Location study
Electra Quick Namur

Address : Chaussée de Louvain 5020 Namur

Simulation for :

6 ultrafast charging points (maxpower :300 kW)

Brand : New brand

ChargePlanner
a solution by RetailSonar

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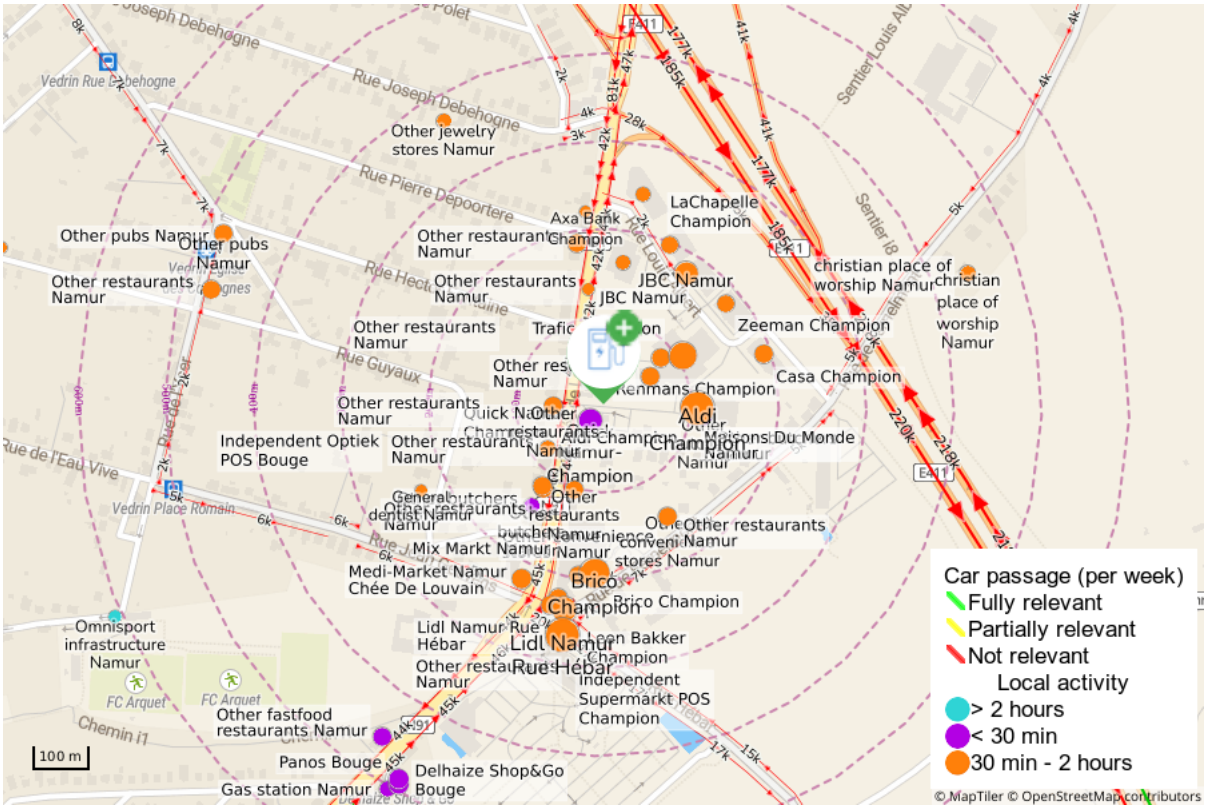
1. Description of the simulation

In this report we show the result of a simulation with 6 ultrafast charging points (300kW) of a charging station located at : Chaussée de Louvain, 5020, Namur, BE

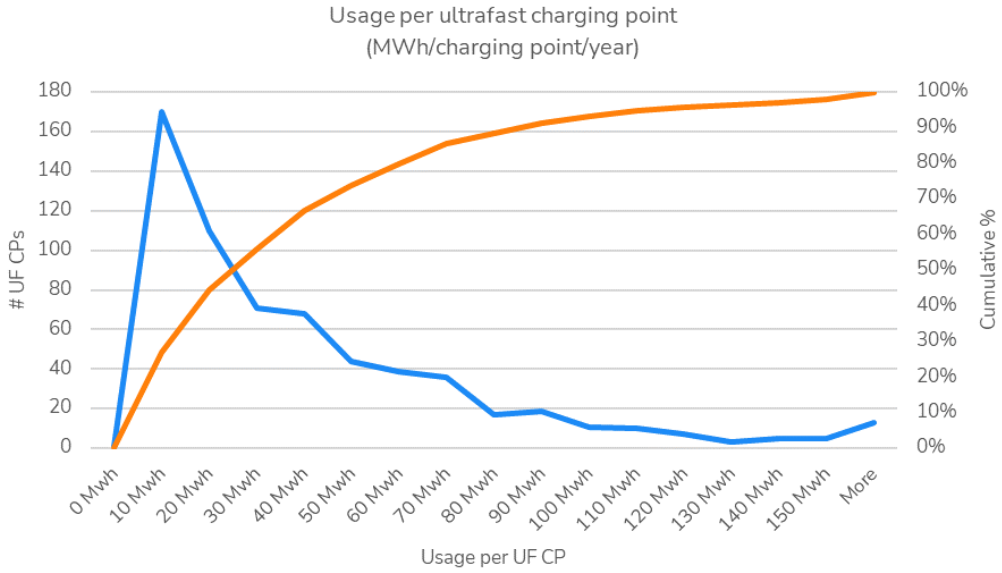


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of **399.982 kWh/year** (**being 66.664 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 707 existing sites with ultra-fast charging points, the predictive model gives a median consumption of 26 MWh per year and per ultra-fast charging point.

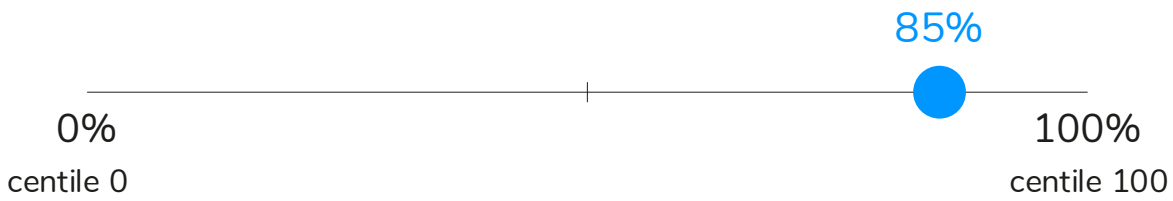


The following graph compares the expected performance (per ultra-fast charging point and per year) of the site under investigation with all existing sites in the country.

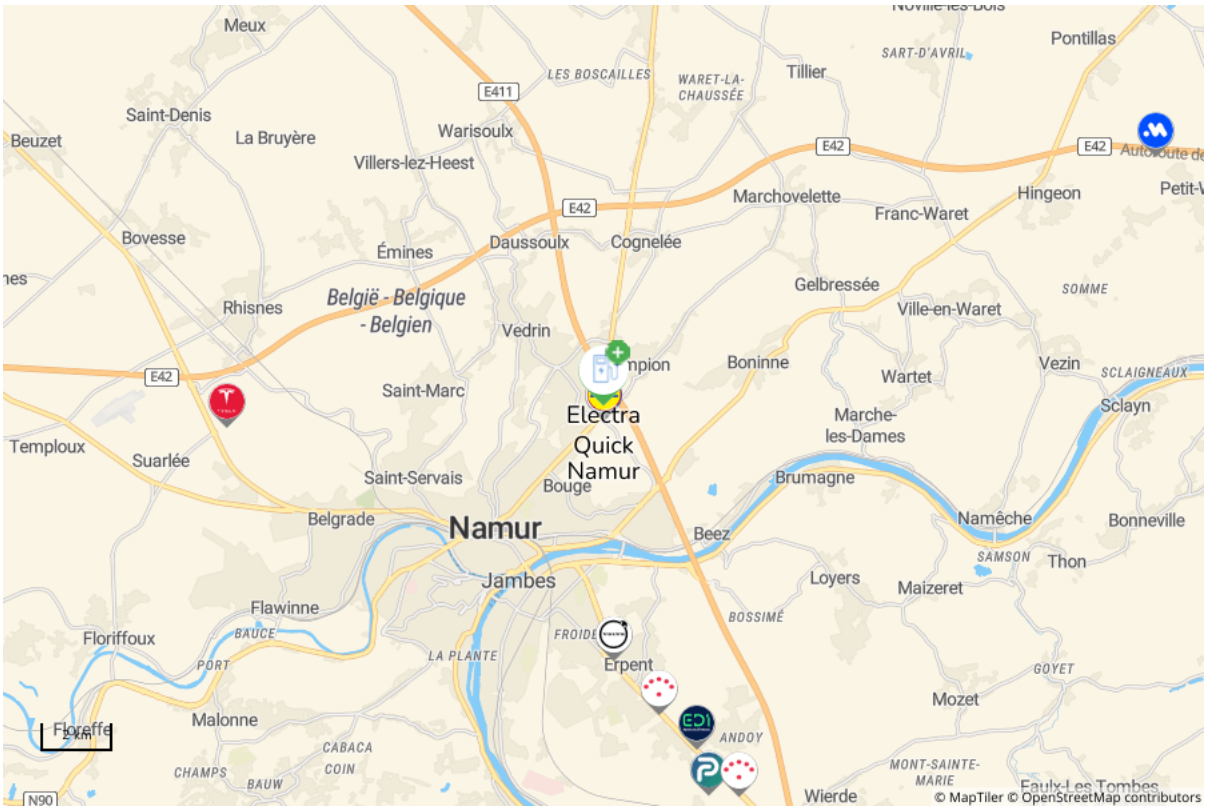
The percentile “0” corresponds to the existing site with the lowest usage, and the percentile “100” to the site with the highest usage. The blue dot corresponds to the performance of the location studied in this report :

This result shows that the studied site is classed within the 15 % 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)
Lidl Namur	Rue Hébar 4	0	N/A	2	50 kW	0,58 €/kWh	1

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

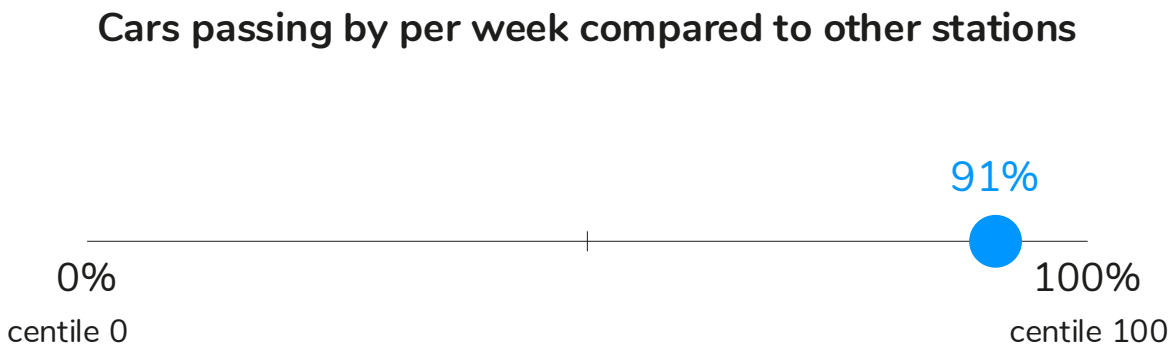
2.1. On the road potential within 3 minutes

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 **541.482** 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 9 % best sites in the country.



2.2. Potential of local activity in a 300m radius

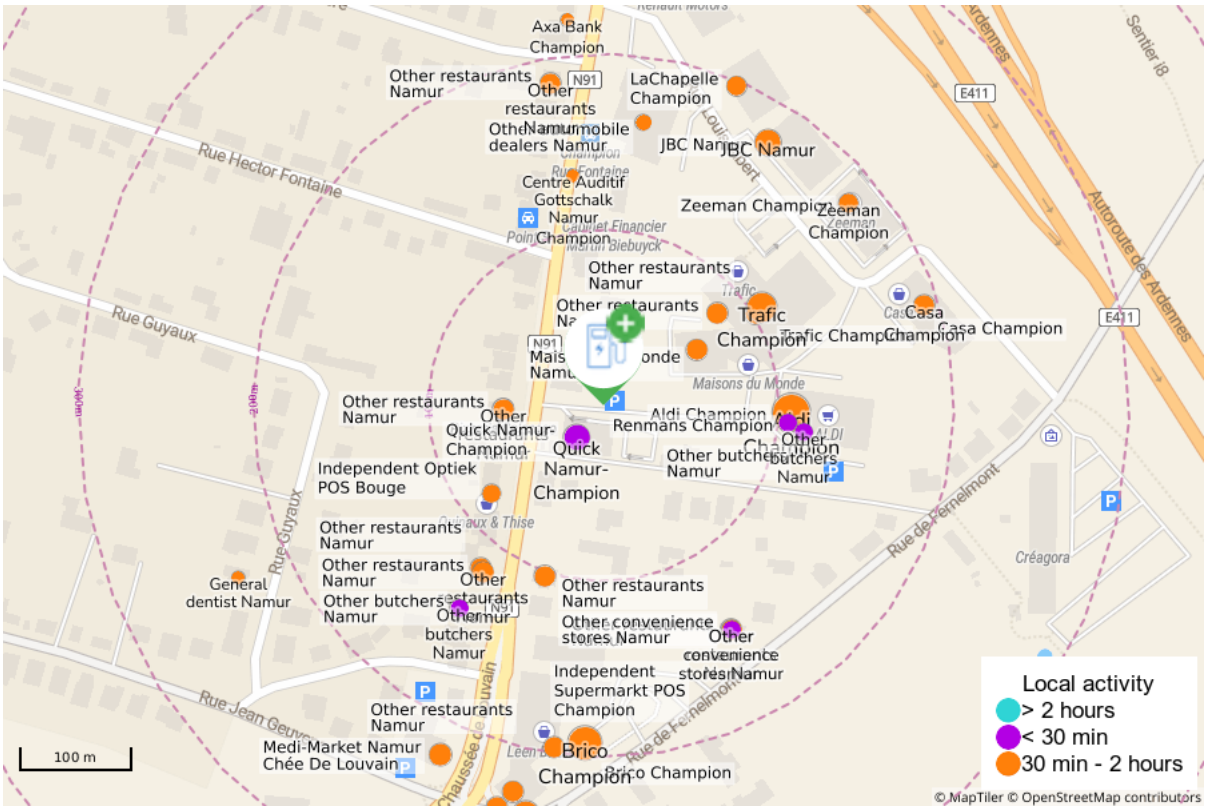
The presence of relevant local activity is important for ultrafast charging points. Mainly activity with a short visit duration (<30min) is important. Also activity with a medium long duration (30min – 2h) is partly relevant. In this study we took into account the following activity:

< 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.


Axa Bank Champion
Other restaurants Namur
Other restaurants
LaChapelle Champion
Other Namur mobile dealers Namur
JBC Namur
Centre Auditif Gottschalk Namur
Zeeman Champion
Other restaurants Namur
Trafic Champion
Casa Champion
Rue Hector Fontaine
Rue Guyaux
N91
E411
Autoroutes des Ardennes
Maisons du Monde
Aldi Champion
Renmans Champion
Other butchers Namur
Quick Namur-Champion
Independent Optiek POS Bouge
Other restaurants Namur
Rue de Fernelmont
Créagora
General dentist Namur
Other butchers Namur
Other convenience stores Namur
Independent Supermarkt POS Champion
Rue Jean Geuvry
Medi-Market Namur Chée De Louvain
Brico Champion
100 m
Local activity
> 2 hours
< 30 min
30 min - 2 hours
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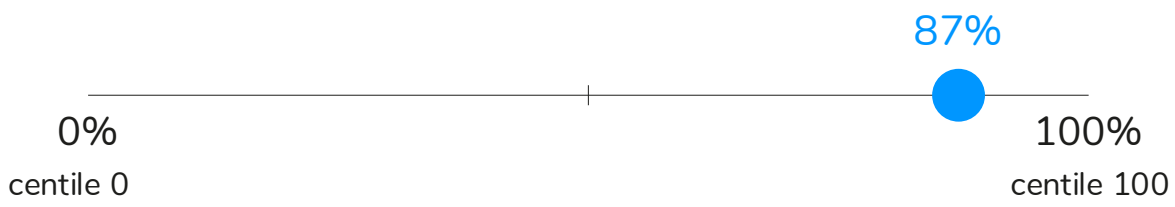
Less than 30min	Address	Number of visitors per year	Distance (m)
Quick Namur-Champion	Chaussée De Louvain 566	50.000	24 m
Renmans Champion	Chaussée De Louvain 562	10.000	106 m
Butcher Namur	Chaussée de Louvain 562	10.000	115 m
Other butchers Namur	Chaussée de Louvain 539	10.000	142 m
Other convenience stores Namur	Rue de Fernelmont 19	10.000	147 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 13 % 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



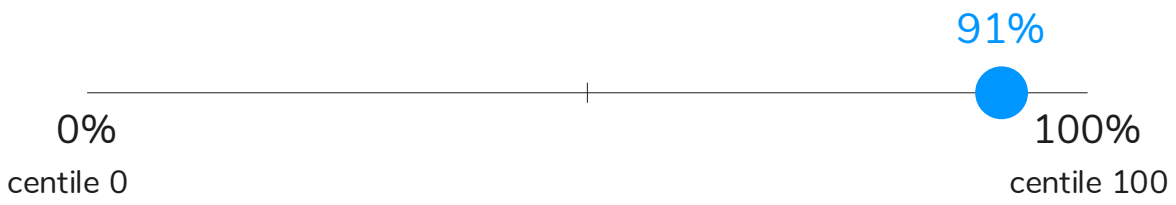
30min - 2h	Address	Number of visitors per year	Distance (m)
Other restaurants Namur	Chaussée de Louvain 567	20.000	57 m
Other restaurants Namur	Chaussée de Louvain 564	20.000	84 m
Other restaurants Namur	Chaussée de Louvain 548	20.000	102 m
Trafic Champion	Rue Louis Albert 6a	75.000	106 m
Aldi Champion	Chaussée De Louvain 562	150.000	107 m
Other restaurants Namur	Chaussée de Louvain 547	20.000	117 m
Other restaurants Namur	Rue de Fernelmont 19	20.000	147 m
JBC Namur	Rue Louis Albert 7	50.000	177 m
Brico Champion	Rue De Fernelmont 1a	110.000	192 m

30min - 2h	Address	Number of visitors per year	Distance (m)
Leen Bakker Champion	Rue De Fernelmont 1	60.000	237 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 9 % 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

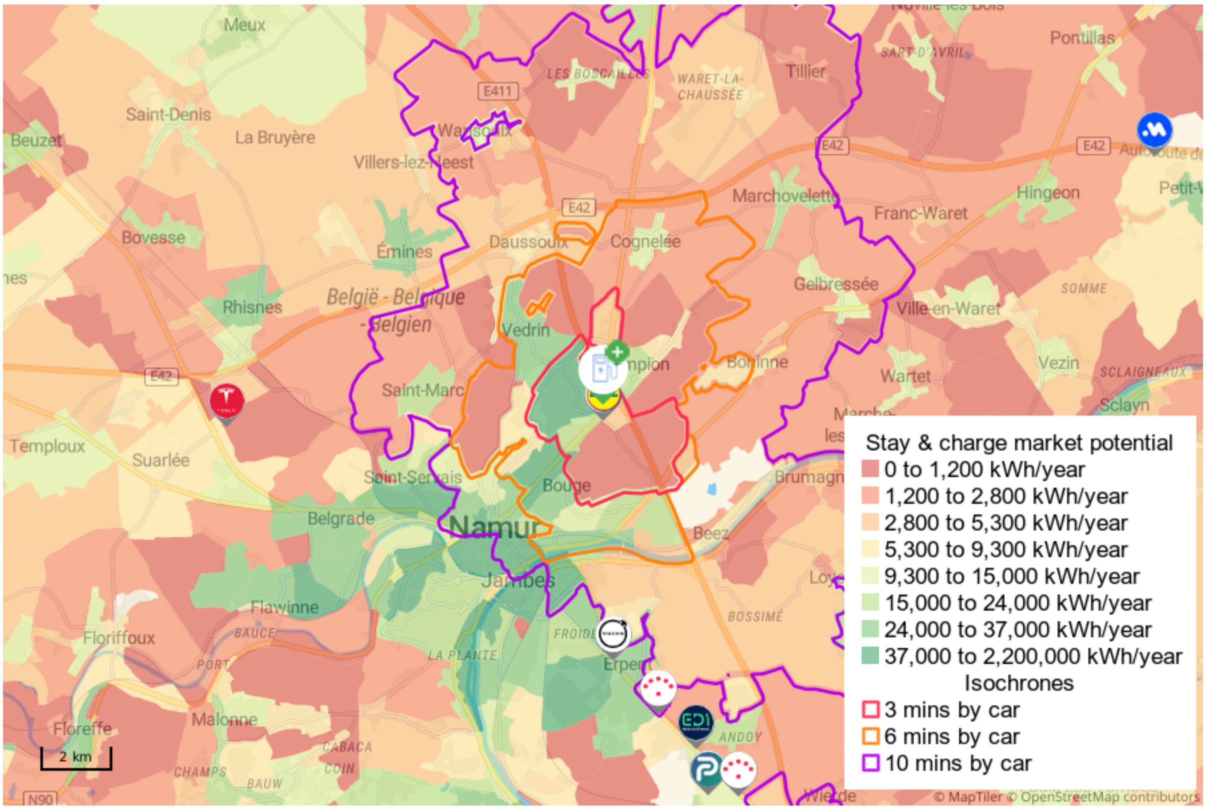


2.3. Residential and local visitor's potential

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.


Stay & charge market potential
0 to 1,200 kWh/year
1,200 to 2,800 kWh/year
2,800 to 5,300 kWh/year
5,300 to 9,300 kWh/year
9,300 to 15,000 kWh/year
15,000 to 24,000 kWh/year
24,000 to 37,000 kWh/year
37,000 to 2,200,000 kWh/year
Isochrones
3 mins by car
6 mins by car
10 mins by car
Namur
Jambes
Bouge
Vedrin
Saint-Servais
Saint-Marc
Belgrade
Flawinne
Malonne
Floreffe
Floriffoux
Temploux
Suarlée
Rhisnes
Bovesse
Saint-Denis
La Bruyère
Meux
Beuzet
Villers-lez-Heest
Émines
Daussoulx
Cognelée
Marchovelette
Tillier
Franc-Waret
Hingeon
Pontillas
Gelbressée
Ville-en-Waret
Wartet
Vezin
Sclayn
Boninne
Beez
Brumagne
Erpent
Wierde
België - Belgique - Belgien
E42
E411
N90
2 km
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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	3.116 inhabitants	15.011 inhabitants	37.914 inhabitants
Households	1.326 families	6.520 families	17.390 families
Wealth index	106 %	105 %	97 %
Population density	925	1.103	1.353
Cars	2.024 cars	9.038 cars	21.257 cars
Light commercial vehicles	340 vehicles	1.520 vehicles	3.576 vehicles
Electric vehicles	88 vehicles	393 vehicles	914 vehicles
Number of visits > 2 hours in the zone	11.149 visits	293.325 visits	1.350.897 visits
Employees	970 FTE	6.173 FTE	15.714 FTE
Residential potential	174 kWh/year	779 kWh/year	1.796 kWh/year
Market space 'stay & charge'			
Stay & charge market potential	76.720 kWh/year	378.993 kWh/year	1.012.211 kWh/year
Available slow charging power	185 kW	495 kW	1.376 kW
Needed slow charging power by 2030	304 kW	1.500 kW	4.006 kW
Developable slow charging power by 2030	119 kW	1.005 kW	2.629 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 : Minor 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 : "Minor issues".

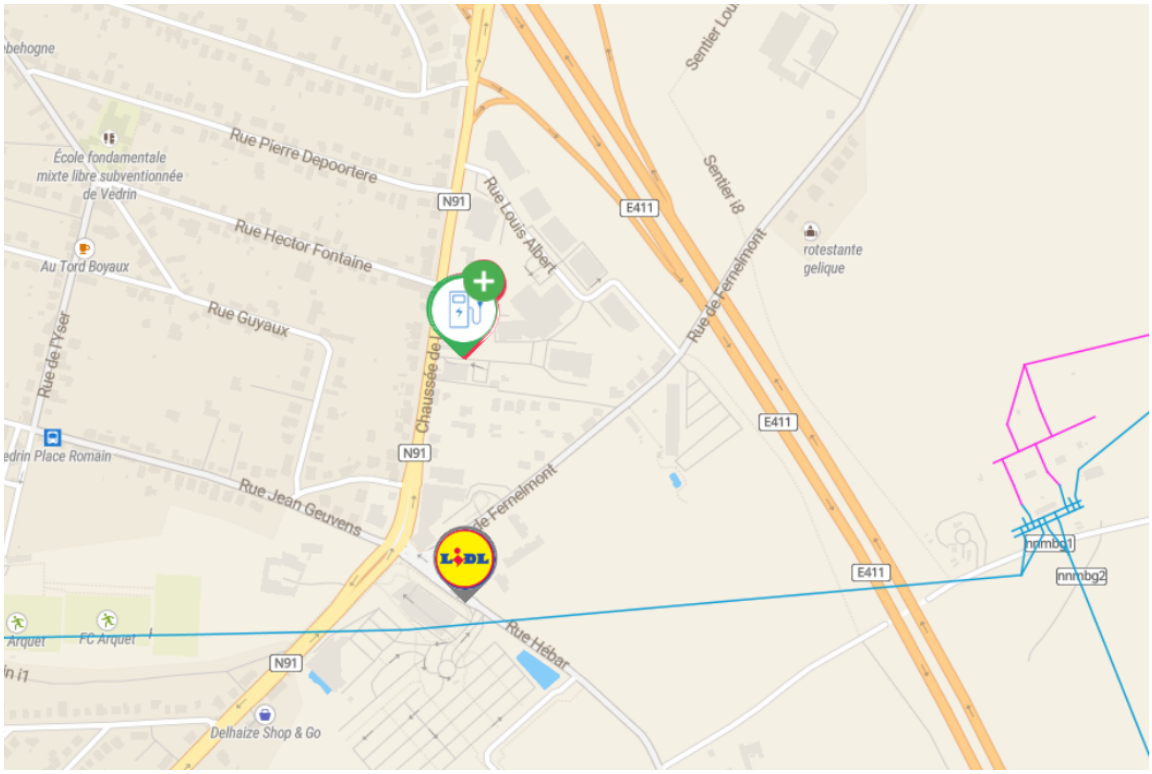
2.4.3. Recharge price : 0,60 €/kWh

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 : 0,60 €/kWh

3. Electrical grid information

The high tension network is located at 318 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

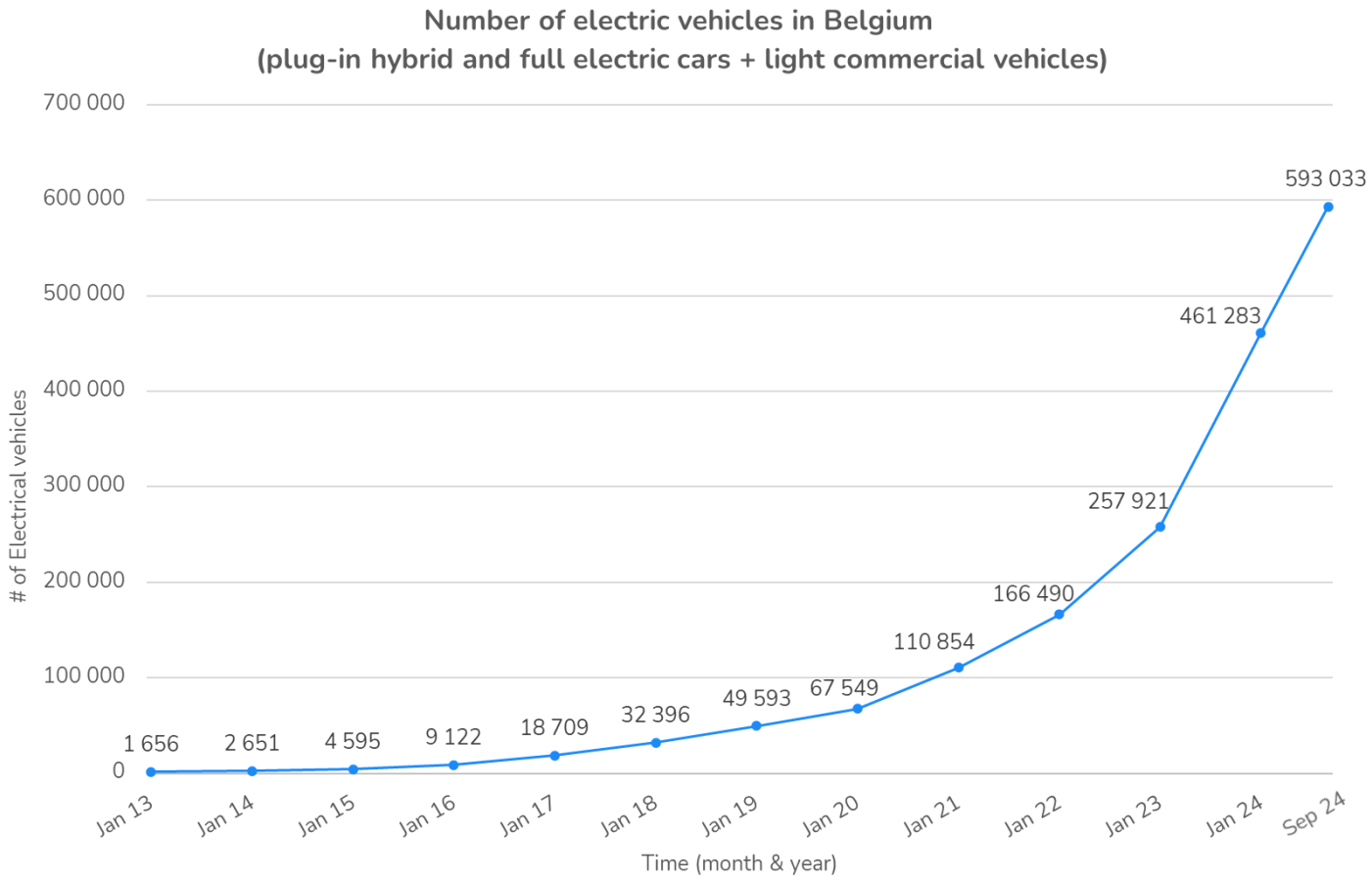
4. Interpretation of the results and market tendencies

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 Belgium is fixed to 593 033 in ChargePlanner. This corresponds to an estimation of reality at the start of September 2024 and contains the cars as well as the light commercial vehicles. Of these, 48% (287 341) are fully electric vehicles, while 51% (305 692) are plug-in hybrid electric vehicles. Since January 2024, the number of electrical vehicles rose by 29%, which means that the strong growth of the last years continues.



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

In Belgium, there are 1 234 sites with at least one fast or ultrafast charging point.

Brand	September 2024								
	Number of locations (at least 1 F or UF)	Ultrafast		Fast		Slow		Price of the kW (€)	
		# Charging points	Average power (kW)	# Charging points	Average power (kW)	# Charging points	Average power (kW)	(Ultra)fast	Slow
Lidl	162	6	180	321	50	173	22	0.58	0.40
Optiload	102	22	240	183	60	130	16.5	0.62	
Allego	99	260	225	90	50	105	43	0.60	0.32
Optimile	69	99	180	52	60	511	22	0.61	0.35
E-Flux	68	165	300	31	80	152	22	0.61	0.13
Powerland	54	123	300	21	60	162	22	0.62	0.21
Sparki	52	230	320					0.65	
Electra	46	267	233	4	50	27	22	0.57	0.22
Smappee	41	45	200	19	80	210	22	0.70	0.31
Electric by D'ieteren	36			56	60	86	22	0.61	0.26
Mobiflow	33	46	200	29	80	118	22	0.62	0.30
TotalEnergies	33	94	175	77	100	19	22		
Fastned	31	181	300	72	50			0.57	
CenEnergy	30			36	120	75	19	0.66	0.18
Powerstop	30	48	175	16	50	2	22	0.49	
Luminus	21	5	180	36	50	35	22	0.58	0.11
Shell Recharge	20	80	150	5	125	196	22	0.79	0.67
Tesla Supercharger	20	431	170						
Other brands	287	510	275	311	71	1 114	22	0.42	0.25
Total	**1 234**	**2 612**	**224**	**1 359**	**70**	**3 115**	**23**	**0.48**	**0.29**

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