# Market Report EV chargers

Ringlaan 34, Kortrijk

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	.12
3.	Detail results expected cannibalisation within the environment	.13
4.	About RetailSonar	.14

DEMO REPORT



### 1. Explanation of data sources and model assumptions

This environment report investigates the theoretical potential for a new charging station at Ringlaan 34, 8500, Kortrijk.

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.





#### 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
- 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 **91,480** cars passing by per week.



#### 1.1.1. Residential and local visitors potential

This is the destination potential, which includes the consumption potential of residents with electric vehicles<sup>1</sup> 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.



<sup>&</sup>lt;sup>1</sup> 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						
Residential potential (in kWh/yr)									
Residential potential	467 kWh /yr	7 304 kWh /yr	58 711 kWh /yr						
Inhabitants	383 inhabitants		47,289 inhabitants						
Electric vehicles	2 EVs	35 EVs	284 EVs						
Wealth index	108 % 101 %		96 %						
Population density	1 083 inh/sqkm	3 728 inh/sqkm	2 860 inh/sqkm						
Local visitor potential (in kWh/yr)									
Local visitor potential	<b>1 04</b> 5 kWh /yr	25 184 kWh /yr	160 075 kWh /yr						
Short stay visits (0-1h) 1,30 Mio visits /yr		0,57 Mio visits /yr	6,70 Mio visits /yr						
Medium stay visits (1-3h)	0,09 Mio visits /yr	0,63 Mio visits /yr	7,37 Mio visits /yr						
Employees 360 Employees		1,302 Employees	22,102 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.

Logo	Brands	# Locations	# FAST 50-149kW chargers	# ULTRA 150-299kW chargers	# ULTRA >300kW chargers
-	Lidl				
Allego?	Allego				
Loui Mini Southing	LastMileSolutions				
Contract.d	Optimile				
\$2 kminus	Luminus				
Ĩ	Tesla				
<b>1</b>	TotalEnergies				
FASTNED	Fastned				
<u></u>	Powerland				
IONITY	lonity				
a second	Mobility Plus				
ED	EDI				
	EVBox				
<u>←</u>	Bluecorner				
NISBAN	Nissan				
Company)	ThePluginCompany			21	
$\Theta$	Volvo			05	
CEED	Audi			00.	
<b>a</b> 2011	Bedec			Y	
Certiman	CenEnergy		OX.		
24	DATS24				
Eneco	Eneco		.01		
0-00	Engie				
Access	Freshmile				
	Threeforce	N	1		
<b>e</b>	ZE-MO	()/			
ABB	АВВ				
	AD Delhaize				
erotap	Ecotap				
	Electro-Test				
and the second s	EnergyDrive				
choider	Enovates				
жолт А	EV-Point				
<u>че</u> 5	KeyWatt by IES				
-	MoveOn				
and the second s	Ms Motor				
<b>V</b>	Porsche Smart Mobility GmbH				
	Q8				
	Volkswagen				



In the tables below, we give an overview of the current fast and ultrafast charging stations in the broader environment around the location.

Competitor location	Address	City	# Ultra 300kW chargers	# Ultra 150- 299kW chargers	# Fast 50- 149kW chargers	Drivetime
EV Chargers	Oudenaardsesteenweg 268	Kortrijk	0	0	2	9 min
Tesla Supercharger	President Kennedylaan 100	Kortrijk	0	12	0	12 min

Tables: Overview of current fast and ultrafast charging stations 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:

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

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

Less than 1h	Visits / mth	Distance (m)
Albert Heijn	15 000	55 m
C&A	7 500	71 m
Action	10 000	133 m
JBC	5 000	27 m
Standaard Boekhandel	5 000	119 m
Lunch Garden	5 000	154 m
Veritas	2 500	60 m
Burger King	5 000	160 m
H&M	7 500	201 m
Zeeman	5 000	72 m



1-3h	Visits / mth	Distance (m)
Wafelino	1 500	80 m
New Intermezzo	1 500	80 m
Restaurant Sphinx	1 000	250 m
Restaurant Shanghai	1 000	250 m

#### 1.1.2. Connection cost

The location has connection possibilities with the high tension network that is located at 0.24 km from the location. Based on this distance we expect a connection cost of approx.  $50k \in -100k \in$  but further investigation is needed to make a detailed investment cost calculation.

#### 1.1.3. Convenience

#### - 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. This area has some issues with local mobility.





## 2. Result: Predicted yearly consumption and expected catchment area

Based on all the above-mentioned building blocks, the model predicts a theoretical potential of 97 924 kWh per year for this charging location.



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

Figure: Predicted 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.

Location	Address	City	# Ultra 300kW chargers	# Ultra 150- 299kW chargers	# Fast 50- 149kW chargers	Cannibalisation
Tesla Supercharger	President Kennedylaan 100	Kortrijk	0	12	0	-7 598 kWh
EV Chargers	Oudenaardsesteenweg 268	Kortrijk	0	0	2	-868 kWh

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### 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

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- 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 <u>lucas.bossaert@retailsonar.com</u> or by clicking the button below.



Lucas Bossaert, Senior Geomarketing Consultant

## Get in touch!