Location study
New brand Kielce

Address : Śląska 3 25-328 Kielce

Simulation for :

4 ultrafast charging points (maxpower :150 kW)

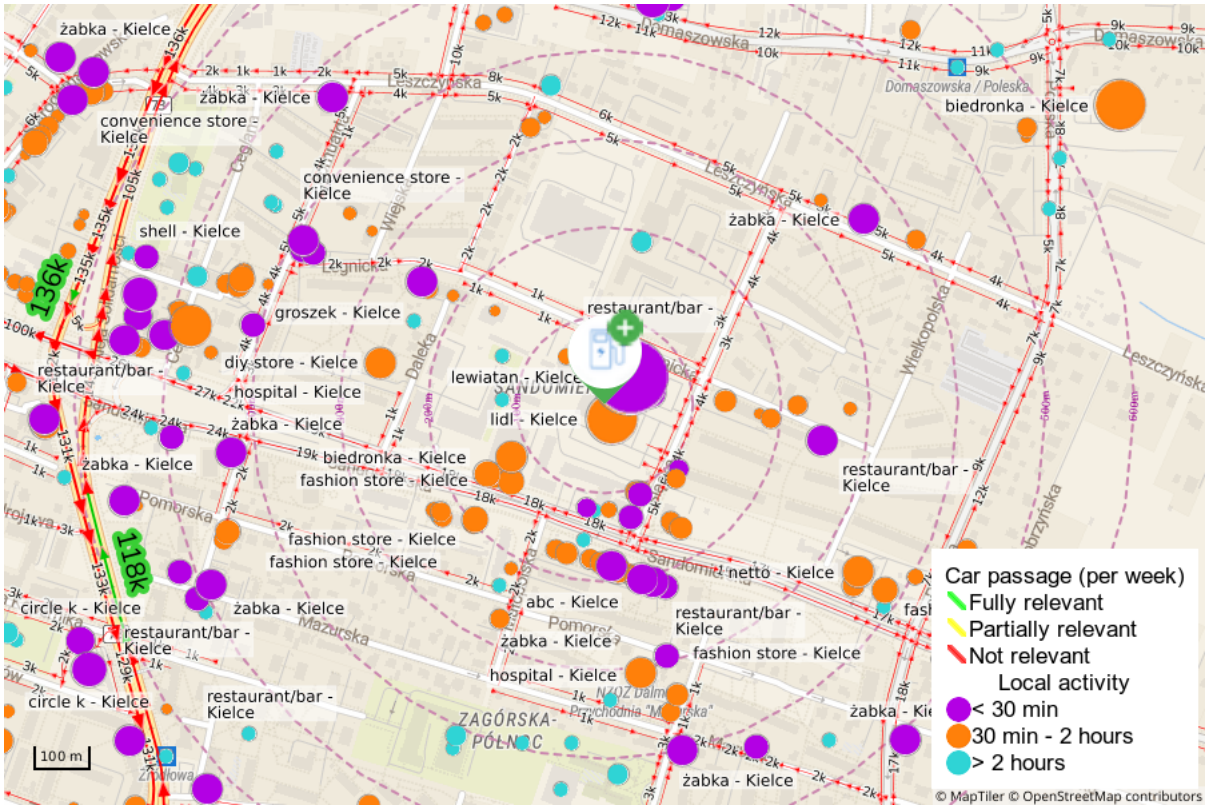
Brand : New brand

ChargePlanner
a solution by RetailSonar

Table of contents

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 : Śląska 3, 25-328, Kielce, PL

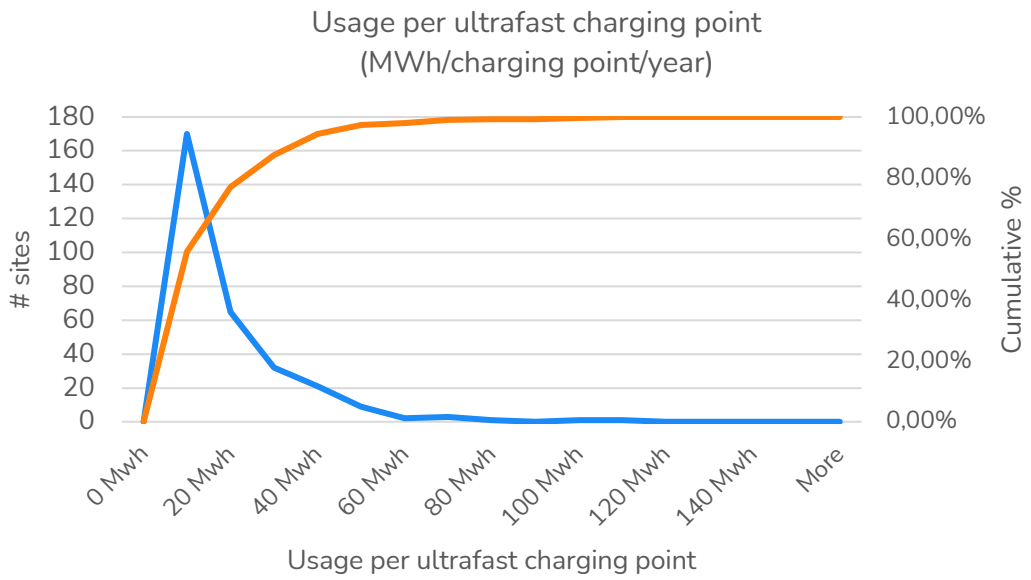


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of **143.727 kWh/year** (**being 35.932 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 305 existing sites with ultra-fast charging points, the predictive model gives a median consumption of 9 MWh per year and per ultra-fast charging point.

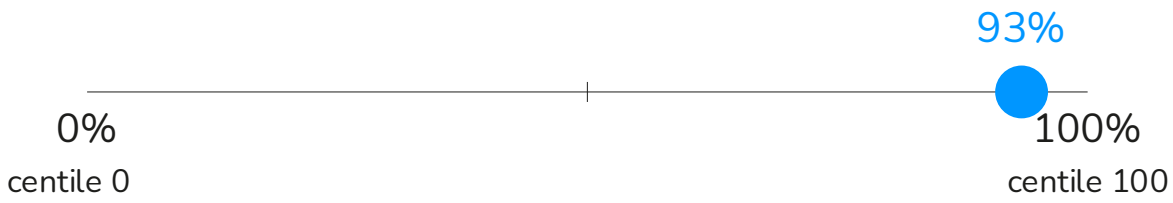


The following graph compares the expected performance (per ultra-fast charging point and per year) of the site under investigation with all existing sites in the country.

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 7 % best sites of the country in terms of potential.

Potential (kWh/ ultrafast charging point) vs. other stations



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

In this table you can find an overview of the competitors within 10 minutes drivetime.

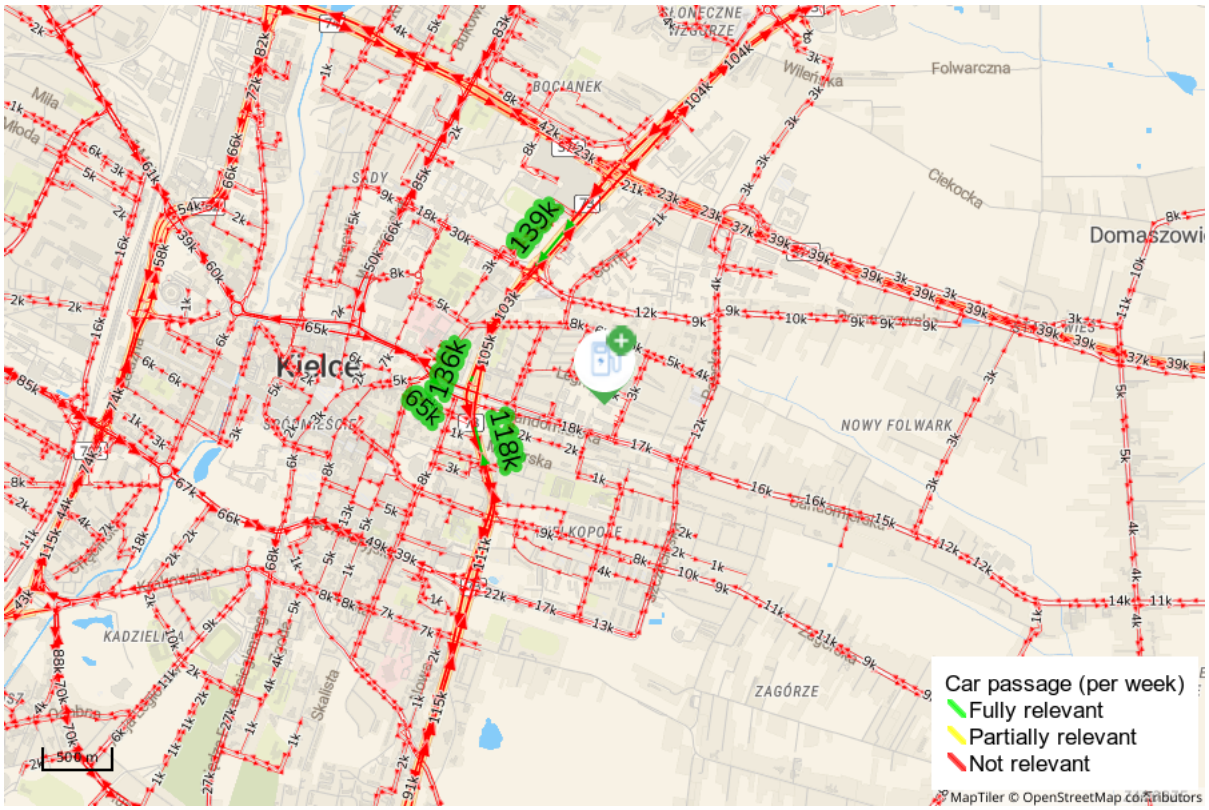
Name of the concurrent station	Address	# Ultrafast charging points (>150kW)	Ultrafast power (kW)	# Fast charging points (49-150kW)	Fast power (kW)	Price (€/kWh)	Drivetime (min)
Elocity Kielce	ulica Gustawa Morcinka 1	0	N/A	2	120 kW	1,62 PLN/kWh	4
GreenWay Kielce	ulica Warszawska 90	0	N/A	2	145 kW	2,64 PLN/kWh	5
no operator name Kielce	aleja Tysiąclecia Państwa Polskiego 7	2	150 kW	0	N/A	2,29 PLN/kWh	5
Elocity Kielce	ulica Zagnańska 92	0	N/A	2	65 kW	2,43 PLN/kWh	6
ORLEN Kielce	ulica Żytnia 1a	0	N/A	1	50 kW	2,29 PLN/kWh	7
GreenWay Kielce	ulica Warszawska 422	2	170 kW	2	145 kW	2,64 PLN/kWh	10
Kaufland Polska Markety Sp. z o.o. Sp. k. Kielce	ulica gen. Władysława Sikorskiego 3	0	N/A	2	60 kW	2,29 PLN/kWh	10

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

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.

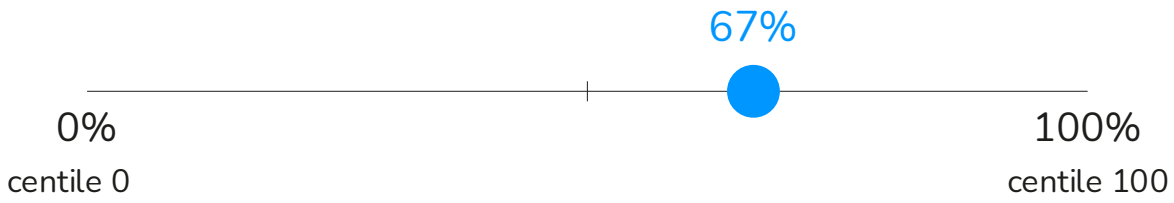
On this map, passage of each road segment is visualized. This gives an indication of the market potential related to passage in the proximity of the charging location.



The charging location has an estimation of **457.651** 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 33 % best sites in the country.

Cars passing by per week compared to other stations



2.2. Potential of local activity in a 300m radius

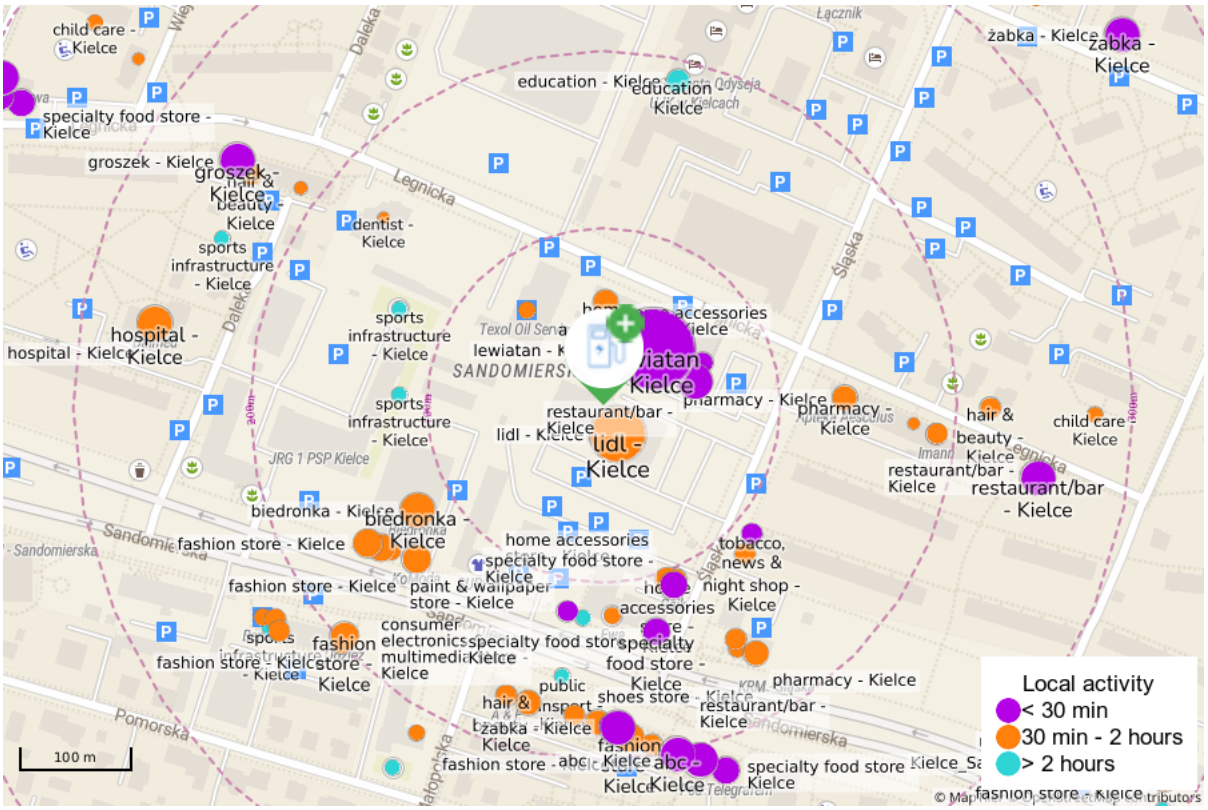
The presence of relevant local activity is important for ultrafast charging points. Mainly activity with a short visit duration (<30min) is important. Also activity with a medium long duration (30min – 2h) is partly relevant. In this study we took into account the following activity:

< 30min : 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.

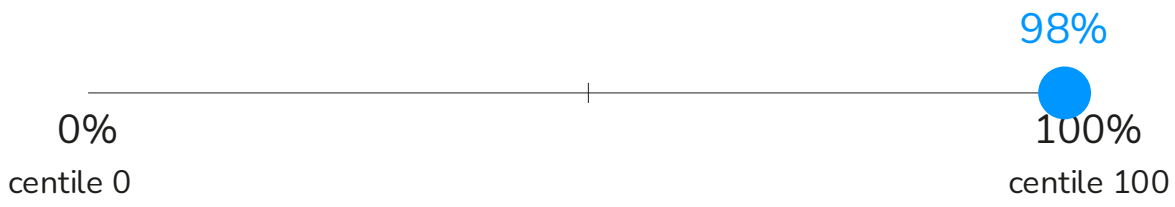

child care - Kielce
specialty food store - Kielce
groszek - Kielce
groszek - Kielce
hair & beauty - Kielce
sports infrastructure - Kielce
dentist - Kielce
hospital - Kielce
hospital - Kielce
sports infrastructure - Kielce
lewiatan - Kielce
education - Kielce
education Kielce
żabka - Kielce
żabka - Kielce
accessories Kielce
lewiatan Kielce
pharmacy - Kielce
pharmacy - Kielce
restaurant/bar - Kielce
lidl - Kielce
lidl - Kielce
hair & beauty - Kielce
child care Kielce
restaurant/bar - Kielce
restaurant/bar - Kielce
biedronka - Kielce
biedronka - Kielce
fashion store - Kielce
home accessories
specialty food store - Kielce
fashion store - Kielce
paint & wallpaper store - Kielce
tobacco, news & night shop - Kielce
accessories
consumer electronics multimedia Kielce
specialty food store
specialty food store - Kielce
fashion store - Kielce
fashion store - Kielce
pharmacy - Kielce
public
shoes store - Kielce
hair &
restaurant/bar - Kielce
żabka - Kielce
fashion
fashion store - Kielce
abc - Kielce
specialty food store Kielce
fasnion store - Kielce
100 m
Local activity
< 30 min
30 min - 2 hours
> 2 hours

Less than 30min	Address	Number of visitors per year	Distance (m)
lewiatan - Kielce	Legnicka	250.000	42 m
restaurant/bar - Kielce	Śląska	20.000	54 m
kolporter - Kielce	Legnicka	5.000	61 m
specialty food store - Kielce	Sandomierska 105	10.000	109 m
tobacco, news & night shop - Kielce	Śląska	5.000	111 m
tobacco, news & night shop - Kielce	Sandomierska	5.000	118 m
specialty food store - Kielce	Sandomierska 105	10.000	131 m
żabka - Kielce	Sandomierska 154	20.000	182 m
abc - Kielce	Sandomierska 154	20.000	201 m
restaurant/bar - Kielce	Sandomierska 154	20.000	208 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 2 % best 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



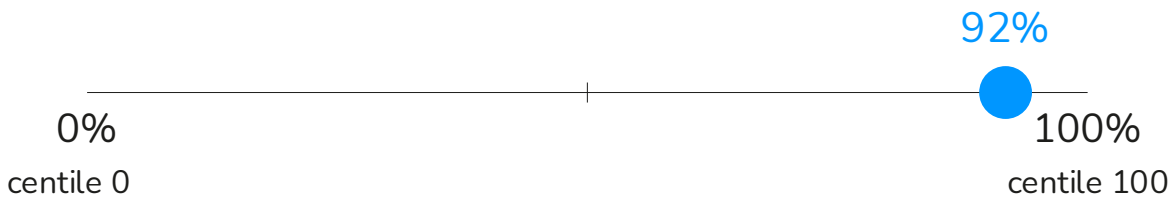
30min - 2h	Address	Number of visitors per year	Distance (m)
lidl - Kielce	Śląska 3	125.000	18 m
home accessories store - Kielce	Legnicka 12H	15.000	58 m
home accessories store - Kielce	Sandomierska 105	15.000	105 m

30min - 2h	Address	Number of visitors per year	Distance (m)
biedronka - Kielce	Sandomierska	40.000	121 m
pharmacy - Kielce	Śląska 10	15.000	137 m
pharmacy - Kielce	Śląska 10	15.000	137 m
fashion store - Kielce	Sandomierska 89	25.000	137 m
paint & wallpaper store - Kielce	Sandomierska 89	20.000	149 m
fashion store - Kielce	Sandomierska 89	25.000	154 m
fashion store - Kielce	Sandomierska 154	25.000	188 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 8 % 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

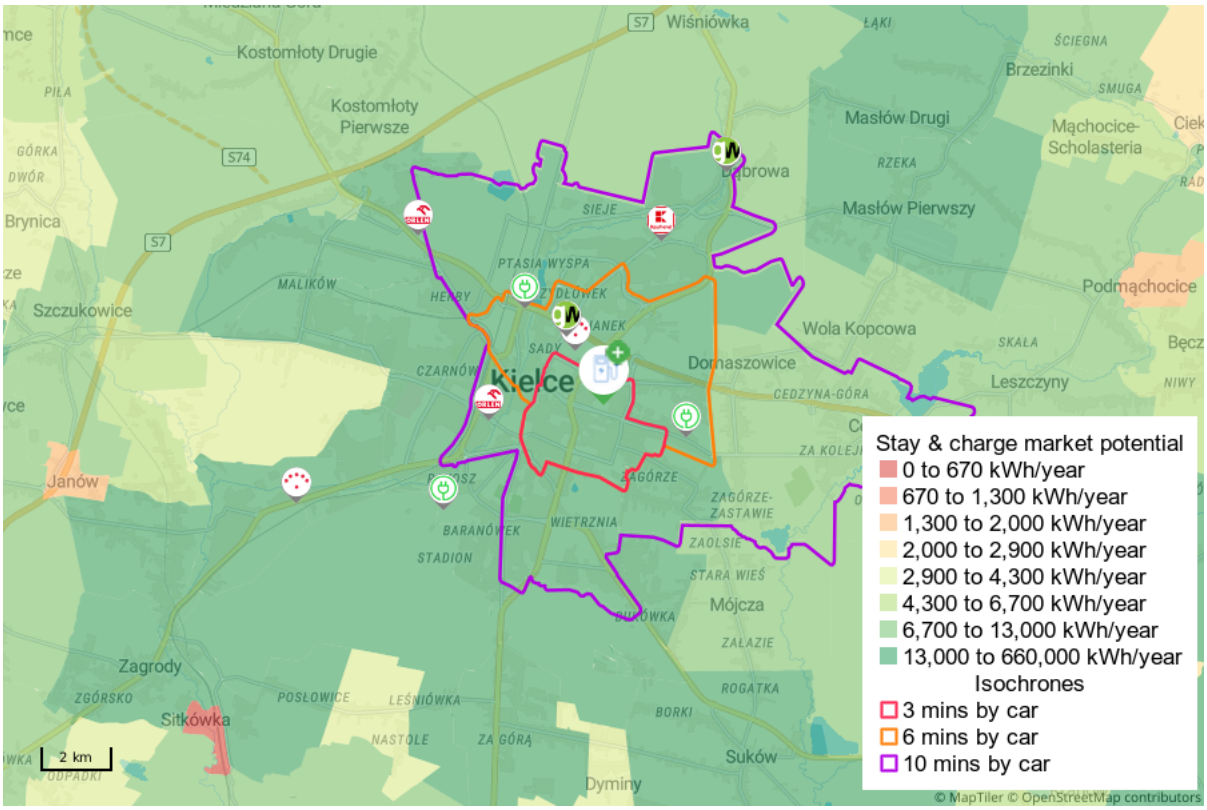


2.3. Residential and local visitor's potential

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.


Kostomłoty Drugie
Kostomłoty Pierwsze
Wiśniówka
Brzezinki
Masłów Drugi
Mąchocice-Scholasteria
Masłów Pierwszy
Dąbrowa
Brynica
Szczukowice
Podmąchocice
Wola Kopcowa
Domaszowice
Kielce
Leszczyny
Janów
Mójcza
Zagrody
Sitkówka
Suków
Dyminy
2 km
Stay & charge market potential
0 to 670 kWh/year
670 to 1,300 kWh/year
1,300 to 2,000 kWh/year
2,000 to 2,900 kWh/year
2,900 to 4,300 kWh/year
4,300 to 6,700 kWh/year
6,700 to 13,000 kWh/year
13,000 to 660,000 kWh/year
Isochrones
3 mins by car
6 mins by car
10 mins by car
© MapTiler © OpenStreetMap contributors

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	16.480 inhabitants	31.091 inhabitants	89.988 inhabitants
Households	6.417 families	12.106 families	34.514 families
Wealth index	100 %	100 %	99 %
Population density	4.982	2.787	2.138
Cars	11.767 cars	22.211 cars	64.038 cars
Light commercial vehicles	1.645 vehicles	3.106 vehicles	8.953 vehicles
Electric vehicles	48 vehicles	89 vehicles	254 vehicles
Number of visits > 2 hours in the zone	4.487.500 visits	10.858.000 visits	26.416.000 visits
Employees	17.500 FTE	33.550 FTE	61.300 FTE
Residential potential	108 kWh/year	190 kWh/year	526 kWh/year
Market space 'stay & charge'			
Stay & charge market potential	220.389 kWh/year	407.159 kWh/year	876.032 kWh/year
Available slow charging power	26 kW	65 kW	291 kW
Needed slow charging power by 2030	2.209 kW	4.081 kW	8.780 kW
Developable slow charging power by 2030	2.182 kW	4.015 kW	8.488 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 specific case :

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

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

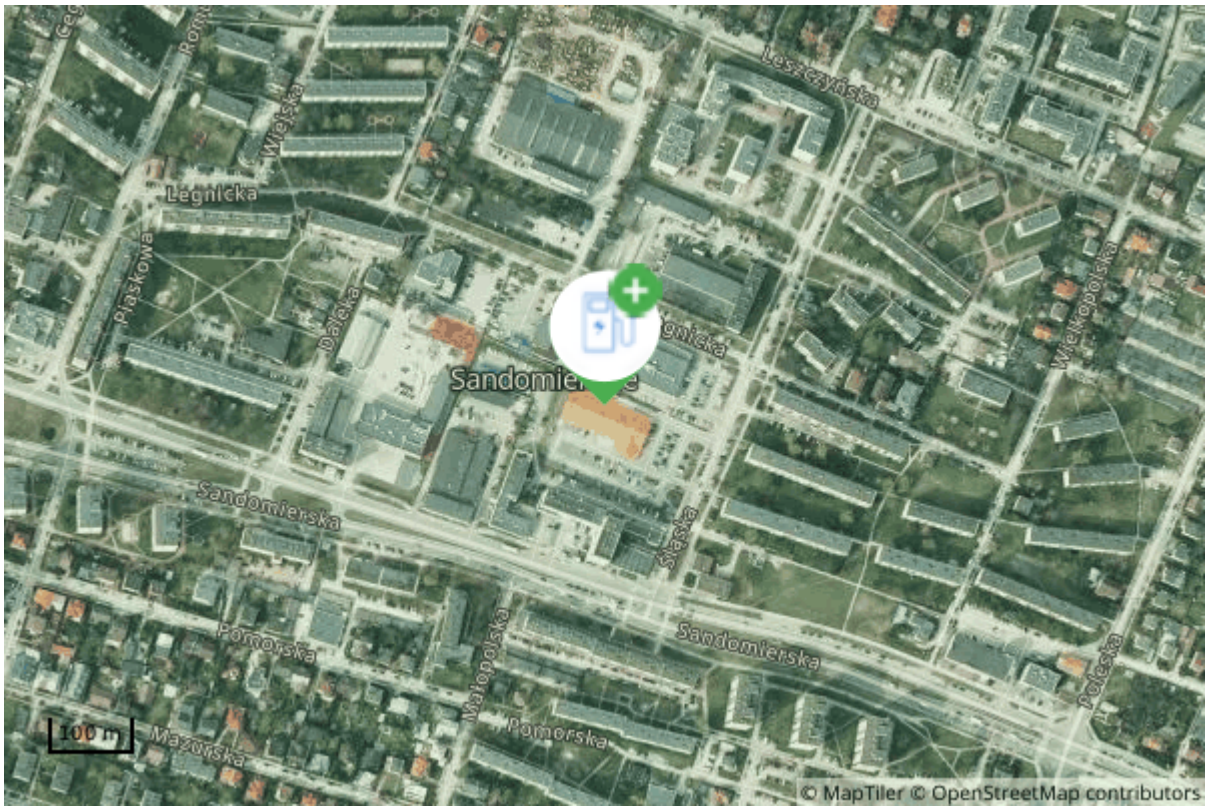
2.4.3. Recharge price : 2,29 PLN/kWh

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 : 2,29 PLN/kWh

3. Electrical grid information

The high tension network is located at 562 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

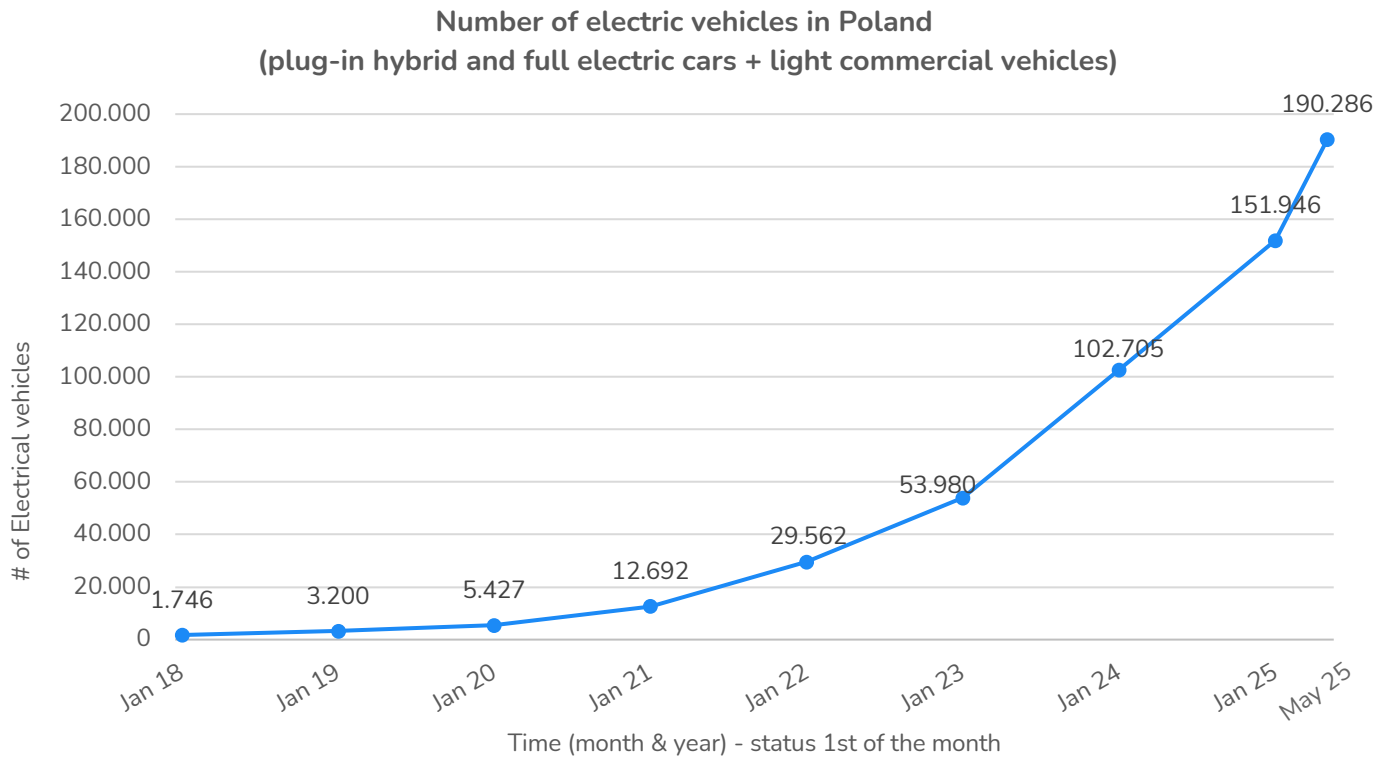
4. Interpretation of the results and market tendencies

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 Poland is fixed to 190 286 in ChargePlanner. This corresponds to an estimation of reality at the start of January 2025 and contains the cars as well as the light commercial vehicles. Of these, 70% (105 854) are fully electric vehicles, while 30% (84 433) are plug-in hybrid electric vehicles. Since January 2025, the number of electrical vehicles rose by 25%, which means that the strong growth of the last years continues.



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

In Poland, there are 2 062 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	Median power (kW)	# Charging points	Median power (kW)	# Charging points	Median power (kW)	(Ultra)fast	Slow	Evolution of Number of locations (at least 1 F or UF)	Evolution of Number of locations (total)
Powerdot	419	451	55	190	855	85	490	22	2.29	1.84	61	86
GreenWay	398	846	187	170	742	119	980	22	2.64	1.70	1	83
Elocity	303	934	86	150	536	50	1693	22	1.97	1.56	10	-117
Kaufland Polska Markety	187	187			374	60	187	22			187	187
ORLEN	179	436	11	180	270	75	731	22			5	5
Lidl	97	128	1	180	111	50	129	22	1.95	1.51	-16	-14
no operator name	58	179	37	150	92	60	293	22			33	91
MOYA ENERGIA	53	53	8	180	98	120	53	22	2.07	0.91	43	43
eTAURON	42	210	3	165	83	50	423	22	1.71	1.32	1	1
Polenergia eMobility	32	37	66	180	20	120	40	11	2.05	1.45	3	3
GO+ EAuto	26	37			27	50	44	22	2.28	2.28	-3	-2
Energa	20	78			20	50	138	22			-1	1
Other brands	248	1,343	375	180	265	60	2,541	22	2.30	1.65	-25	206
TOTAL	2,062	4,919	829	180	3,493	60	7,742	22	2.07	1.56	299	573

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