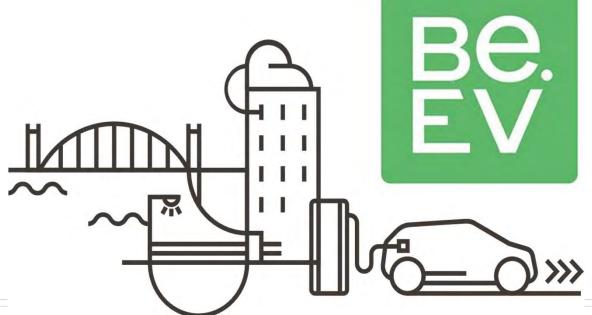
Who, What, Why, When, Where, How: Electric Vehicle Charging

15 September 2021



1. Who are we? The Be.EV network

- ➤ 6000 EV users in Greater Manchester and the surrounding region
- ➤ Greater Manchester's largest publicly available EV charging network, and is rapidly expanding to other areas in the North of England
- Appointed by Transport for Greater Manchester, working closely with the ten local authorities, civic bodies, NHS Trusts, Universities and major private businesses to develop a unified network
- ➤ Here to facilitate the transition to electric in the region and help anyone who wants to host/install charging facilities to do so
- ➤ The only real local network, working with local supply chain and both public and private sector

Public charging

Fleet

Strategic hubs











2. What makes for good charging

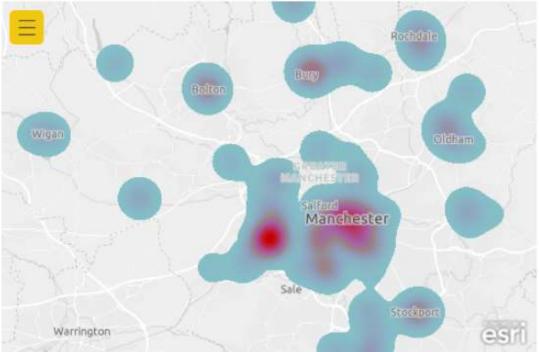
ТҮРЕ	TOTAL PUBLIC CHARGERS	TYPICAL TIME TO CHARGE AVERAGE CAPACITY ELECTRIC VEHICLE TO 80%
SLOW 3kW-6kW	5,277 (23%)	6-12 HOURS
FAST 7kW-22kW	13,025 (58%)	1-6 HOURS
RAPID 43kW+	3,353 (15%)	20-45 MINS
ULTRA- RAPID 100-350kW	838 (4%)	10 MINS





3. Where to charge? The picture in Greater Manchester





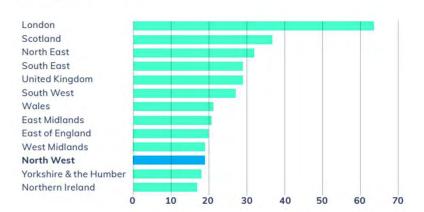
Туре	Sessions	Avg sessions per CP/day	Average Hours	KWh per hour
□ Rapid	2901	6.24	0.87	24.77
⊞ Bolton	297	4.79	0.79	30.55
	er 549	5.90	0.76	25.62
⊕ Oldham	175	5.65	1.29	17.40
⊞ Rochdale	392	6.32	0.93	22.27
	230	7.42	0.84	24.91
	650	10.48	0.85	25.87
⊞ Tameside	240	3.87	0.81	28.88
	368	5.94	0.91	23.06
Total	2901	6.24	0.87	24.77
Туре	Sessions	Avg sessions	Average	KWh per
Туре	Sessions	Avg sessions per CP/day	Average Hours	KWh per hour
Type	Sessions 7117		-	
	1000	per CP/day	Hours	hour
⊟ AC	7117	per CP/day 1.95	Hours 3.97	hour 3.54
⊟ AC ⊞ Bolton	7117 292 759	per CP/day 1.95 1.35	3.97 4.27	3.54 3.10
⊟ AC ⊞ Bolton ⊞ Bury	7117 292 759	per CP/day 1.95 1.35 3.06	3.97 4.27 3.86	3.54 3,10 3.32
⊟ AC ⊞ Bolton ⊞ Bury ⊞ Manchester	7117 292 759 1679	1.95 1.35 3.06 1.81	3.97 4.27 3.86 5.33	3.54 3.10 3.32 3.08
	7117 292 759 1679 394	1.95 1.35 3.06 1.81 0.85	3.97 4.27 3.86 5.33 4.61	3.54 3.10 3.32 3.08 3.63
□ AC □ Bolton □ Bury □ Manchester □ Oldham □ Rochdale □ Salford □ Stockport	7117 292 759 1679 394 208 1474 534	1.95 1.35 3.06 1.81 0.85 1.34 2.26 2.15	3.97 4.27 3.86 5.33 4.61 4.20 3.30 3.35	3.54 3.10 3.32 3.08 3.63 2.98 3.95 4.21
E AC ⊞ Bolton ⊞ Bury ⊞ Manchester ⊞ Oldham ⊞ Rochdale ⊞ Salford ⊞ Stockport ⊞ Tameside	7117 292 759 1679 394 208 1474	1.95 1.35 3.06 1.81 0.85 1.34 2.26 2.15	3.97 4.27 3.86 5.33 4.61 4.20 3.30 3.35 4.12	3.54 3.10 3.32 3.08 3.63 2.98 3.95
□ AC □ Bolton □ Bury □ Manchester □ Oldham □ Rochdale □ Salford □ Stockport	7117 292 759 1679 394 208 1474 534	1.95 1.35 3.06 1.81 0.85 1.34 2.26 2.15 1.56 3.37	3.97 4.27 3.86 5.33 4.61 4.20 3.30 3.35 4.12 3.15	3.54 3.10 3.32 3.08 3.63 2.98 3.95 4.21 4.45 3.87
E AC ⊞ Bolton ⊞ Bury ⊞ Manchester ⊞ Oldham ⊞ Rochdale ⊞ Salford ⊞ Stockport ⊞ Tameside	7117 292 759 1679 394 208 1474 534 194	1.95 1.35 3.06 1.81 0.85 1.34 2.26 2.15	3.97 4.27 3.86 5.33 4.61 4.20 3.30 3.35 4.12	3.54 3.10 3.32 3.08 3.63 2.98 3.95 4.21 4.45

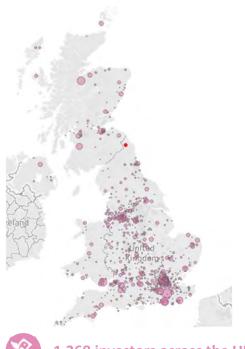


4. Why invest in EV charging facilities?

- ✓ People drive
- ✓ Political drive
- ✓ Social value creation
- ✓ Staff/Visitor expectations

Number of public chargers per 100,000 of population by region in the UK







UK EV uptake has been limited to date in the UK



Selection of vehicles

Price of vehicles

5. When? Now!

- > Climate Emergency
- > Clean Air Zone
- > Target Zero / Net Zero commitments







6. How much does it cost?

Self-funded

8 x



- > c. £40k
- + Power upgrade
- + Maintenance
- + Lifecycle
- + Emergency make safe
- + Connection
- + Back office
- + Customer support

4 x



- > c. £100k
- + Power upgrade
- + Maintenance
- + Lifecycle
- + Emergency make safe
- + Connection
- + Back office
- + Customer support

By becoming part of a public charging network like Be.EV

£0

- Fully funded, full-life solution for landlords, fleet operators, retailers, employers
- Provide value-add to customers, staff, visitors, managers



Thank you!





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Exhibition stand (indoor marketplace)



www.be-ev.co.uk



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Be.EV

