Location study
Eigene geplante Standorte Lensahn

Address : Dieselstraße 4 23738 Lensahn

Simulation for :

4 ultrafast charging points (maxpower :150 kW)

Brand : Eigene geplante Standorte

ChargePlanner
a solution by RetailSonar

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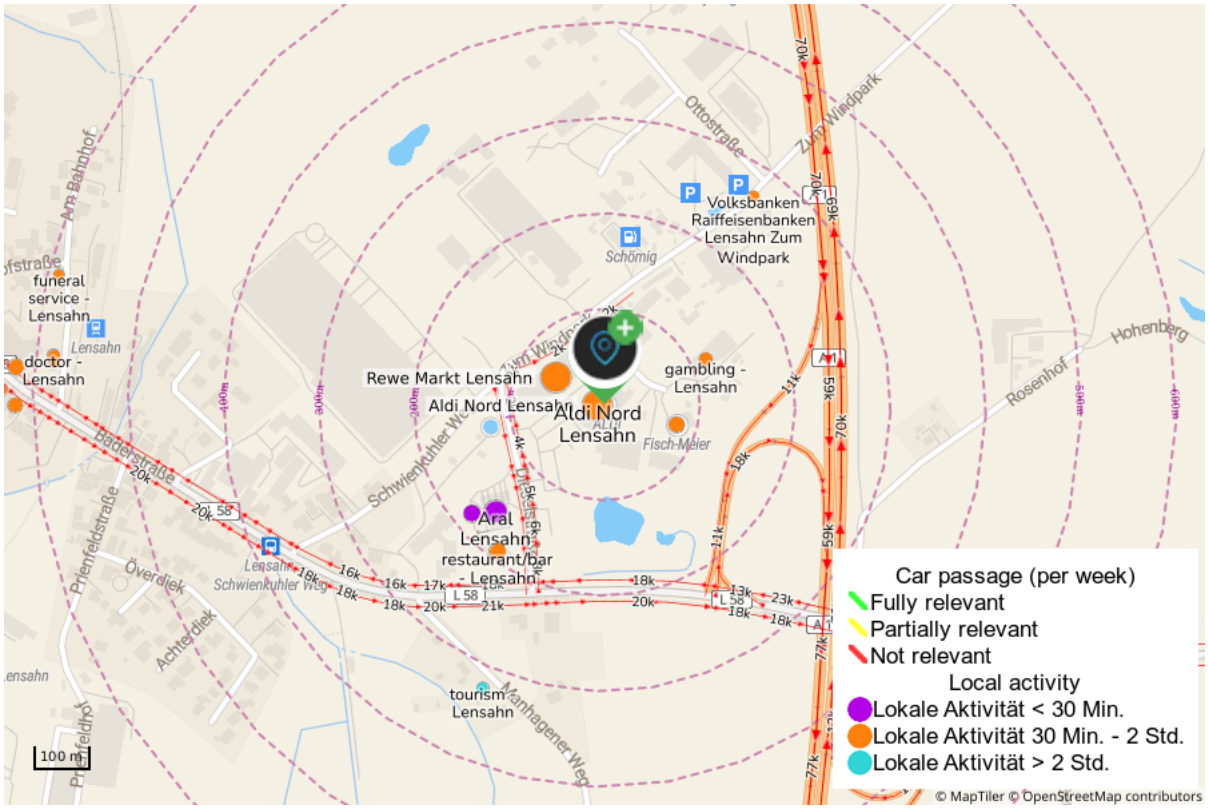
1. Description of the simulation

In this report we show the result of a simulation with 4 ultrafast charging points (>150kW) of a charging station located at : Dieselstraße 4, 23738, Lensahn, DE

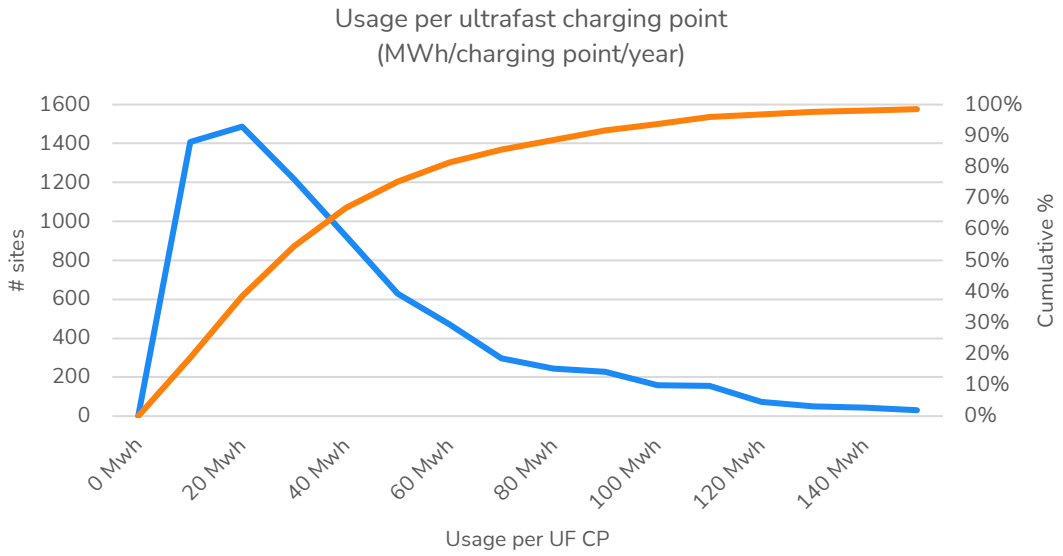


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of **437.312 kWh/jahr (being 109.328 kWh/Jahr per ultrafast charging point)** for this location.

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

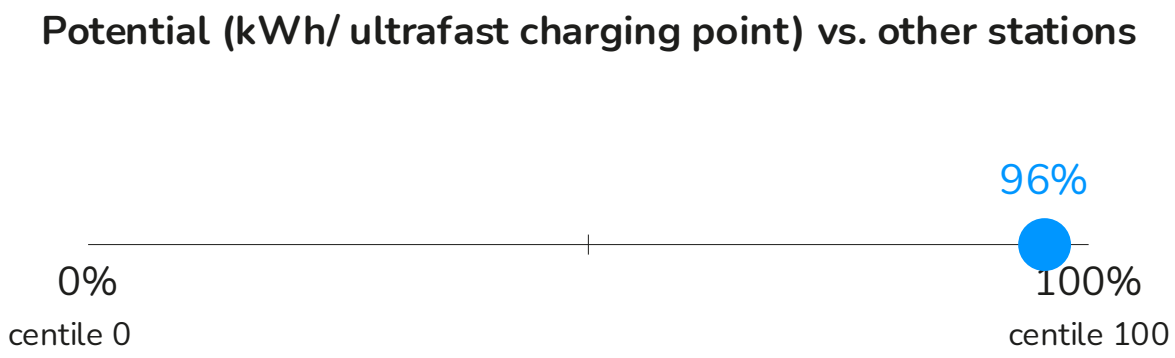
For the 7 535 existing sites with ultra-fast charging points, the predictive model gives a median consumption of 26.7 MWh per year and per ultra-fast charging point.



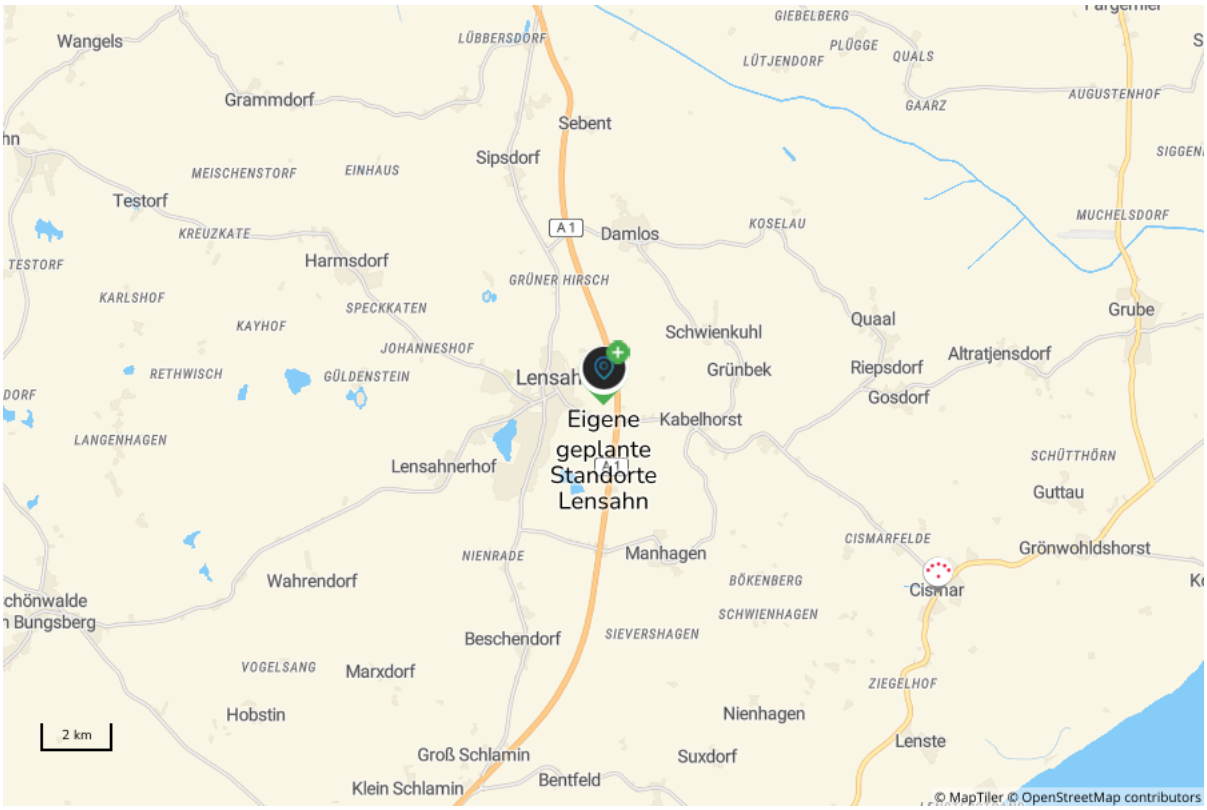
The following graph compares the expected performance (per ultra-fast charging point and per year) of the site under investigation with all existing sites in the country.

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 4 % best sites of the country in terms of potential.



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



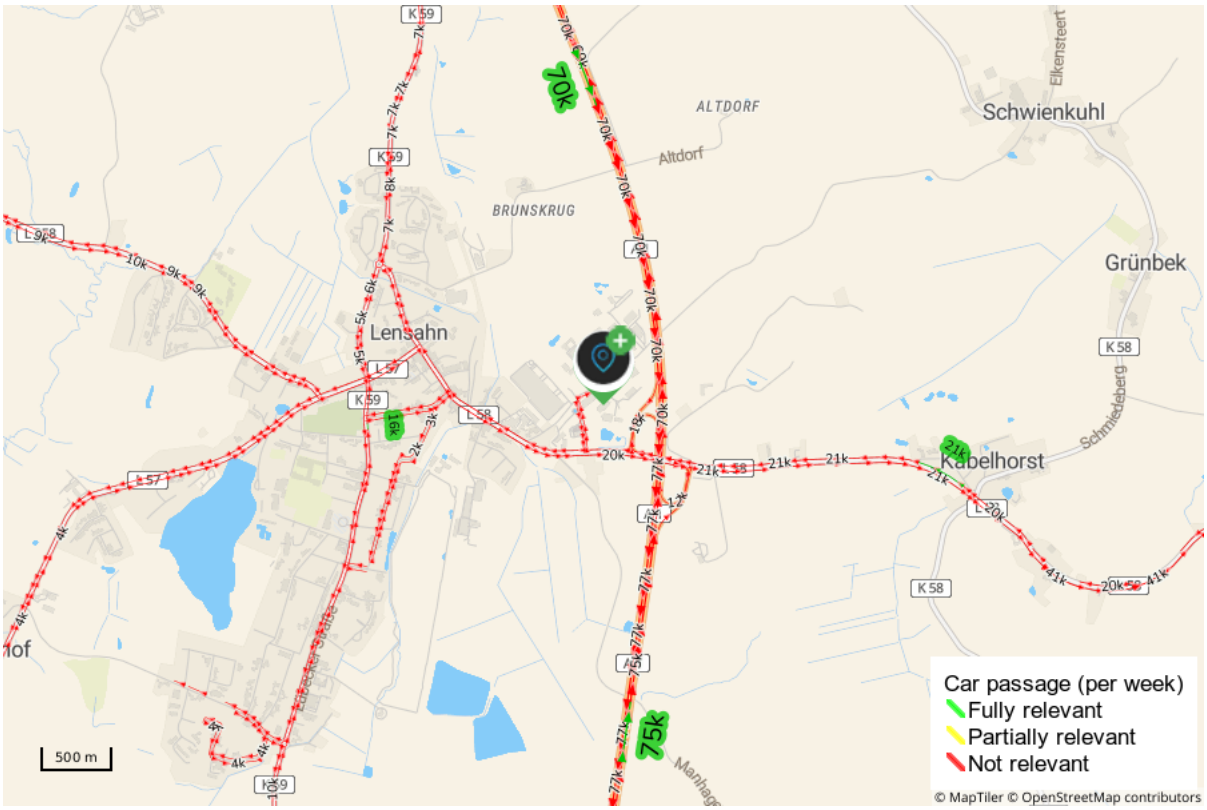
In this table you can find an overview of the competitors within 10 minutes drivetime.

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.

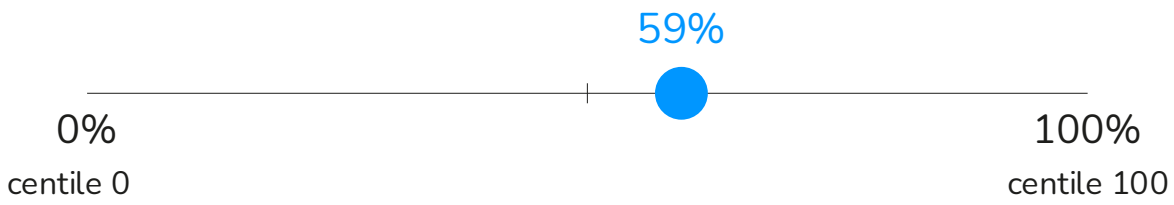
On this map, passage of each road segment is visualized. This gives an indication of the market potential related to passage in the proximity of the charging location.



The charging location has an estimation of **183.057** 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 41 % best sites in the country.

Cars passing by per week compared to other stations



2.2. Potential of local activity in a 300m radius

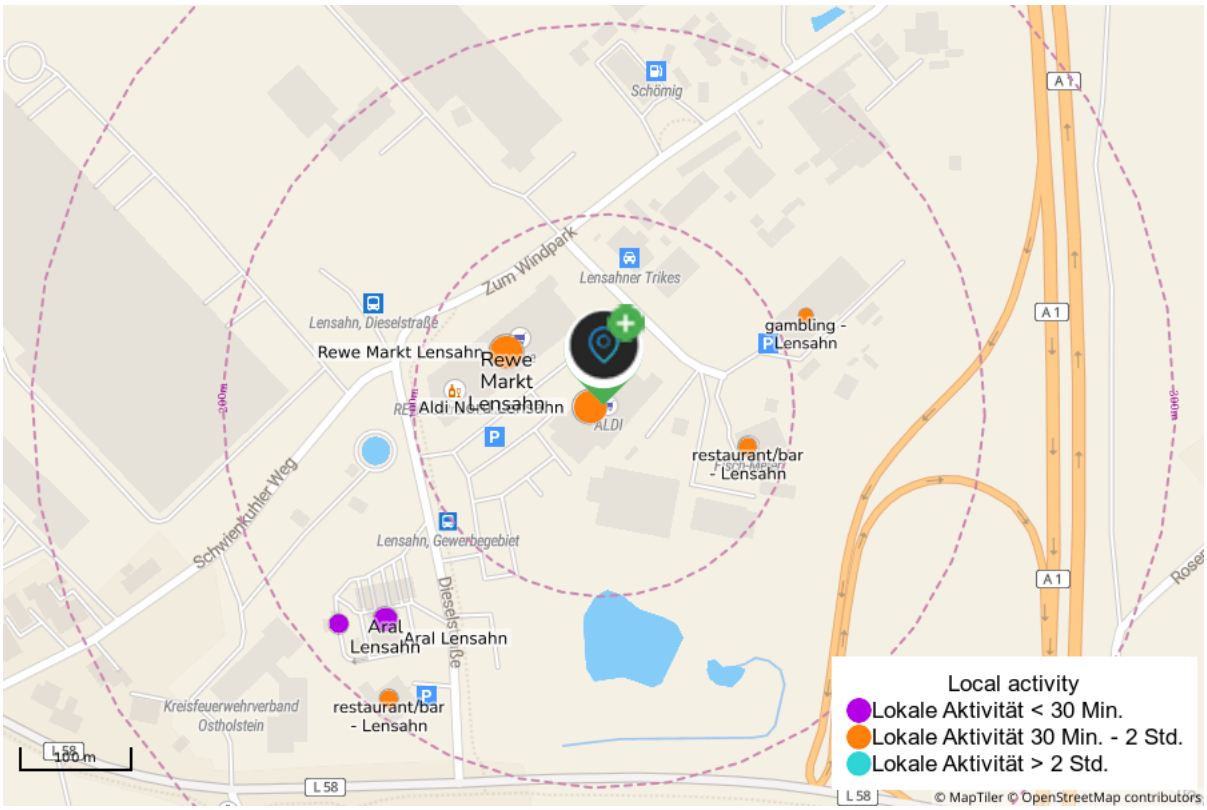
The presence of relevant local activity is important for ultrafast charging points. Mainly activity with a short visit duration (<30min) is important. Also activity with a medium long duration (30min – 2h) is partly relevant. In this study we took into account the following activity:

< 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.


Schömig
Zum Windpark
Lensahner Trikes
Lensahn, Dieselstraße
Rewe Markt Lensahn
Rewe Markt Lensahn
Aldi Nord Lensahn
ALDI
gambling - Lensahn
restaurant/bar - Lensahn
Schwienkuhler Weg
Lensahn, Gewerbegebiet
Dieselstraße
Aral Lensahn
Aral Lensahn
Kreisfeuerwehrverband Ostholstein
restaurant/bar - Lensahn
A 1
L 58
100 m
Local activity
Lokale Aktivität < 30 Min.
Lokale Aktivität 30 Min. - 2 Std.
Lokale Aktivität > 2 Std.
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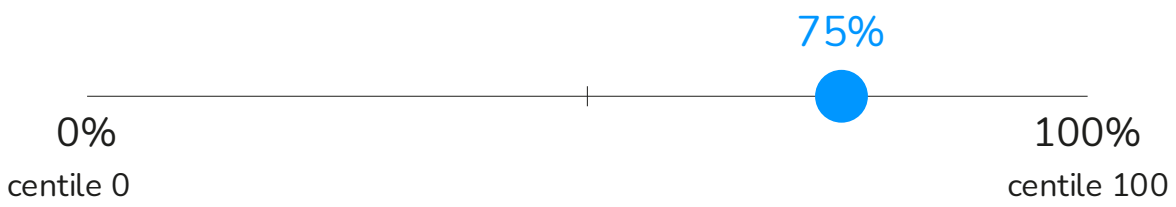
Less than 30min	Address	Number of visitors per year	Distance (m)
Aral Lensahn	Dieselstraã□E 1	25.000	160 m
carwash - Lensahn	Bäderstraße	11.250	180 m

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 25 % 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

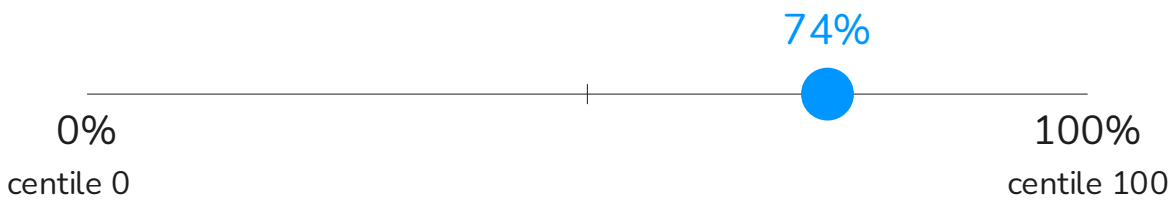


30min - 2h	Address	Number of visitors per year	Distance (m)
Aldi Nord Lensahn	Dieselstraße 4	125.000	7 m
Rewe Markt Lensahn	Dieselstraße 6	125.000	58 m
restaurant/bar - Lensahn	Daimlerstraße 8	15.000	79 m
gambling - Lensahn	Daimlerstraße 7	5.000	116 m
restaurant/bar - Lensahn	Dieselstraße 1a	15.000	190 m
Volksbanken Raiffeisenbanken Lensahn Zum Windpark	Zum Windpark 9	1.000	268 m
Volksbanken Raiffeisenbanken Lensahn Zum Windpark	Zum Windpark 9	1.000	268 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 26 % 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

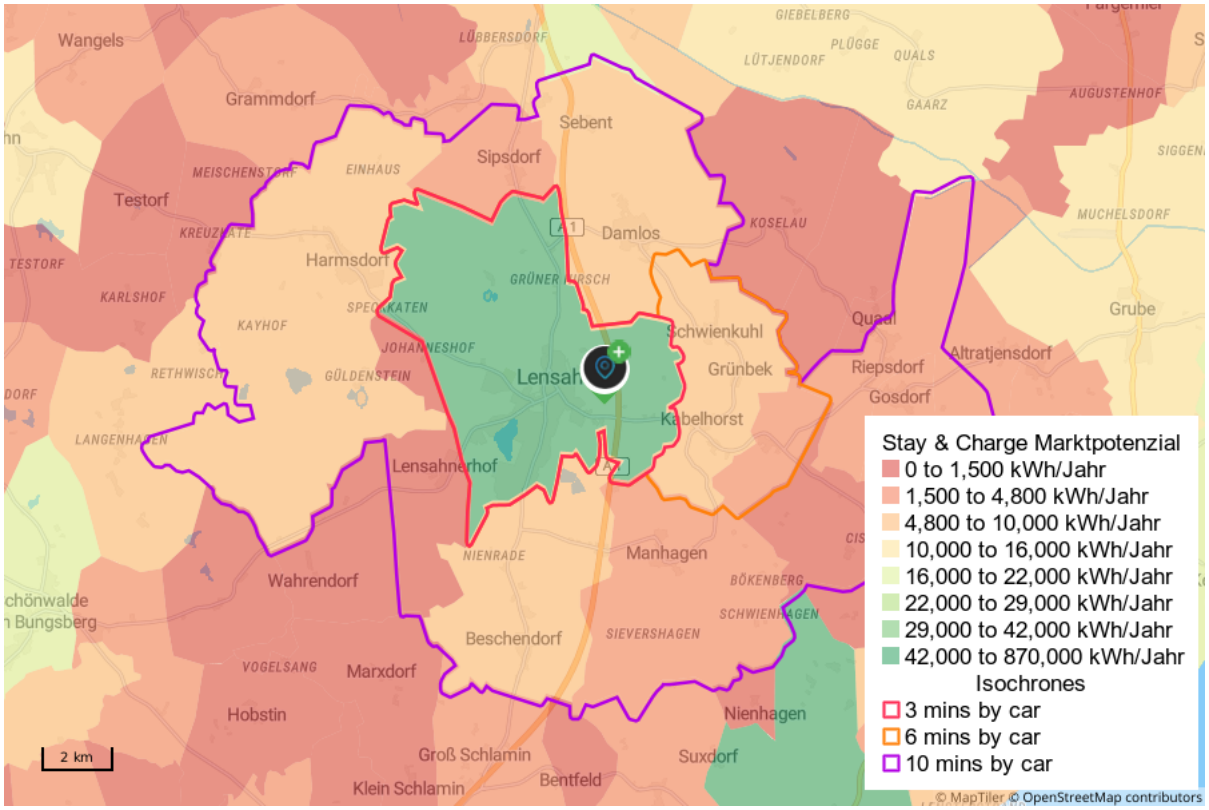


2.3. Residential and local visitor's potential

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 potential residential and activity 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
Marktpotenzial 'Stay & Charge'			
Einwohner	4.410 Einwohner	4.937 Einwohner	8.033 Einwohner
Haushalte	1.976 Familien	2.230 Familien	3.513 Familien
Wohlstandsindex	93 %	93 %	93 %
Bevölkerungsdichte	285	136	72
Autos	2.896 Autos	3.326 Autos	5.691 Autos
Leichte Nutzfahrzeuge	275 Fahrzeuge	314 Fahrzeuge	471 Fahrzeuge
Elektroautos	125 Fahrzeuge	141 Fahrzeuge	226 Fahrzeuge
Anzahl der Langzeitbesuche in der Zone	355.000 Besuche	401.000 Besuche	572.000 Besuche
Beschäftigungsanzahl	1.758 Artbeitnehmer	1.782 Artbeitnehmer	1.945 Artbeitnehmer
Wohnmarktpotenzial	209 kWh/Jahr	235 kWh/Jahr	371 kWh/Jahr
Marktvolumen 'Stay & Charge'			
Stay & Charge Marktpotenzial	75.365 kWh/Jahr	82.291 kWh/Jahr	119.699 kWh/Jahr
Verfügbare langsame Ladeleistung	158 kW	158 kW	158 kW
Benötigte langsame Ladeleistung bis 2030	306 kW	335 kW	487 kW
Entwickelbare langsame Ladeleistung bis 2030	148 kW	176 kW	328 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 to : "Normal".

2.4.2. Micro-Accessibility : Keine Probleme

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 : "Keine Probleme".

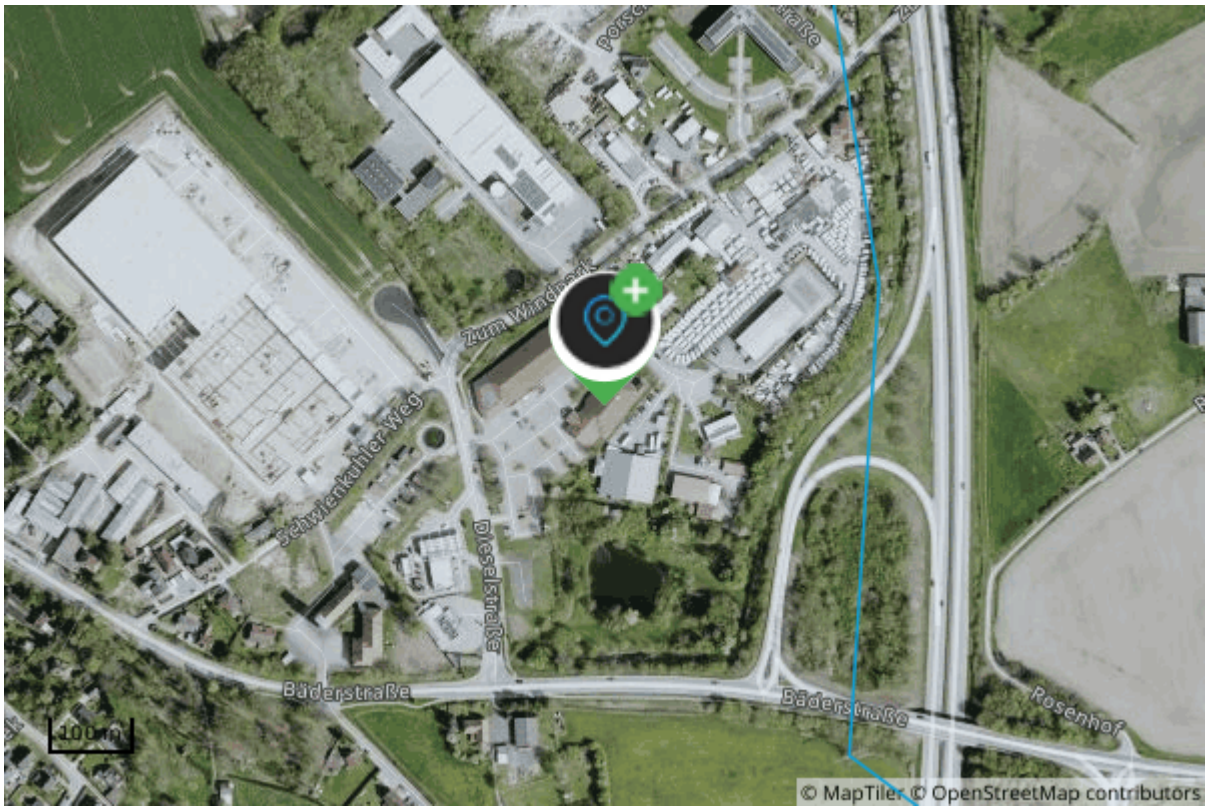
2.4.3. Recharge price : 0,62 €/kWh

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 : 0,62 €/kWh

3. Electrical grid information

The high tension network is located at 186 Metern 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

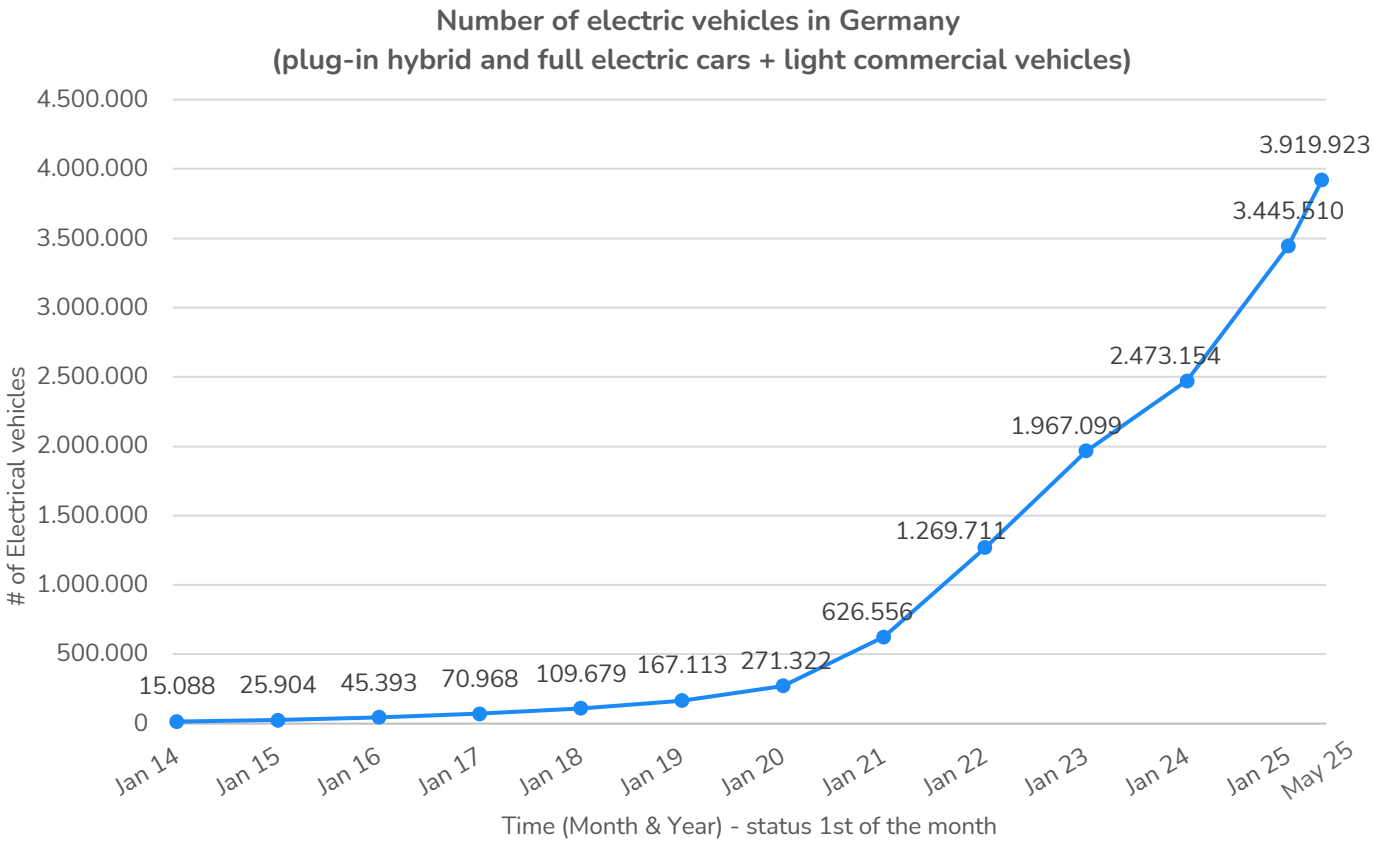
4. Interpretation of the results and market tendencies

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 Germany is fixed to 3 919 923 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, 62% (2 443 255) are fully electric vehicles, while 38% (1 476 668) are plug-in hybrid electric vehicles. Since January 2025, the number of electrical vehicles rose by 13.7%, which means that the strong growth of the last years continues.



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

In Germany, there are 11 851 sites with at least one fast or ultrafast charging point.

Brand	May-25										May 2025 vs. January	
			Ultrafast		Fast		Slow		Price of the kW (l)			
	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)
EnBW	1,572	2,349	6,846	350	590	63	2,766	22	0.73	0.59	52	-128
EWE Go	696	1,039	1,568	150	178	50	835	22	0.71	0.71	19	-58
Aral Pulse	504	504	2,484	300	958	100	11	22	0.66	0.66	18	18
Lidl	494	672	10	350	1,000	50	865	22	0.40	0.24	8	7
Allego	459	534	1,382	150	346	50	372	22	0.61	0.51	15	-2
Shell Recharge	409	1,328	1,378	300	48	120	1,110	4	0.66		17	-20
Kaufland	376	382	6	250	1,101	50	604	22	0.46	0.40	32	32
EDEKA	329	484	140	150	669	50	1,354	22			38	36
E.ON Drive	307	902	335	175	488	50	2,500	22	0.61	0.49	8	18
ALDI SÜD	304	687	375	150	246	50	969	22	0.37	0.24	12	-11
no operator name	291	1,446	640	201	277	50	3,668	22			19	-436
ChargePoint	272	2,118	435	150	203	50	8,498	22	0.63	0.48	10	69
Tesla Supercharger	259	259	3,285	250							7	7
Comfortcharge	229	297	423	150	138	50	593	7			-14	-21
Pfalzwerke	204	242	649	225	162	50	388	22			-171	-226
Mer Germany	190	489	371	175	284	50	1,152	22			1	1
Volkswagen Group	167	1,516	105	150	142	53	5,328	17			-33	-16
IONITY	161	161	1,240	350					0.58		2	2
Vattenfall InCharge	141	266	396	180	40	120	1,022	11	0.52	0.43	39	46
Non-networked	131	613	122	190	208	50	2,170	22		0.42	125	563
TotalEnergies	131	490	119	400	165	50	1,387	22	0.62	0.53	21	-10
TEAG Mobil	125	251	438	150	55	50	393	22	0.66	0.51	4	-4
MOON POWER GmbH	114	186	73	150	138	50	271	22	0.72	0.61	12	15
TankE	90	536	26	150	131	100	1,397	22			11	12
Citywatt GmbH	84	251	484	300	24	50	623	22	0.70	0.54	3	4
Ladeverbund+	83	1,200	93	150	62	50	2,952	22			83	1200
Porsche Smart Mobility	76	92	167	350			58	22			76	92
Energie Südbayern (ESE	75	393	126	150	90	50	1,026	22	0.58	0.41	15	66
JOLT Energy	74	74	164	300					0.50		2	2
Grid & Co.	72	243	133	225	49	50	466	22			10	26
amperio GmbH	69	146	78	300	41	50	237	22	0.61	0.37	6	7
GreenCharge	68	69	60	160	112	50	75	22			2	3
Hamburger Energiewerk	68	684	140	150			1,543	22	0.55	0.42	-15	-143
Circle K	67	67	25	295	153	54	29	45	0.70	0.70	5	4
MVV Energie	65	275	129	300	72	50	735	22			12	22
SachsenEnergie	60	204	137	150	46	50	480	22	0.42	0.42	60	204
Other brands	3,035	30,696	4,388	208	3,123	58	87,650	20	0.70	0.63	314	1367
Total	**11,851**	**52,145**	**28,970**	**223**	**11,339**	**58**	**133,527**	**21**	**0.63**	**0.41**	**825**	**2748**

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