

Address: Rue du Fort 4040 Herstal

Simulation for:

6 ultrafast charging points (> 300kW)

0 ultrafast charging points (150 - 300kW)

0 fast charging points (49 - 150kW)

Brand: New brand







Table of contents

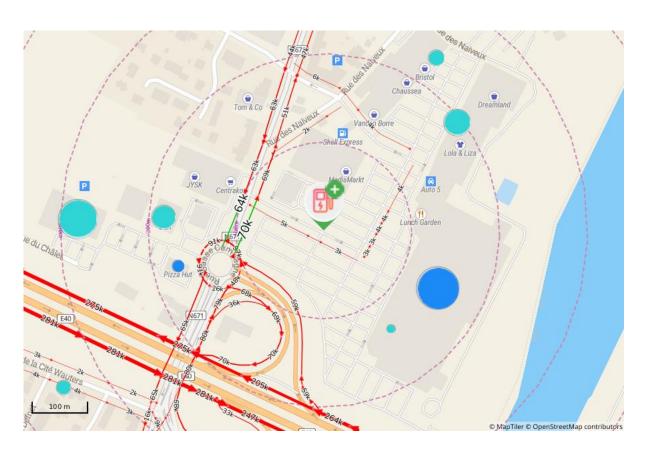
1	Description of the simulation	3
2.	Predicted yearly consumption	4
2.1.	On the road potential	5
2.2.	Potential of local activity in a 300m radius	6
2.3.	Residential and local visitor's potential	8
3.	Electrical grid information	11
4.	Interpretation of the results and market tendencies	12
4.1.	Number of electric vehicles in Belgium	12
4.2.	Competitive pressure of fast and ultra-fast chargers	13
5.	About RetailSonar	14





1. Description of the simulation

In this report we show the results of a simulation with 0 fast charging points (49-150kW), 0 ultrafast charging points (150-300kW) and 6 ultrafast charging points (300kW+) of a charging station located at: Rue du Fort, 4040, Herstal, BE.



Car passage (Cars / week) 8k 8k

Local activity
Parking times less than 1h
Parking times 1h – 3h

Parking times more than 3h



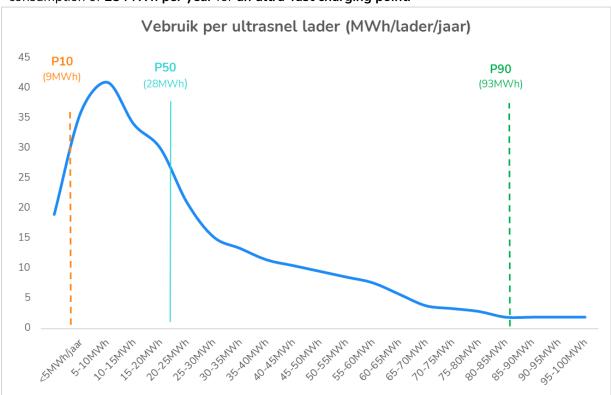


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of 1,022,374 kWh/yr (being 170,396 kWh/yr per ultra-fast charging point per year) for this location.

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

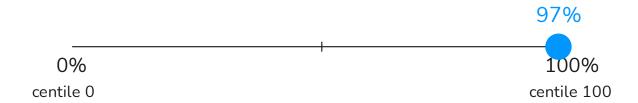
For the 350 existing sites with at least one ultra-fast charge point, the predictive model gives a median consumption of **28 MWh per year** for **an ultra-fast charging point**.



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:

Potential (kWh/ultrafast charger) compared to other stations



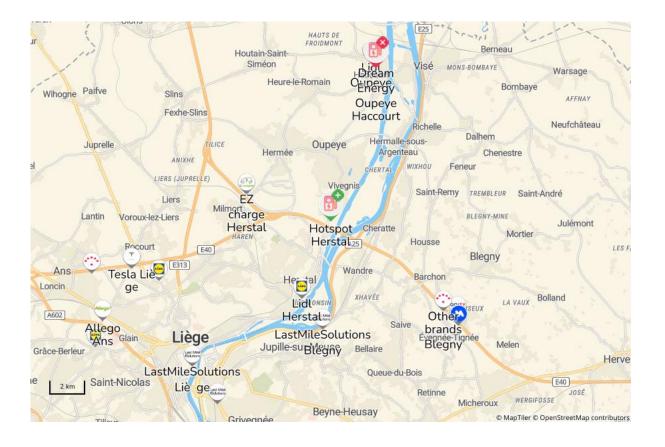




The opening of this new location will partially cannibalise surronding charging locations.

In the table you can find an overview of the most cannibalised locations.

Name	Street + housenumber	Drivetime (min)	# Ultrafast charging points(>30 0kW)	# Ultrafast charging points(150 -300kW)	# fast charging points (49- 150kW)
EZ charge Herstal	Route de Tilice 3	6	0	0	4
Mobiflow Soumagne	Rue du relais 1	8	0	1	1
Lidl Herstal	Boulevard Zénobe Gramme	8	0	0	2
Other brands Blegny	Parc Artisanal de Blegny	8	0	0	1
lonity Soumagne	A3	10	6	0	2







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

2.1. On the road potential

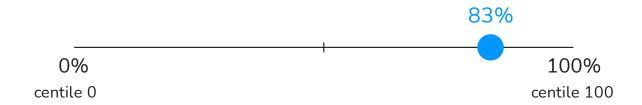
This potential consists of the car passage (expressed in the average number of vehicles passing by per week). This potential is very important for ultrafast charging points.

On this map, passage of each road segment is visualised. 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 133,408 cars passing by per week.

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 very important for ultrafast charging points. Mainly activity with a short visit duration (<1h) is important. Also activity with a medium long duration (1h - 3h) is partly relevant. In this study we took into account following activity:

< 1h: fast food restaurants, shops, destination retail,...

1h - 3h: non-destination retails, restaurants, bars, cinemas, sport & cultural spaces.

> **3h**: work, schools, touristic places, hotels.

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



Local activity

- Parking times less than 1h
- Parking times 1h 3h
- Parking times more than 3h





Less than 1h	Number of visitors per year	Distance (m)
Quick Herstal	50,000	58 m
Media Markt Herstal	75,000	79 m
Lunch Garden Herstal	50,000	111 m
Fastfood restaurant Herstal	20,000	131 m
McDonald's Herstal	50,000	140 m
Fastfood restaurant Herstal	20,000	151 m
Pizza Hut Herstal	30,000	167 m
Fastfood restaurant Herstal	20,000	167 m
C&A Herstal	75,000	183 m
Action Herstal	100,000	195 m

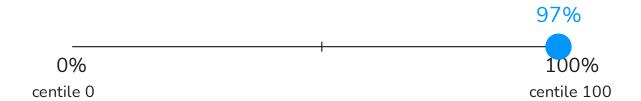
1-3h	Number of visitors per year	Distance (m)
Restaurant Herstal	20,000	112 m
Jysk Herstal	15,000	118 m
Restaurant Herstal	20,000	131 m
Restaurant Herstal	20,000	136 m
Carrefour Hyper Herstal	600,000	145 m
Tom & Co Herstal	15,000	169 m
Restaurant Herstal	20,000	170 m
Maxi Zoo Herstal	10,000	224 m

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





Potential crossvisits

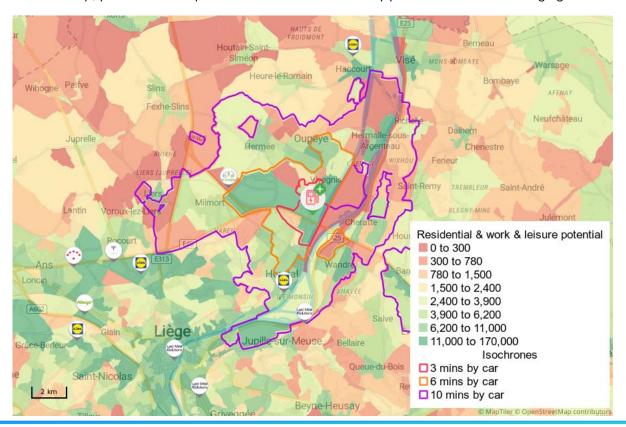


2.3 Residential and local visitor's potential

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 the least 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 salaries 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 of the environment of the site

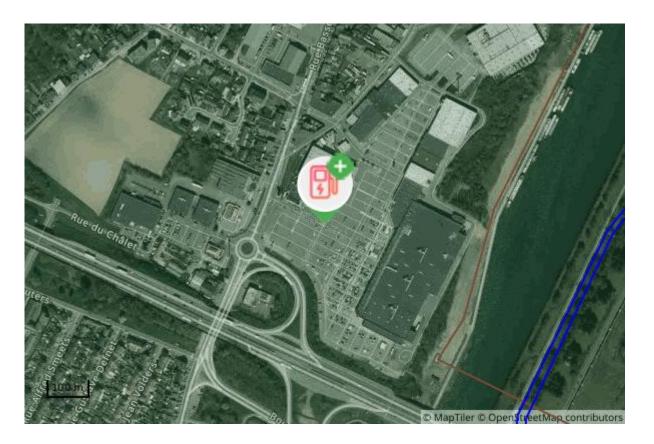
Environment analysis	0~3 min by car	0~6 min by car	0~10 min by car				
Residential potential (in kWh/yr)							
Residential potential	3,885 kWh/yr	17,218 kWh/yr	75,493 kWh/yr				
Inhabitants	2,698	12,704	54,768				
Electric vehicles	34	151	654				
Wealth index	78 %	77 %	81 %				
Local visitor potential (in kWh/yr)							
Work & leisure potential	79,107 kWh/yr	160,982 kWh/yr	474,135 kWh/yr				
Employees	1,770 employees	9,839 employees	23,891 employees				
Relevant local visits 0-1h	204,300 visits	343,175 visits	1,056,925 visits				
Relevant local visits 1-3h	45,905 visits	88,153 visits	269,268 visits				





3. Electrical grid information

The closest source post (high tension) is located at 241 m from the location.



- High voltage network underground
- High voltage network above ground





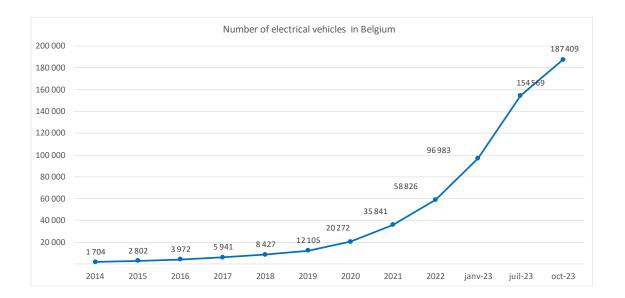
4. Interpretation of the results and market tendencies

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 Belgium

The number of electrical vehicles in Belgium is fixed to 187 409 in ChargePlanner. This corresponds to an estimation of reality at the start of October 2023 and contains the cars as well as the light commercial vehicles. Since January 2023, the number of electrical vehicles rose by 93%, which means that the strong growth of the last years continues.







4.2 Competitive pressure of fast and ultra-fast chargers

In Belgium, there are 891 sites with at least one fast or ultrafast charger. This represents an increase of 23% over the last 3 months. The brands that progress the most are LastMileSolutions (+20 sites), Equans (+16 sites) and Luminus (+11 sites).

<u>Remark</u>: certain adjustments to competition data (due to changes in brand name, changes in power or the privatization of certain sites) are adjusted retroactively in this summary.

	juit-23		Evolution	oct-23			Evolution	
Brand		Charger in total # fast chargers	formation total # ultrafast chargers (149+	growth (# locs with at least one fast/ultrafast	# locations	Charger in total # fast chargers	formation total # ultrafast chargers (149+	growth (# locs with at least one fast/ultrafast
		(50-149 kW)	kW)	charger)		(50-149 kW)	kW)	charger)
Tesla	19	0	367	-	20	0	383	+1
TotalEnergies	50	91	142	+12	54	126	120	+4
Fastned	25	60	131	+3	26	66	143	+1
Allego	97	133	104	+10	103	148	143	+6
IONITY	12	6	60	-1	12	6	64	-
Powerland	65	38	93	+25	70	45	119	+5
charge.brussels	17	10	30	+3	18	11	25	+1
Certipower	13	1	29	+2	15	1	32	+2
Sparki	6	0	26	+3	11	0	44	+5
Powerlink21	3	0	12	-	3	0	12	-
Smappee	21	9	20	+12	27	13	24	+6
Mobiflow	15	16	16	+7	20	19	29	+5
LastMileSolutions	78	132	5	+4	98	163	10	+20
EnergyDrive	2	0	4	-1	4	3	4	+2
Mobility+	17	21	8	+14	22	30	13	+5
DATS24	15	18	0	+8	24	30	0	+9
Bluecorner	13	20	5	+3	13	22	3	-
Luminus	5	10	0	-	16	42	0	+11
Lidl	132	264	0	+2	134	267	0	+2
EZ Charge	2	4	4	+2	10	17	12	+8
Gabriëls	0	0	0	-	8	4	16	+8
Electra	0	0	0	-	6	0	42	+6
Equans	0	0	0	-	16	32	0	+16
PowerDot	0	0	0	-	2	6	0	+2
Shell Recharge	0	0	0	-	10	4	35	+10
Boostcharge	0	0	0	-	2	0	8	+2
EDI	4	6	0	+1	3	5	0	-1
EVBox	5	9	2	+1	5	9	2	-
ThePluginCompany	3	8	0	-	2	4	0	-1
Other brands	106	107	100	+67	137	131	105	+31
TOTAL	725	963	1158	177	891	1204	1388	166





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
- Simule 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 & optimise your strategy
- Realise your policy goals