

Romeinse Steenweg 868, Wemmel

Simulation for 2 Ultra > 300kW chargers





TABLE OF CONTENTS

1.	Explanation of data sources and model assumptions	3
2.	Result: Predicted yearly consumption and expected catchment area	14
3.	Detail results expected cannibalisation within the environment	15
4.	About RetailSonar	16

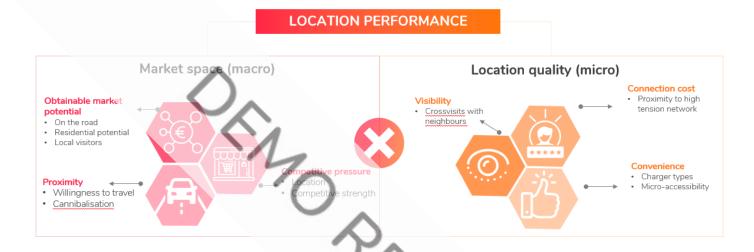




1. Explanation of data sources and model assumptions

This environment report investigates the theoretical potential for a new charging station at Romeinse Steenweg 868, 1780, Wemmel, BE.

For this purpose, we call upon various data sources from the local micro-environment and from the wider macro-environment. These data sources are then combined within a smart predictive model that has been validated based on actual visitor dynamics for existing charging stations taking into account all performance indicators as shown below.



In this section, we give a brief overview of the various data sources used and the assumptions of the model.



1.1. Market potential

The report is based on the estimated annual EV charging consumption per neighbourhood (NIS10) in Belgium. The total market potential for ultrafast charging in Belgium is estimated at 69,187 MWh per year today and rapidly growing.



To map this market potential we make a distinction between:

- 1) The on the road potential captured from vehicles passing by
- 2) Residential potential captured from EV drivers living nearby
- 3) Local visitors related to work and leisure. For ultrafast chargers mainly short visits (Less than 1h) and medium long visits (1h-3h) are relevant and taken into account.

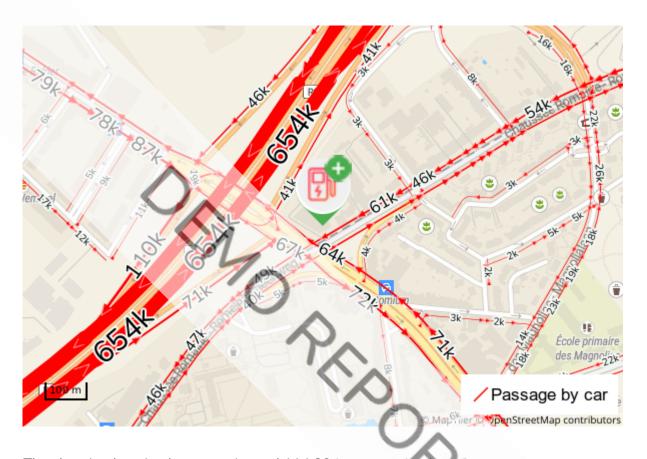
In the subsection below we dive into each of these market potential building blocks:



1.1.1. On the road potential

This is the non-destination potential and includes the average number of cars passing each road segment per week.

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



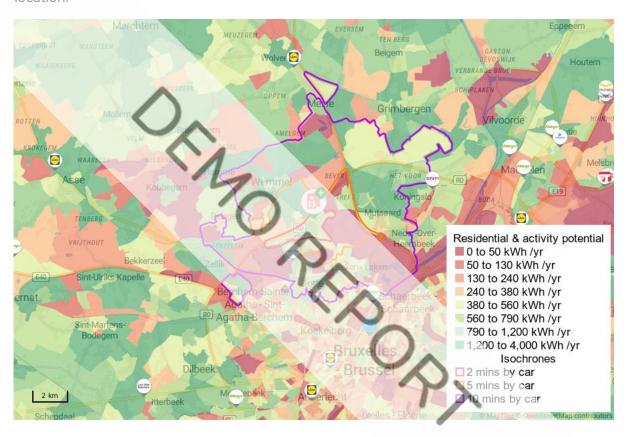
The charging location has an estimated 114,934 cars passing



1.1.1. Residential and local visitors potential

This is the destination potential, which includes the consumption potential of residents with electric vehicles¹ who charge near their homes, work and their activities. To calculate the potential per zone, the number of electric vehicles, the wealth index, the estimated number of employees and the activity (estimated number of visits / year) in each zone are taken into account.

On this map, you can see the residential & local visitors potential per zone around the charging location.



¹ https://statbel.fgov.be/en/open-data/number-cars-statistical-sector https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/belgium/vehicles-and-fleet



The table below shows an overview of the desination potential, together with its building blocks, within each of the catchment areas of the charging location:

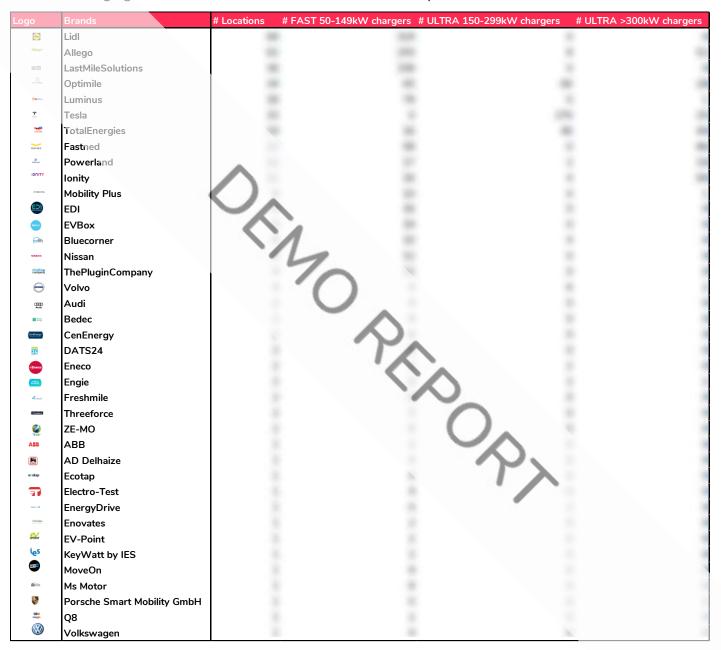
Environment analysis	0~2 min by car	2~5 min by car	5~10 min by car			
Potential KPIs						
Residential potential	2,822 kWh /yr	15,423 kWh /yr	74,117 kWh /yr			
Inhabitants	6,789 inhabitants	20,903 inhabitants	102,407 inhabitants			
Electric vehicles	16 EVs	82 EVs	388 EVs			
Wealth index	68 %	90 %	92 %			
Population density	12,014 inh/sqkm	11,928 inh/sqkm	10,623 inh/sqkm			
Local visitor potential	57,970 kWh /yr	299, 284 kWh /yr	1,189,160 kWh /yr			
Short stay visits (0-1h)	36,043 visits /yr	186,080 visits /yr	739,359 visits /yr			
Medium stay visits (1-3h)	24,028 visits /yr	124,053 visits /yr	492,906 visits /yr			
Employees	1,418 Employees	13,264 Employees	27,092 Employees			



1.2. Competitive pressure

In the overview below, we show the EV brands that are included in the analyses

To measure the competitive pressure in the vicinity of a location, we take into account the presence of charging locations from this list of brands in the vicinity of the tested location.





In the tables below, we give an overview of the own locations in the 10 minutes drivetime zone around the location.

Car 0-2min

Own location	Address	City	# Ultra 300kW chargers	# Ultra 150- 299kW chargers	# Fast 50- 149kW chargers	Drive time
New brand Wemmel	Romeinse Stee nweg 868	Wemmel	2	0	0	1

No competitor locations within 0-2min car drivetime

Car 2-5min

No own locations within 2-5min car drivetime

No competitor locations within 2-5min car drivetime

Car 5-10min

No own locations within 5-10min car drivetime

Competitor location	Address	City	# Ultra 300kW chargers	# Ultra 150- 299kW chargers	# Fast 50- 149kW chargers	Driveti me
EV Chargers Brussel Laarbeeklaan 74	Laarbeeklaan 74	Brussel	0	2	0	6

Tables: Overview of locations in the 10 minutes driving zone



1.3. Micro environment

1.3.1. Crossvisit potential from local activity within 250m

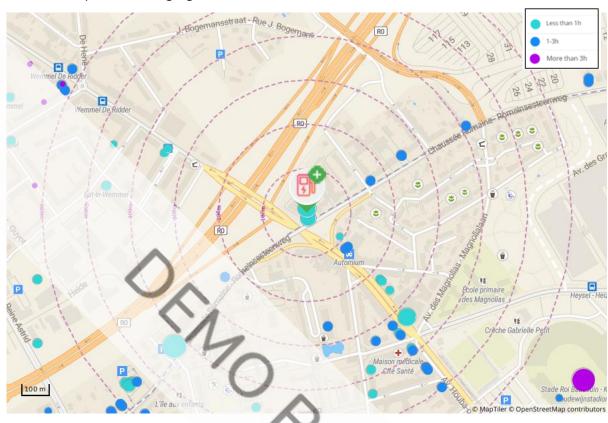
The presence of local activity nearby has a clear influence on the performance of charging locations. This is because it leads to non-destination charging due to combined visits. The extent to which local activity contributes to non-destination charging depends on the type of activity, the number of visits, the duration of the visit and the distance between this local activity and the charging location as follows:

- Less than 1h stays: fast food, shops, park & rides at railway stations/airports
- 1-3h stays: non-destination retail, restaurants, bars, cinemas, sport & cultural spaces
- More than 3h stays: touristic sites, hotels, sport sites





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



Less than 1h	Number of visits per month	Distance (m)
Albert Heijn Wemmel	15,000.00	11 m
Action Wemmel	10,000.00	0 m
Apotheek Boudauin	1,500.00	229 m
La Boucherie Belge	1,000.00	223 m

1- 3h	Number of visits per month	Distance (m)	
Ciky Sushi Bar	2,000.00	119 m	
V.I.P.	2,000.00	120 m	
Lotus Bleu	2,000.00	161 m	



1-3h	Number of visits per month	Distance (m)
Love Sus hi	2,000.00	235 m
Forum Cafe	2,000.00	250 m
Daniell's Tavern	2,000.00	250 m





1.1.2. Connection cost

The location has connection possibilities with the high tension network that is located at 1 km from the location. Based on this distance we expect a connection cost of € 134,237. But further investigation is needed to make a detailed investment cost calculation.

1.1.3. Convenience

Charger types

The charging location for this tested site has 0 Fast 50-149kW chargers, 0 Ultra 150-299kW chargers and 2 Ultra >300kW chargers.

- Micro- accessibility

The drivetimes to a charging location, says something about the micro-accessibility of the location. The following map shows the local traffic situation in the environment.

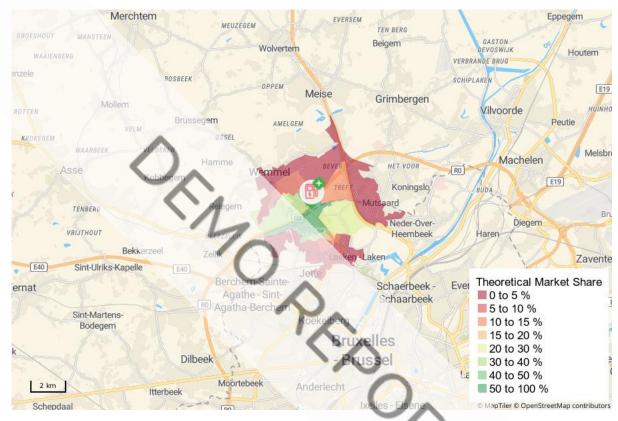




2. Result: Predicted yearly consumption and expected catchment area

Based on all the above-mentioned building blocks, the model predicts a theoretical potential of 225,492 kWh per year for this charging location.

The theoretical potential will be achieved in the following catchment area:





3. Detail results expected cannibalisation within the environment

The opening of this new charging location will partially cannibalise surrounding charging locations. In the table you can find an overview of the most cannibalised locations.

No own location selected

name	Address	City	# Ultra 300kW chargers	# Ultra 150- 299kW chargers	# Fast 50- 149kW chargers	Cannibalis ation
EV Chargers Brussel Laarbeeklaan 74	Laarbeeklaan 74	Brussel	0	2	0	-4,419 kWh
Tesla Supercharger Aalst	Villalaan 22	Aalst	0	16	0	-646 kWh
IONITY - Wetteren North A10/E40	Shell E40 North	Wetteren	10	0	4	-642 kWh
Tesla Supercharger - Hotel Van der Valk	Chaussée De Mons 22	Nivelles	0	12	0	-615 kWh
Tesla Supercharger - Diegem	Culliganlaan 16	Mac helen		16	0	-538 kWh
				P>		



4. About RetailSonar

From location planning to location performance. RetailSonar is **Europe's leading geomarketing company**. We optimise 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 thank to state of the art 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 & 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 & optimise your strategy
- Realise your policy goals



Would you like more information?

We are always happy to help! Please contact us in order to get more information by simply sending an email to lucas.bossaert@retailsonar.com or by clicking the button below.

Get in touch!



Lucas Bossaert, Senior Geomarketing Consultant