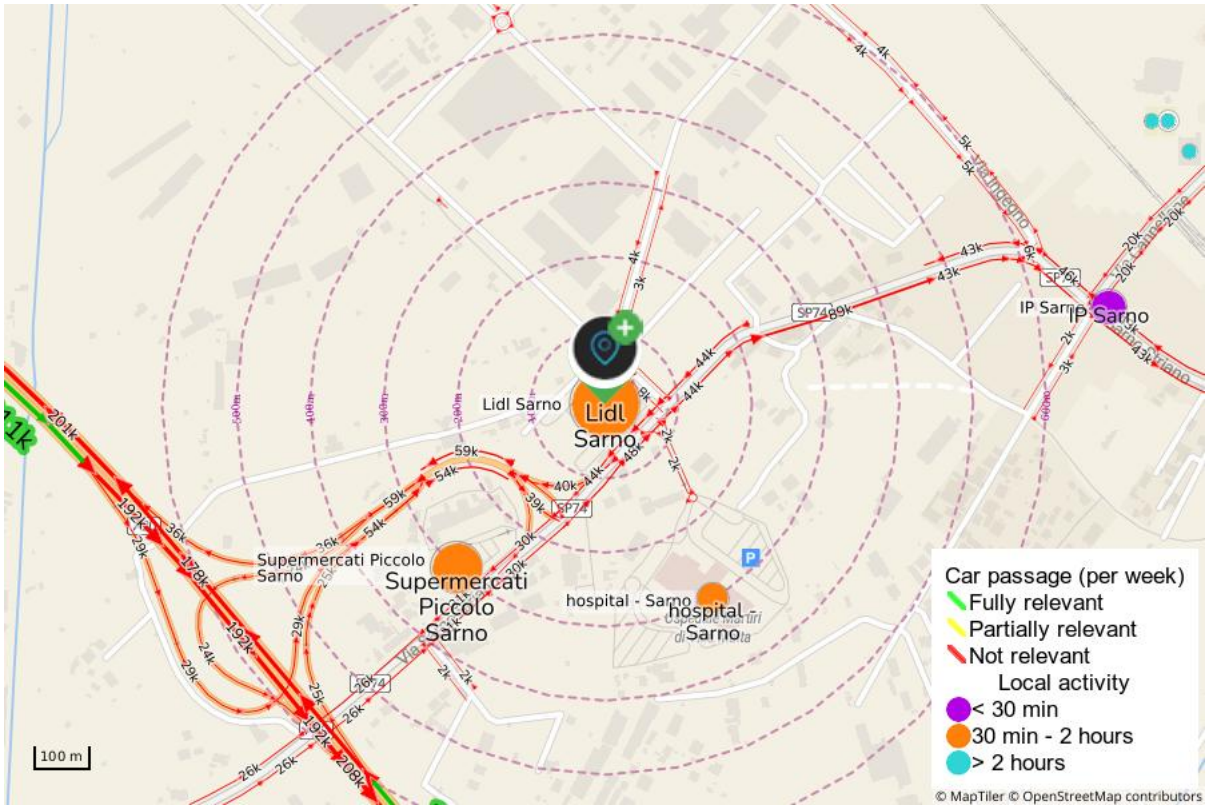
1.Description of the simulation

In this report we show the result of a simulation with 4 ultrafast charging points (>150kW) of a charging station located at : Via Sarno-Striano, 84087, Sarno, IT

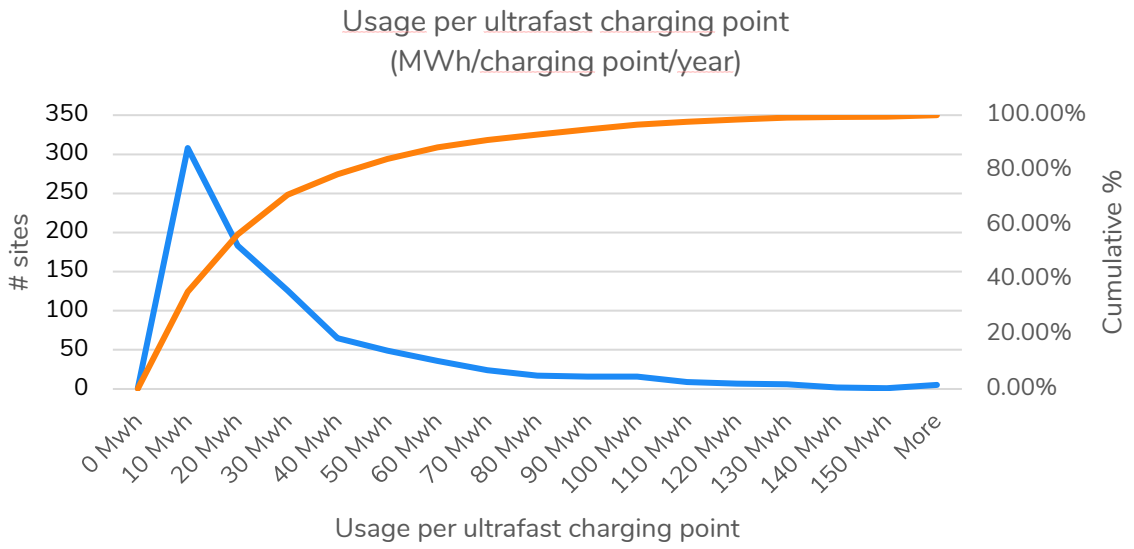


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of **444.972 kWh/year** (**being 111.243 kWh/year per ultrafast charging point)** for this location.

In the following graphs, we compare this result with all other sites in the country.

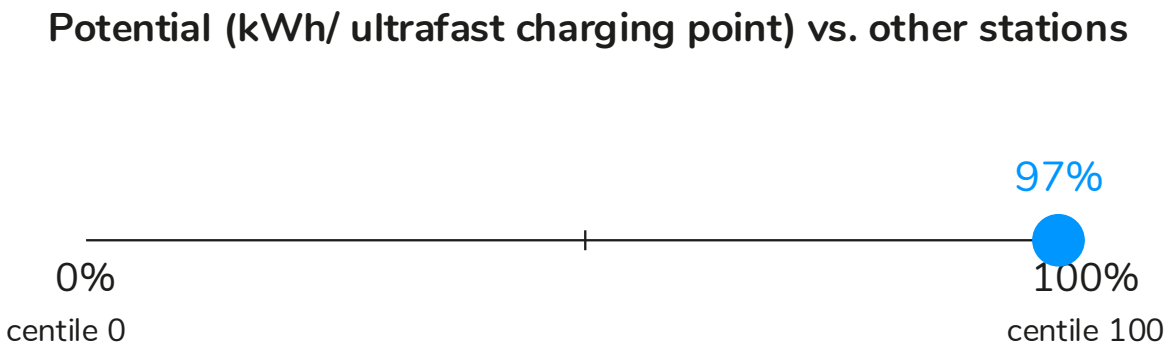
For the 871 existing sites with ultra-fast charging points, the predictive model gives a median consumption of 16.3 MWh per year and per ultra-fast charging point.



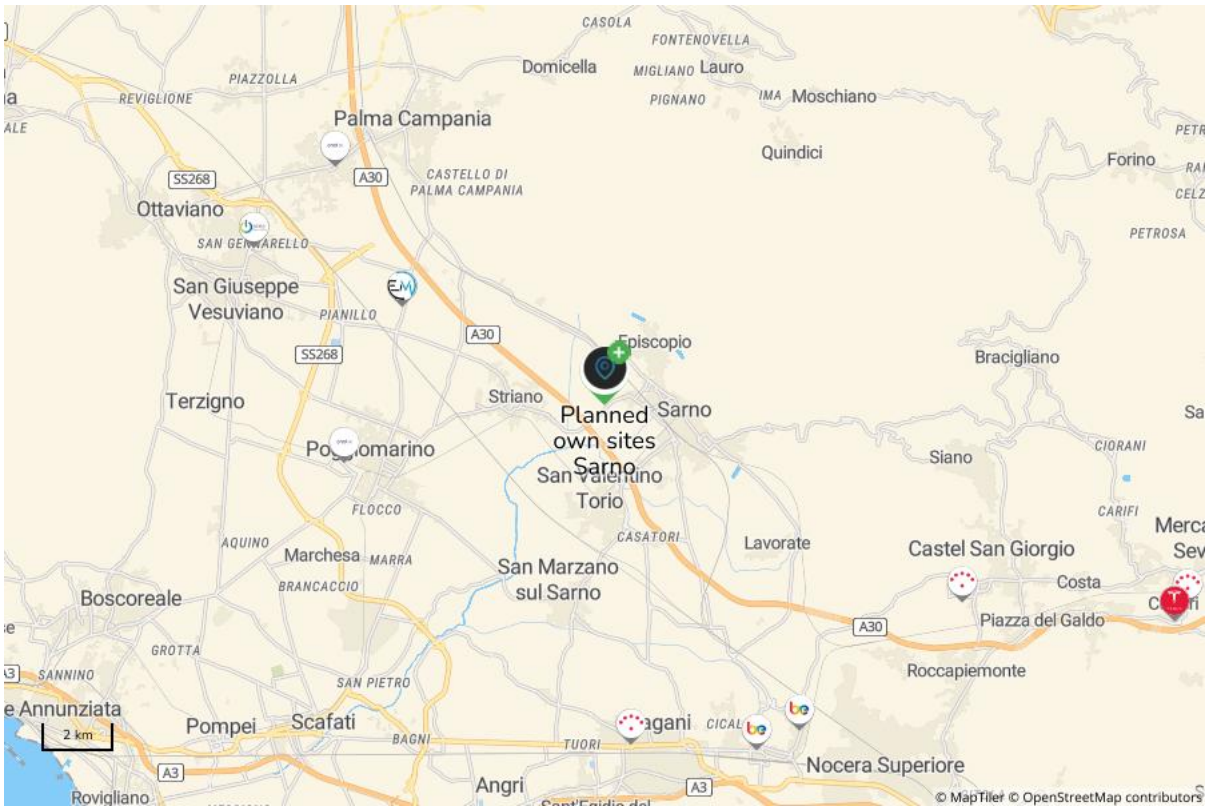
The following graph compares the expected performance (per ultra-fast charging point and per year) of the site under investigation with all existing sites in the country.

The percentile “0” corresponds to the existing site with the lowest usage, and the percentile “100” to the site with the highest usage. The blue dot corresponds to the performance of the location studied in this report :

This result shows that the studied site is classed within the 3 % best sites of the country in terms of potential.



The opening of this new location will partially cannibalize surrounding charging locations.

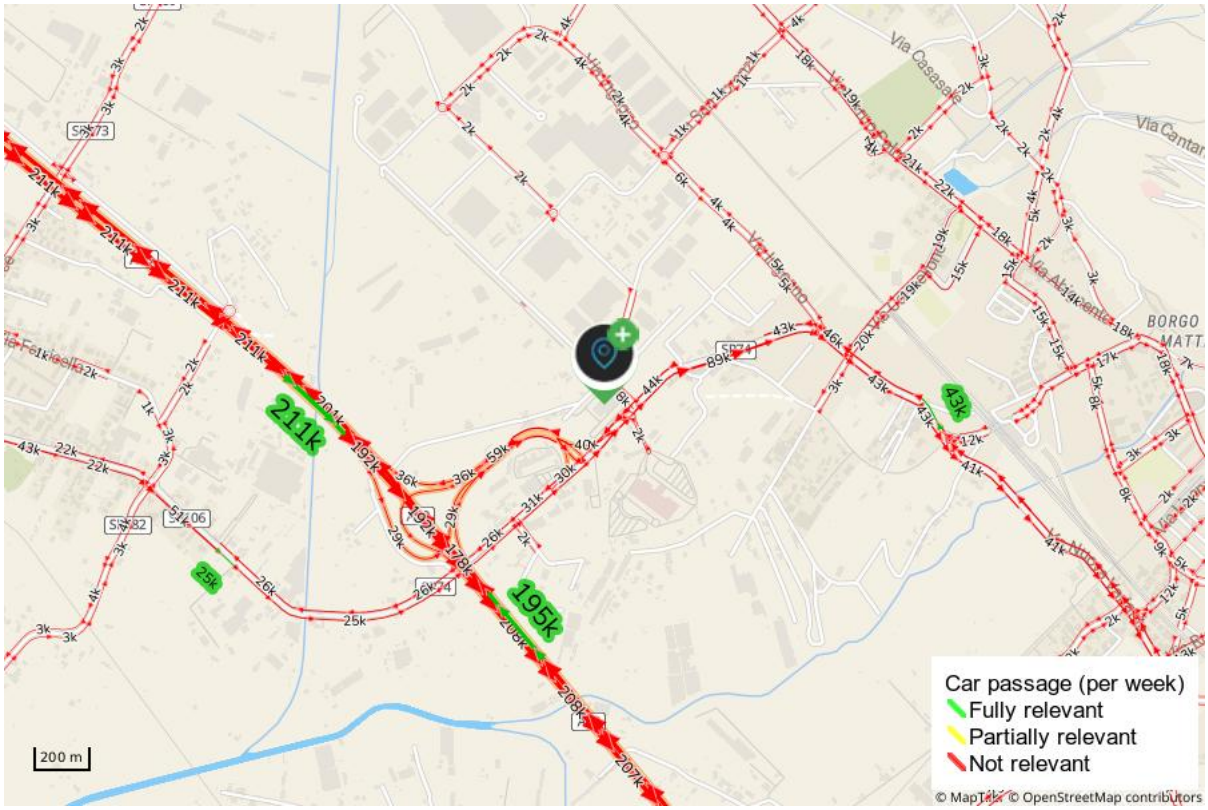


The calculation of the potential is based on the following indicators (ranked in function of importance) on the following pages.

2.1. On the road potential within 3 minutes

This potential consists of the car passage (expressed in the average number of vehicles passing by per week). This potential is very important for ultrafast charging points.

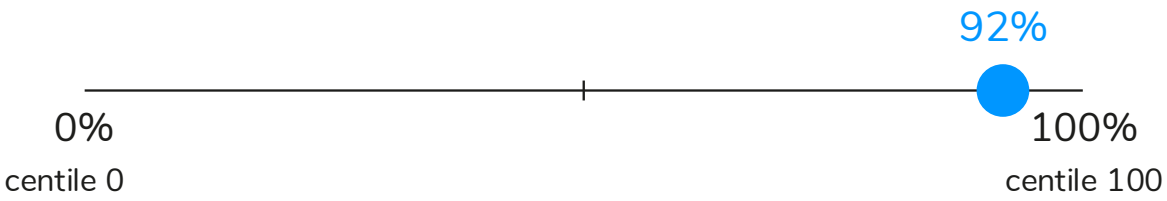
On this map, passage of each road segment is visualized. This gives an indication of the market potential related to passage in the proximity of the charging location.



The charging location has an estimation of **474.036** cars passing by per week. This is based on the 4 incoming roads with the highest passage score at 3 minutes drivetime.

With this result, the site is classed within the 8 % best sites in the country.

Cars passing by per week compared to other stations



2.2. Potential of local activity in a 300m radius

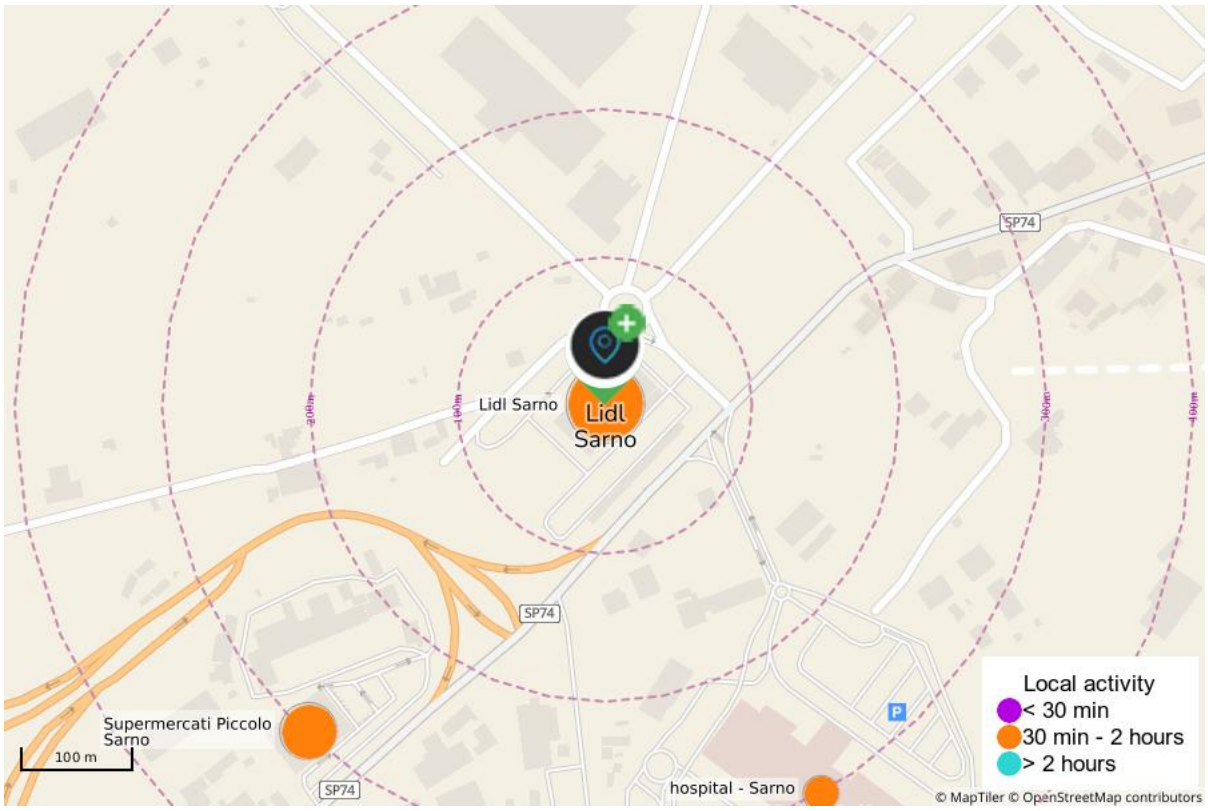
The presence of relevant local activity is important for ultrafast charging points. Mainly activity with a short visit duration (<30min) is important. Also activity with a medium long duration (30min – 2h) is partly relevant. In this study we took into account the following activity:

< 30 min : fast food restaurants, shops, destination retail...

30min – 2h: non-destination retail, restaurants, bars, cinemas, sport & cultural spaces.

> 2h : work, schools, touristic places, hotels.

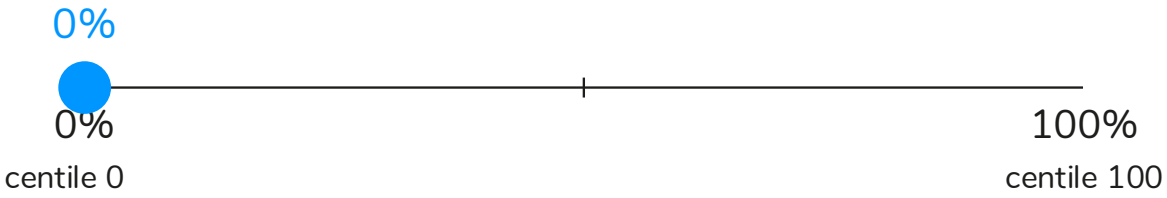
The figure below shows the local environment and the presence of perfect neighbours surrounding the charging location.



In this overview, we compare this result with those observed at other sites in the country.

With this result, the site is classed in the 0 % least performing sites of the country in terms of local activity potential with a short visit duration (<30min) in a 300m radius.

Local activity potential less than 30min in a 300m radius

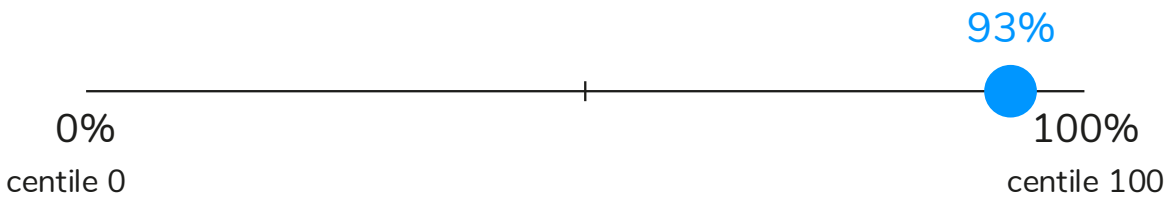


30min - 2h	Address	Number of visitors per year	Distance (m)
Lidl Sarno	Via Sarno-Striano	250.000	1 m
Lidl Sarno	Via Sarno-Striano	250.000	1 m
Supermercati Piccolo Sarno	Via Sarno-Striano	125.000	298 m
Supermercati Piccolo Sarno	Via Sarno-Striano	125.000	298 m

In this overview, we compare this result with those observed at other sites in the country.

With this result, the site is classed in the 7 % best sites of the country in terms of local activity potential with a medium long duration (30min-2h) in a 300m radius.

Local activity potential for visit in 30min-2h in a 300m radius

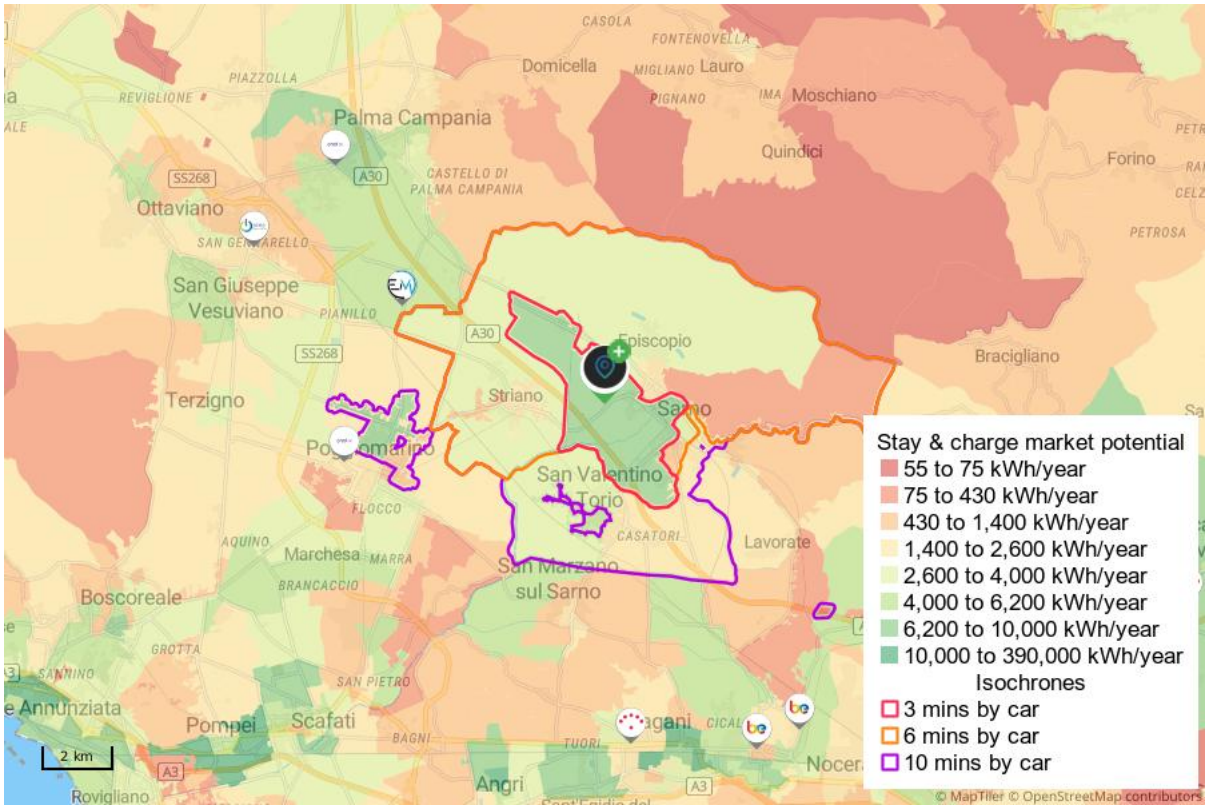


2.3. Residential and local visitor's potential

This is the destination potential that is part of the potential of consumption of residents that charge their vehicles close to their homes, their work and their activities. This is a less important potential for ultrafast charging points.

To calculate the potential per zone, we take into account the number of electrical vehicles, the wealth index, the estimated workers and the commercial activity (number of visits/year) for every zone.

On this map, you can see the stay & charge potential per zone around the charging location.



The table below shows an overview of the potential indicators, within each environment of the site :

Environment analysis	0~3 min by car	0~6 min by car	0~10 min by car
Market potential 'stay & charge'			
Inhabitants	4.587 inhabitants	24.794 inhabitants	44.604 inhabitants
Households	1.547 families	8.666 families	15.430 families
Wealth index	78 %	77 %	77 %
Population density	754	4.405	5.070
Cars	3.596 cars	17.517 cars	34.080 cars
Light commercial vehicles	2.841 vehicles	9.751 vehicles	20.188 vehicles
Electric vehicles	10 vehicles	49 vehicles	95 vehicles
Number of visits > 2 hours in the zone	80.000 visits	240.000 visits	290.000 visits
Employees	6.150 FTE	12.800 FTE	17.100 FTE
Residential potential	18 kWh/year	94 kWh/year	189 kWh/year
Market space 'stay & charge'			
Stay & charge market potential	8.539 kWh/year	28.659 kWh/year	48.744 kWh/year
Available slow charging power	N/A	53 kW	114 kW
Needed slow charging power by 2030	138 kW	463 kW	787 kW
Developable slow charging power by 2030	138 kW	410 kW	673 kW

2.4. Location quality

Visibility, accessibility & price have a significant impact on the success of a charging location.

2.4.1. Visibility : Normal

Each location in the platform can get a visibility score going from very bad to very good. This is not an automatically calculated parameter, but a manual scoring. By default, for all competitors and tested locations, the value is set to neutral unless you explicitly change it. It's useful to fill out this parameter when you are testing a

Visibility	Definition
Very good	Your location stands out & gets noticed by everyone
Good	Some positive elements, but not the best
Normal	Both positive as negative aspects, location doesn't stand out
Bad	Large part of passing traffic doesn't notice your location
Very bad	Almost nobody notices your location

Specific case :

For this location, the estimation of the visibility is actually set to : "Normal".

2.4.2. Micro-Accessibility : No issues

Each location in the platform can get a micro-accessibility score going from no issues to major issues. This is not an automatically calculated parameter, but a manual scoring. By default for all competitors and tested locations, the value is set to no issues unless you explicitly change it. It's useful to fill out this parameter when you are testing a specific case :

Micro-accesssibility	Definition
No issues	Able to smoothly access the location site
Minor issues	Lose time to access the location site
Major issues	Lose lots of time to access the location site

For this location, the estimation of the micro-accessibility is actually set on : "No issues".

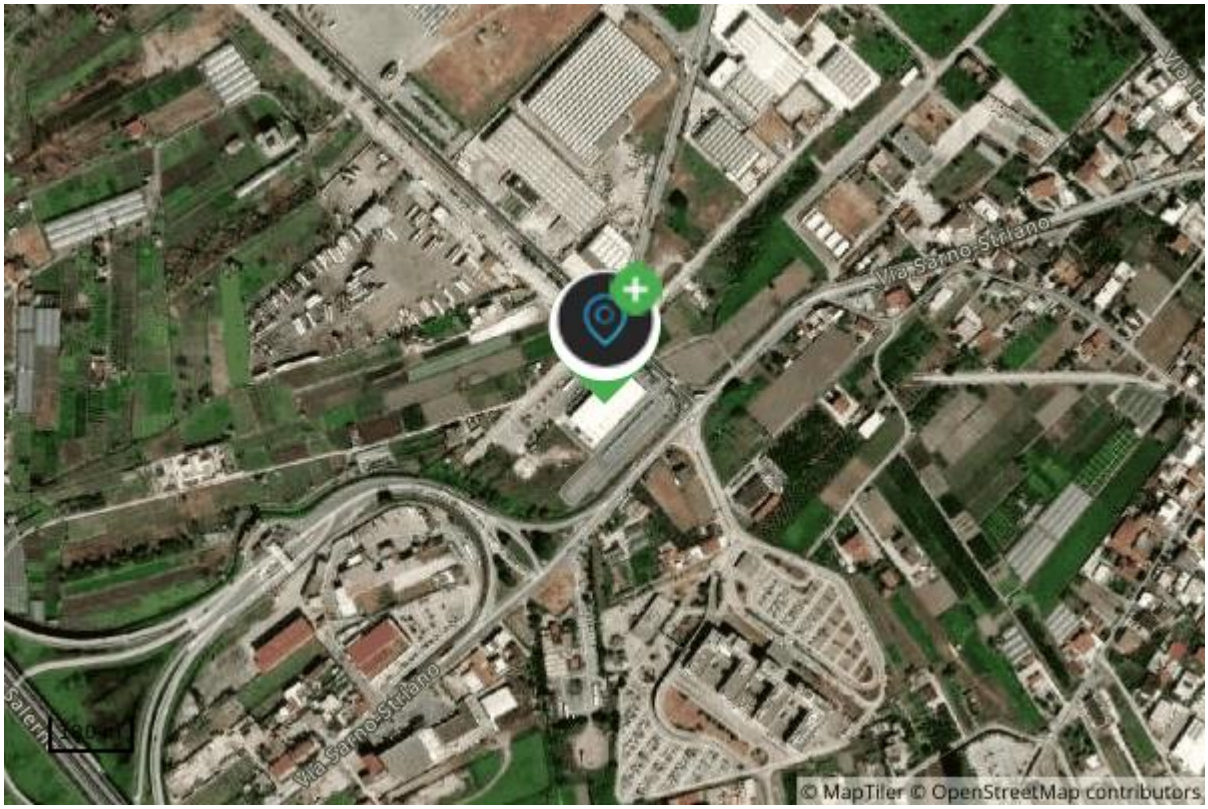
2.4.3. Recharge price : 0,69 €/kWh

Each location present in the platform has a charging price. Which is the average price relating to the station excluding taxes and any additional parking costs (€/connected hour). The indicated price also doesn't take into account flat-rate prices (fixed price per charging session) or the price of time spent (cost per connected hour).

For this location, the ad hoc price is actually set on : 0,69 €/kWh

3. Electrical grid information

The high tension network is located at 838 m from the location.



- <1 kV: low voltage grid
- 1-50 kV: medium voltage grid
- 51-150 kV: high voltage grid
- ≥150kV: extra high voltage grid
- undefined

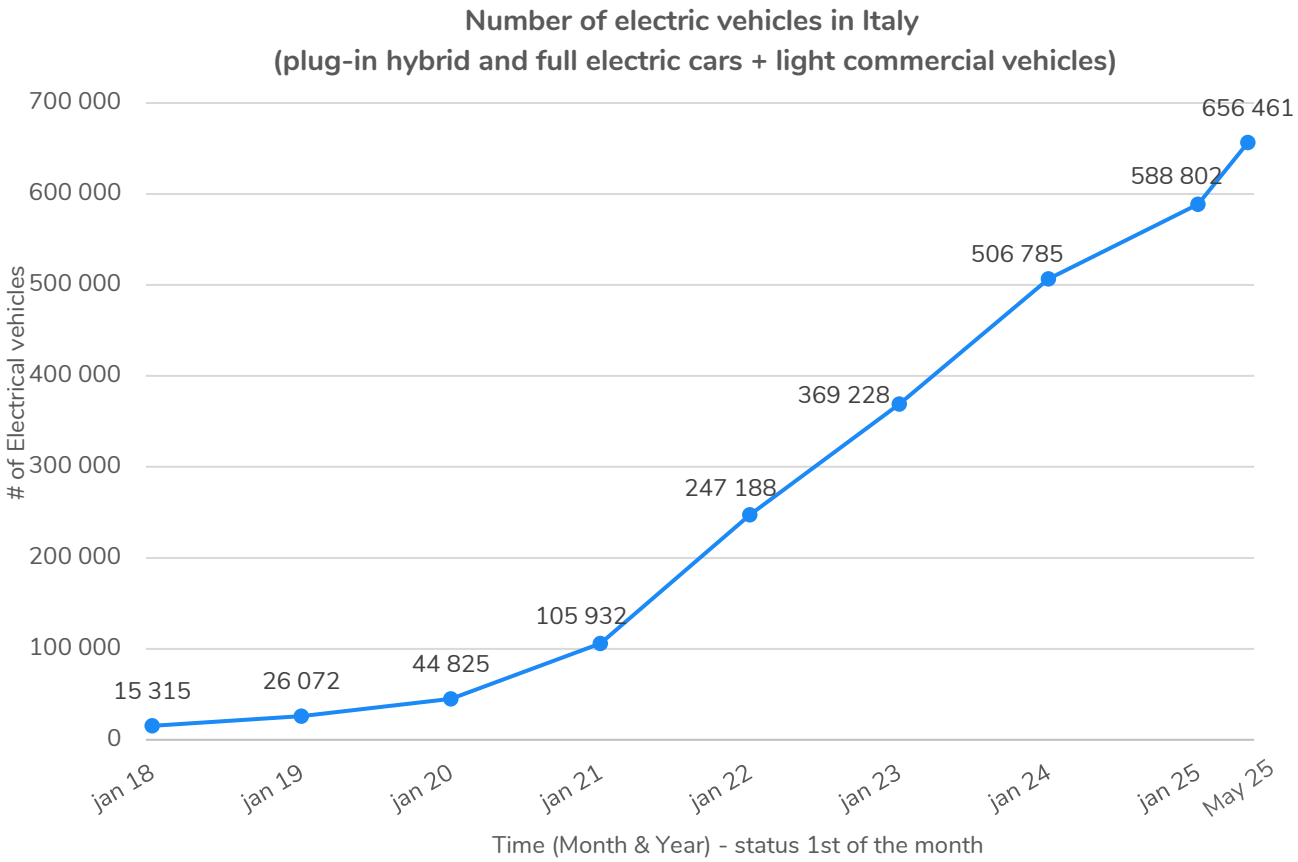
4. Interpretation of the results and market tendencies

This report of the investigation of potential is based on the most recent market data.

In this section, we give a brief overview of the different data sources used and the observed evolutions in the charging electrical vehicles market.

4.1. Number of electric vehicles in the country

The number of electrical vehicles in Italy is fixed to 656 461 in ChargePlanner. This corresponds to an estimation of reality at the start of May 2025 and contains the cars as well as the light commercial vehicles. Of these, 51% (332 587) are fully electric vehicles, while 49% (323 874) are plug-in hybrid electric vehicles. Since January 2025, the number of electrical vehicles rose by 11%, which means that the strong growth of the last years continues.



4.2. Competitive pressure of fast and ultra-fast charging points

In Italy, there are 4 937 sites with at least one fast or ultrafast charging point.

Brand	May 2025										May 2025 vs. January 2025	
			Ultrafast		Fast		Slow		Price per kWh (€)			
	Number of locations (at least 1 F or UF)	Number of locations (total)	# Charging points	Average power (kW)	# Charging points	Average power (kW)	# Charging points	Average power (kW)	(Ultra)fast	Slow	Evolution of Number of locations (at least 1 F or UF)	Evolution of Number of locations (total)
Enel X	1640	8189	10	225	3364	67.25	16511	21	0.69	0.57	104	80
Be Charge	892	4989	38	150	1847	110	14884	22	0.69	0.54	116	51
Ewiva	344	347	1159	245	123	100	20	21	0.78		17	17
no operator name	251	1022	130	240	514	90	2495	22			98	34
Atlante	218	373	131	300	538	60	622	22	0.69	0.52	13	11
Neogy	202	581	40	150	422	87.667	960	22	0.73	0.53	26	44
Free to x	180	185	766	300	246	57	144	6.9			1	1
Powy Energy	168	396	4	200	341	100	855	22	0.72	0.57	99	42
Duferco Energia	113	338	2	150	222	100	686	22	0.65	0.55	26	25
Tesla Supercharger	93	93	972	250	20	122.5	4	22			4	4
Fastway	59	60	2	150	118	120	8	22				
Route220	55	191	55	175	62	61	308	22			9	6
RicaricaEV	50	83			77	50	163	22			-1	
IONITY	40	40	272	350	12	50	6	43	0.65	0.65		
IPlanet	38	38	112	260	33	60	29	22	0.65	0.65	3	3
Go Electric Stations	36	751	8	180	65	55	1406	22			4	4
Porsche Smart Mobility	34	74	47	320	2	50	78	22			74	34
Electrip	32	87	82	290	57	60	203	22	0.41	0.41	1	2
Beagleplug	30	249	4	300	58	60	410	22			10	2
Nissan	30	43			59	50	68	31.633				
Allego	29	30	6	225	43	50	10	22	0.69		-1	-1
Electra	29	29	145	300	22	50	15	22	0.65	0.53	5	5
ChargePoint	28	110	29	150	39	50	344	22	0.64	0.54		
EDISON PLUG&GO	28	183			54	50	383	22			5	5
EMOTION	26	79	4	150	56	67.5	122	22			4	1
Volvo Charging	26	65	44	170	8	100	107	22	0.72	0.72	-1	
Other	266	4992	151	198	451	62	11437	21	0.58	0.53	-33	17
TOTAL	4937	23617	4213	213	8853	65	52278	22	0.63	0.55	662.00	346.00

5. About RetailSonar

From location planning to location performance. RetailSonar is **Europe's leading geomarketing company**. We optimize the location strategy for over 200 retailers in more than 15 countries.

We make the difference thanks to :

The most complete, innovative & up-to-date **retail database** in Europe

Accurate sales forecasts thanks to state of the art of **Artificial Intelligence**

An international **geomarketing platform** for real estate, sales & marketing

RetailSonar offers an unrivalled expertise in providing the right location strategy for all stakeholders in the fast changing EV sector.

The right location strategy for installers and distributors

- Determine the optimal locations for each type of charger
- Simulate business cases in your own data platform
- A professional market report to share with stakeholder

The right location strategy for retailers & real estate

- Determine the profitability of all your available locations
- Simulate business cases in your own data platform
- Clear guidelines to bring your strategy into practice

The right location strategy for governments & cities

- Determine the optimal regional coverage of chargers
- Simulate business case & optimize your strategy
- Realize your policy goals