



Location study Scunthorpe

Adress : A18 DN15 8GR Scunthorpe

Simulation for :

8 ultrafast charging points (150 kW)

Brand : New brand

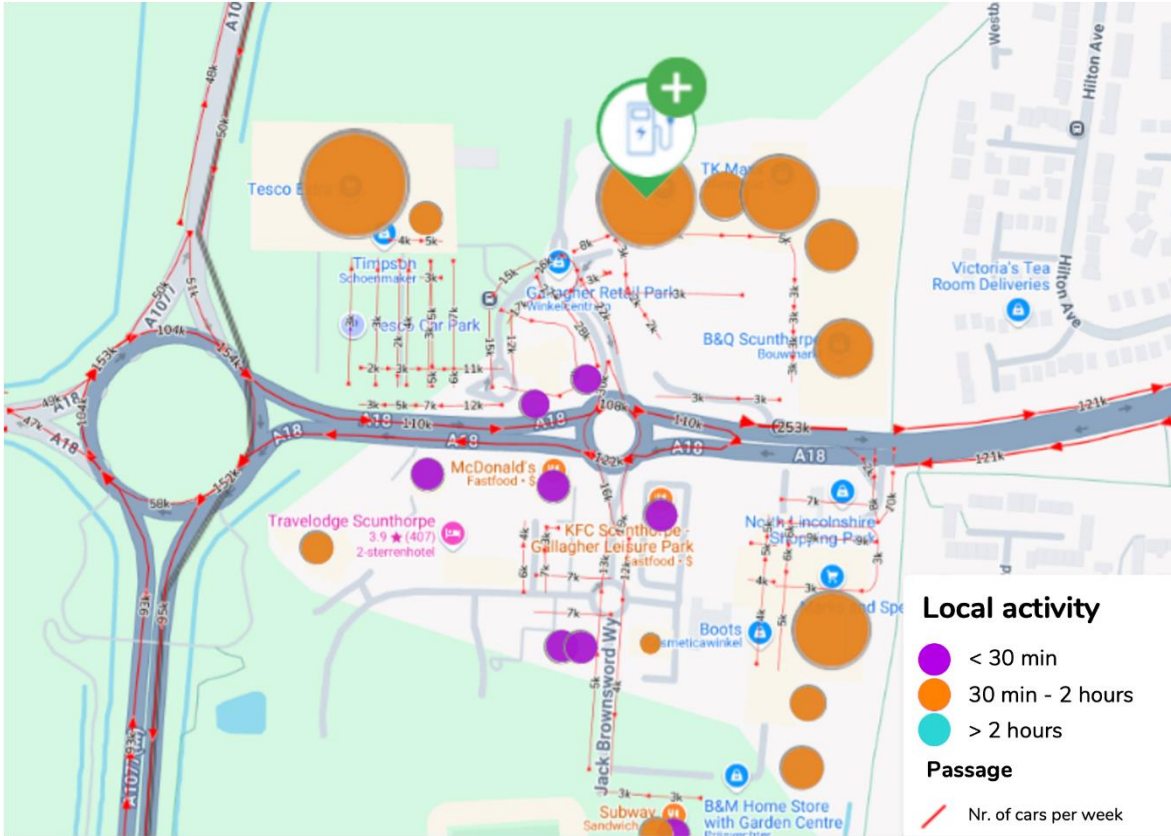


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1. Description of the simulation

In this report we show the result of a simulation with 8 ultrafast charging points (>150kW) of a charging station located at : A18, DN15 8GR, Scunthorpe, UK

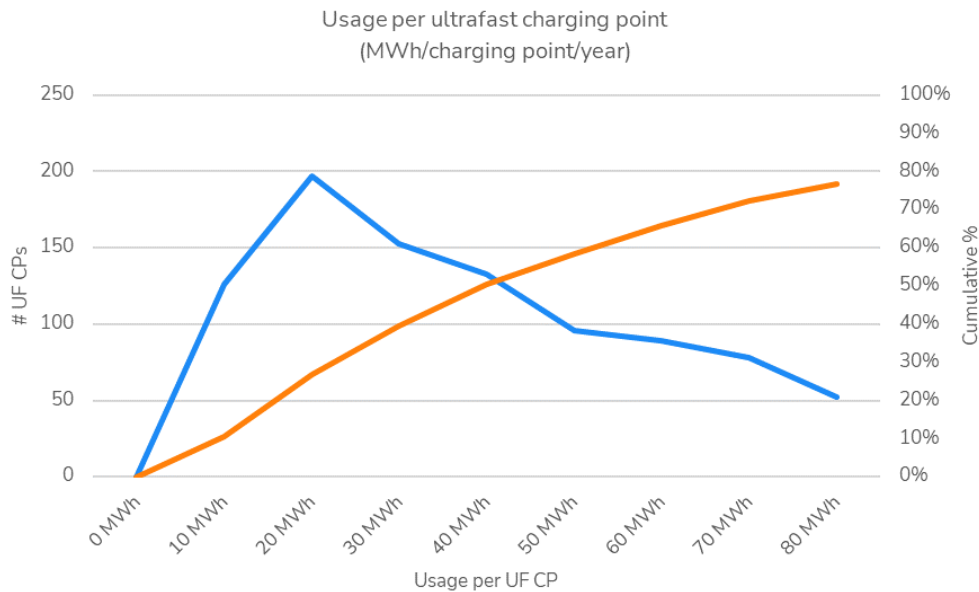


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of **933.743 kWh/year (being 116.718 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 525 existing sites with only ultra-fast charging points, the predictive model gives a median consumption of 46.2 MWh per year and per ultra-fast charging point.

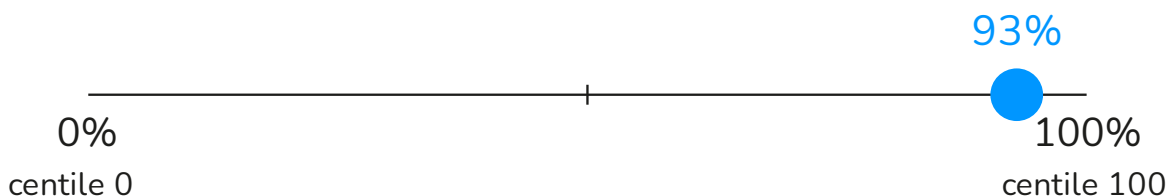


The following graph compares the expected performance (per ultra-fast charging point and per year) of the site under investigation with all existing sites in the country.

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 7 % best sites of the country in terms of potential.

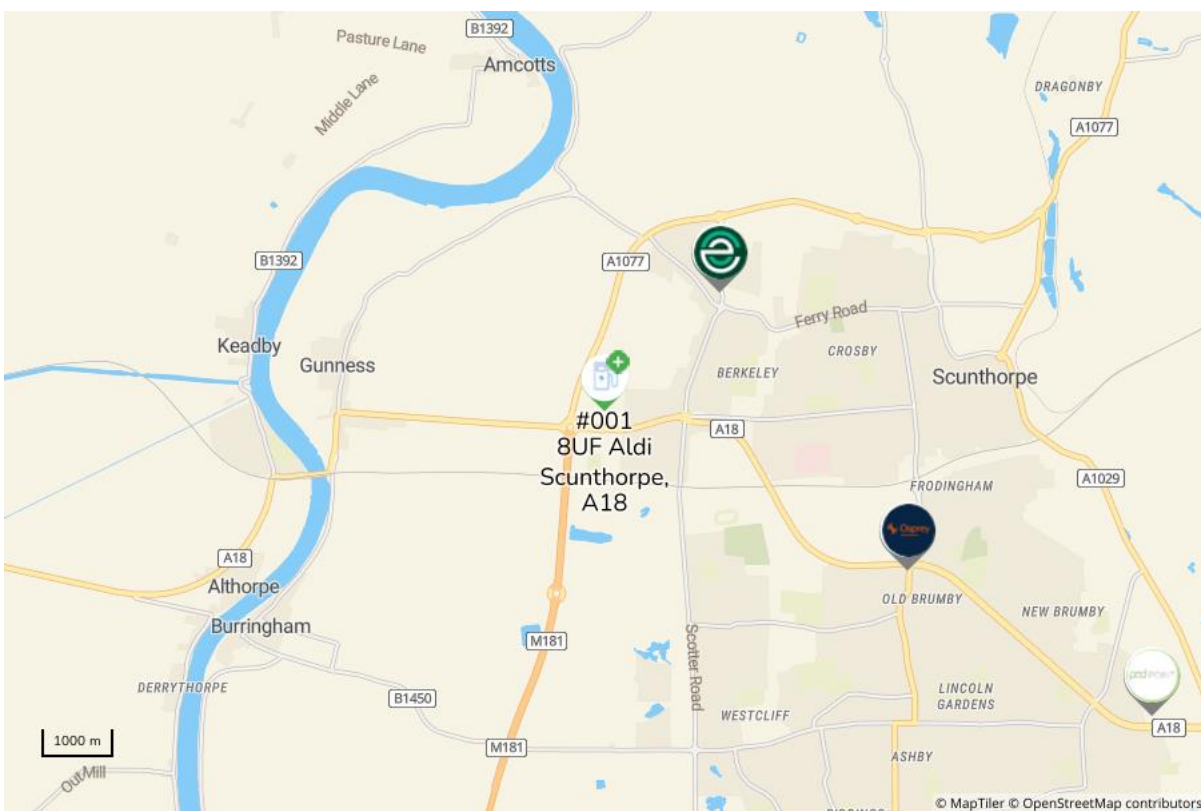
Potential (kWh/ ultrafast charging point) vs. other stations



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

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

Name of the concurrent station	Street + housenumber	# Ultrafast CP's (>150kW)	# Fast CP's (49-150kW)	Power (kW)	Price (€/kWh)	Drivetime (min)
evyve North Lincolnshire	Luneberg Way	0	4	75 kW	0,63 €/kWh	5
Osprey North Lincolnshire	Ashby Road	0	8	60 kW	0,66 €/kWh	6
Pod Point North Lincolnshire	Queensway	0	2	50 kW	0,65 €/kWh	8
GeniePoint North Lincolnshire	Ashby Ville Roundabout	0	2	60 kW	0,63 €/kWh	9



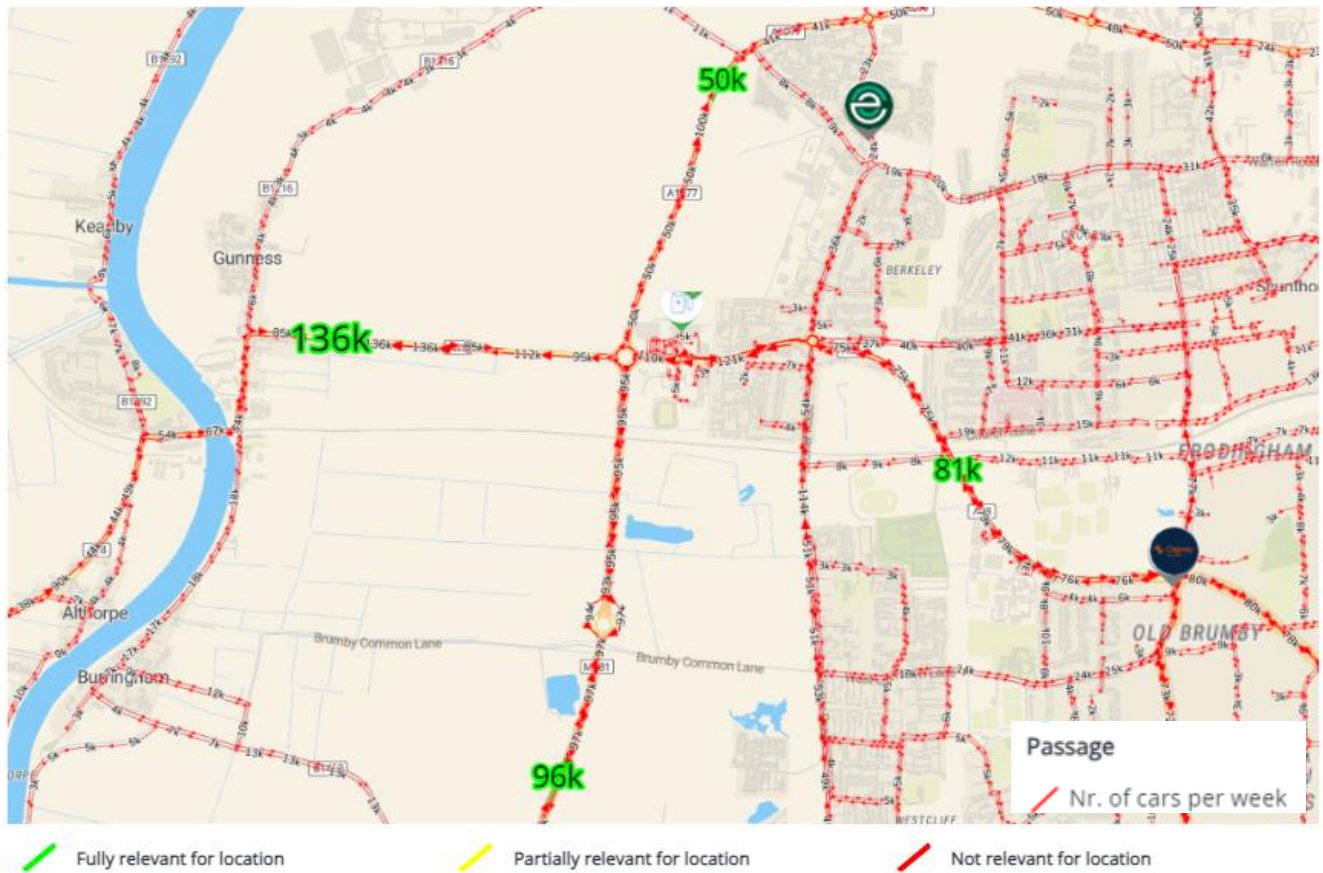
The calculation of the potential is based on the indicators presented in the next sections (ranked in function of importance) :

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.

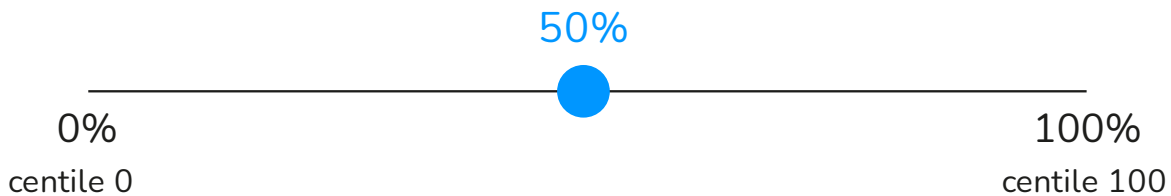
Total relevant car passage for #001 8UF Aldi Scunthorpe, A18: 363,249



The charging location has an estimation of **363.249** cars passing by per week.

With this result, the site is classed within the 50 % least performing sites in the country.

Cars passing by per week compared to other stations



2.2. Potential of local activity in a 300m radius

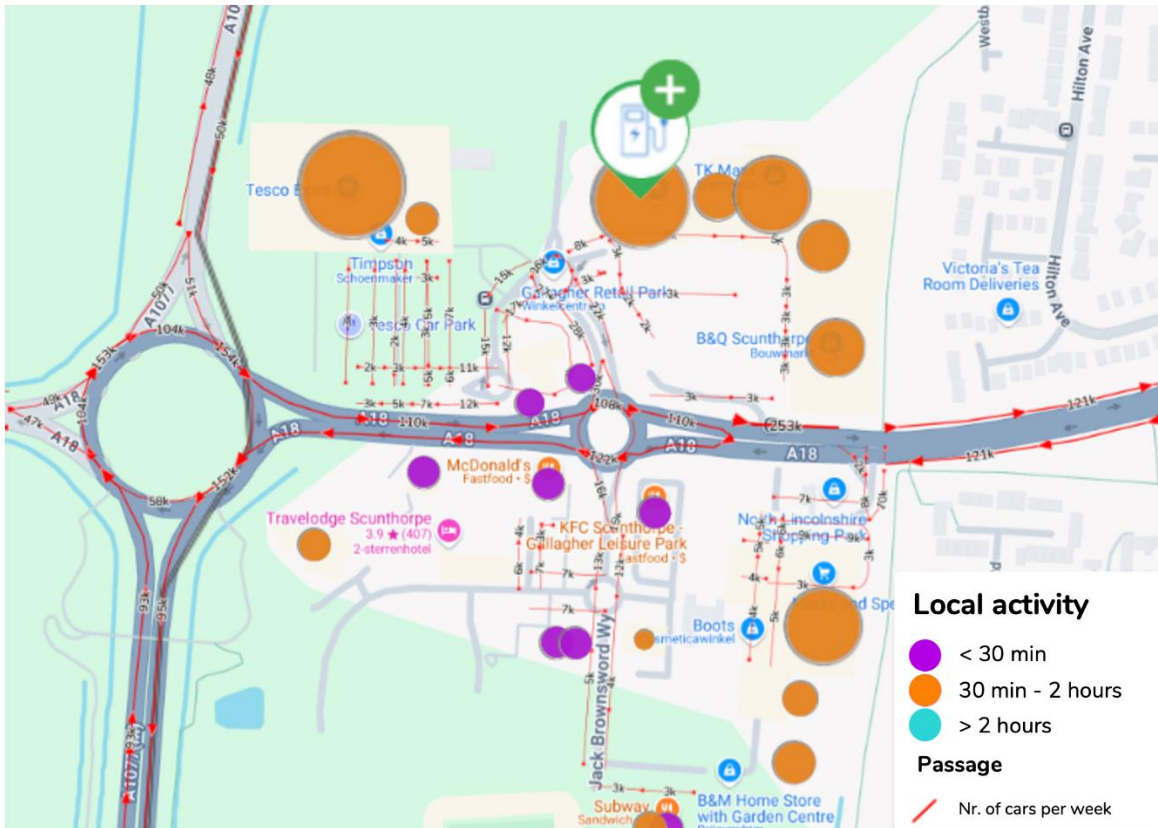
The presence of relevant local activity is very important for ultrafast charging points. Mainly activity with a short visit duration (<30min) is important. Also activity with a medium long duration (30min – 2h) is partly relevant. In this study we took into account the following activity:

< **30min** : fast food restaurants, shops, destination retail...

30min - 2h : non-destination retails, 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.

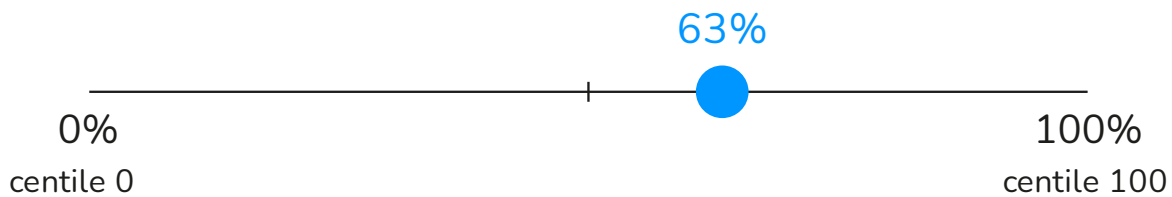


Less than 30min	Number of visitors per year	Distance (m)
Car Wash	15.000	116 m
CarWash POIs - Burringham and Gunness	15.000	143 m
McDonald's	20.000	184 m
KFC	20.000	193 m
pizza hut	20.000	215 m
burger king	20.000	276 m
taco bell	20.000	278 m

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 37 % 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



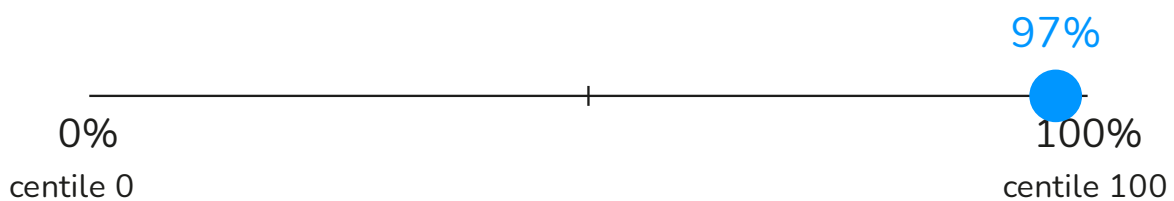
30min - 2h	Number of visitors per year	Distance (m)
aldi - Burringham and Gunness	250.000	0 m
next - Burringham and Gunness	50.000	48 m
tk maxx - Burringham and Gunness	150.000	81 m
Lawn and Garden POIs - Burringham and Gunness	60.000	117 m
costa - Burringham and Gunness	20.000	135 m
b&q - Burringham and Gunness	80.000	152 m
tesco extra - Burringham and Gunness	302.500	179 m
kwik fit - Burringham and Gunness	5.000	271 m

30min - 2h	Number of visitors per year	Distance (m)
marks & spencer	150.000	286 m
hungry horse	20.000	293 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 3 % 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

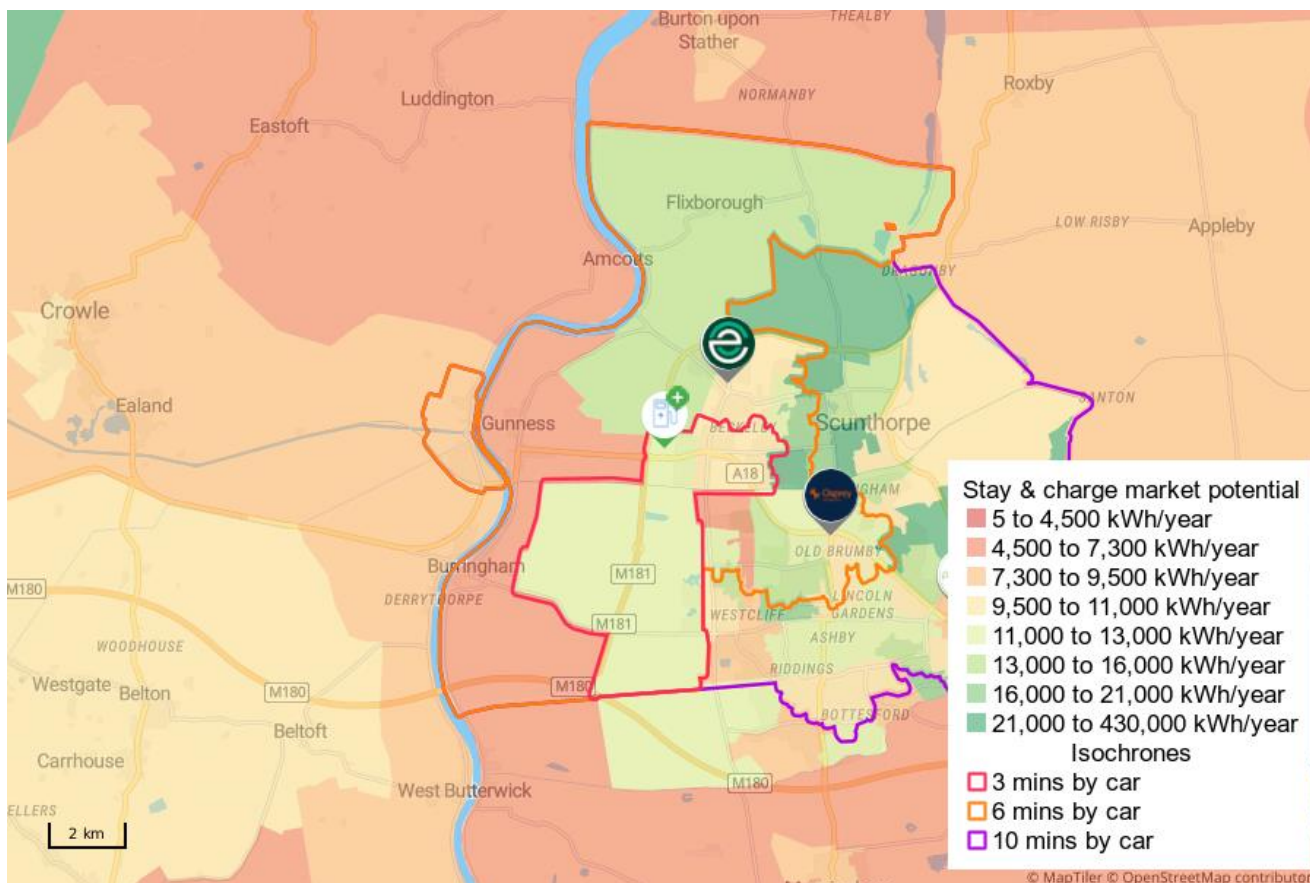


2.3. Residential and local visitor's potential

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	3~6 min by car	6~10 min by car
Inhabitants	5.520 inhabitants	21.206 inhabitants	49.716 inhabitants
Households	2.498 families	8.712 families	21.000 families
Wealth index	60 %	64 %	57 %
Population density	2.115	2.750	4.036
Cars	2.784 cars	10.688 cars	25.025 cars
Light commercial vehicles	458 vehicles	1.760 vehicles	4.121 vehicles
Electric vehicles	79 vehicles	308 vehicles	704 vehicles
Employees	1.850 FTE	12.075 FTE	28.600 FTE
Number of visits > 2 hours in the zone	N/A	480.000 visits	608.000 visits
Residential potential	141 kWh/year	611 kWh/year	1.321 kWh/year
Stay & charge market potential	32.614 kWh/year	170.252 kWh/year	434.274 kWh/year

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 on : "Normal".

2.4.2. Micro-Accessibility : No 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-accessibility	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 : "No issues".

2.4.3. Recharge price : 0,64 £/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).

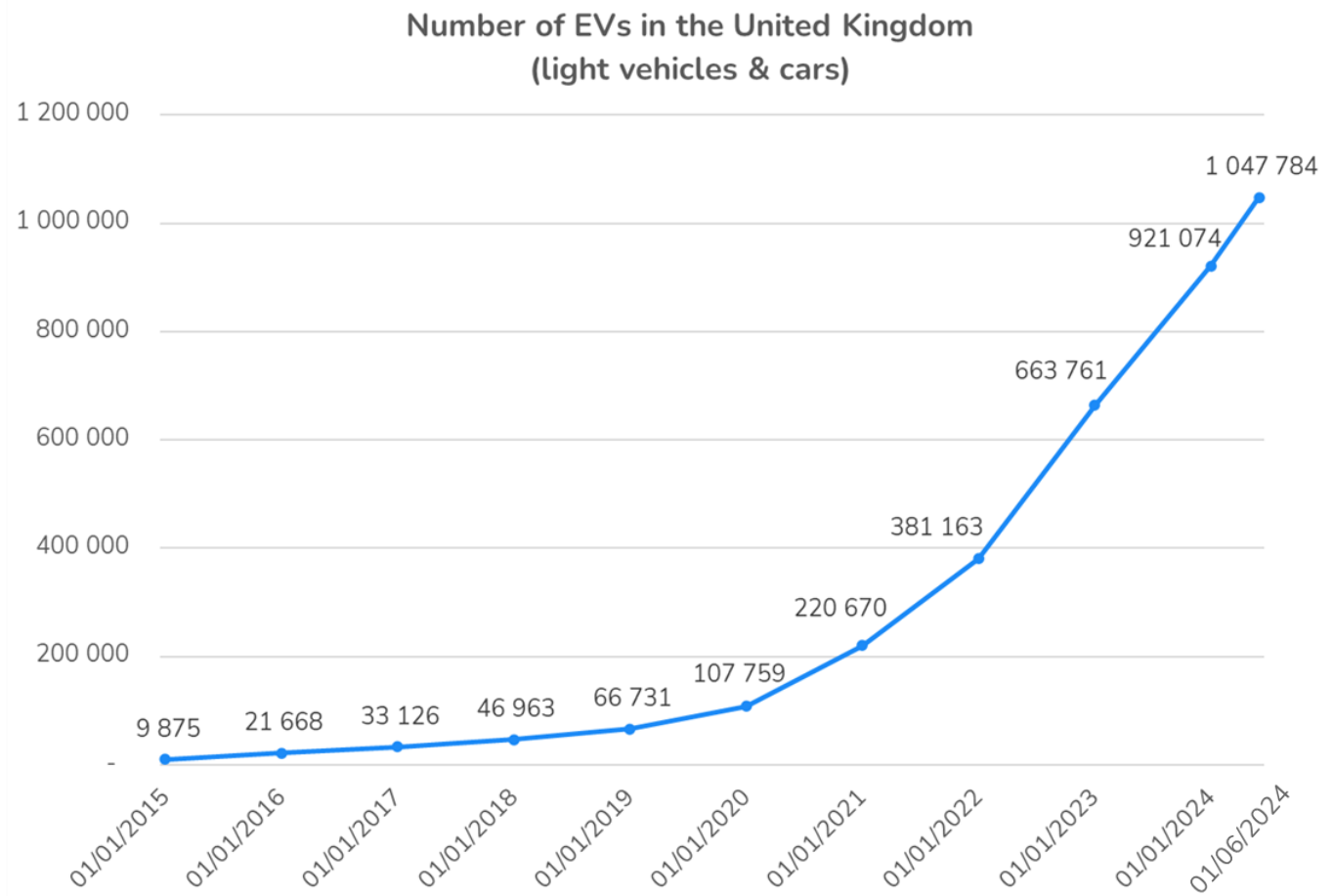
3. Interpretation of the results and market tendencies

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.

3.1. Number of electric vehicles in the country

The number of electrical vehicles in United Kingdom is fixed to 1 047 784 in ChargePlanner. This corresponds to an estimation of reality at the start of June 2024 and contains the cars as well as the light commercial vehicles. Since January 2024, the number of electrical vehicles rose by 14%, which means that the strong growth of the last years continues.



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

In United-Kingdom, there are 5 371 sites with at least one fast or ultrafast charging point .

Brand	June 2024								
	Number of locations (at least 1 (ultra)fast CP)	Ultrafast		Fast		Slow		Price of the kWh (€)	
		# charging points	Average power (kW)	# charging points	Average power (kW)	# charging points	Average power (kW)	(Ultra)fast	Slow
bp pulse	845	519	182	1872	56	1046	27	0.66	0.63
Instavolt	633	377	160	2725	69	2	7	0.71	0.71
GeniePoint	542	12	250	1188	53	677	28	0.63	0.63
Pod Point	440			922	53	962	17	0.64	0.58
ChargePlace Scotland	377	3	150	1095	50	1482	20	0.49	0.43
Osprey	356	287	231	1774	56	250	17	0.66	0.66
Shell Recharge	203	410	177	615	67	208	22	0.72	0.64
ESB	192	36	300	500	51	232	34	0.62	0.56
MFG EV power	175	697	160	746	52			0.66	
GRIDSERVE	151	581	316	628	72	290	25	0.66	0.54
Tesla Supercharger	138	1981	200						
Swarco eConnect	132	82	150	338	52	381	18	0.62	0.51
evyve	113			421	75	9	18	0.62	0.62
Mer	93	49	150	201	57	108	21	0.65	0.47
Be.EV	85	124	150	280	50	153	21	0.69	0.62
PoGo	76	45	192	179	53	122	22	0.48	0.47
Blink Charging	66			166	50	134	18		
Nissan	57			57	50	98	6		
Fuuse	56	72	188	160	69	81	22	0.63	0.57
EVPoint	52	176	190	67	72	8	20	0.53	0.36
Smart Charge	50	368	176	41	62			0.63	
Mer UK	38	19	150	85	61	18	20	0.65	0.47
IONITY	30	216	346					0.62	
Easygo.ie	23			66	50	1	22		
Fastned	23	95	288	87	52	18	38	0.57	0.58
Porsche Smart Mobility GmbH	23	42	346						
Applegreen Electric	21	252	180	22	100			0.64	
Other brands	381	549	184	596	62	511	21	0.61	0.48
Total	5371	6992	209	14831	60	6791	21	0.63	0.55

4. 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