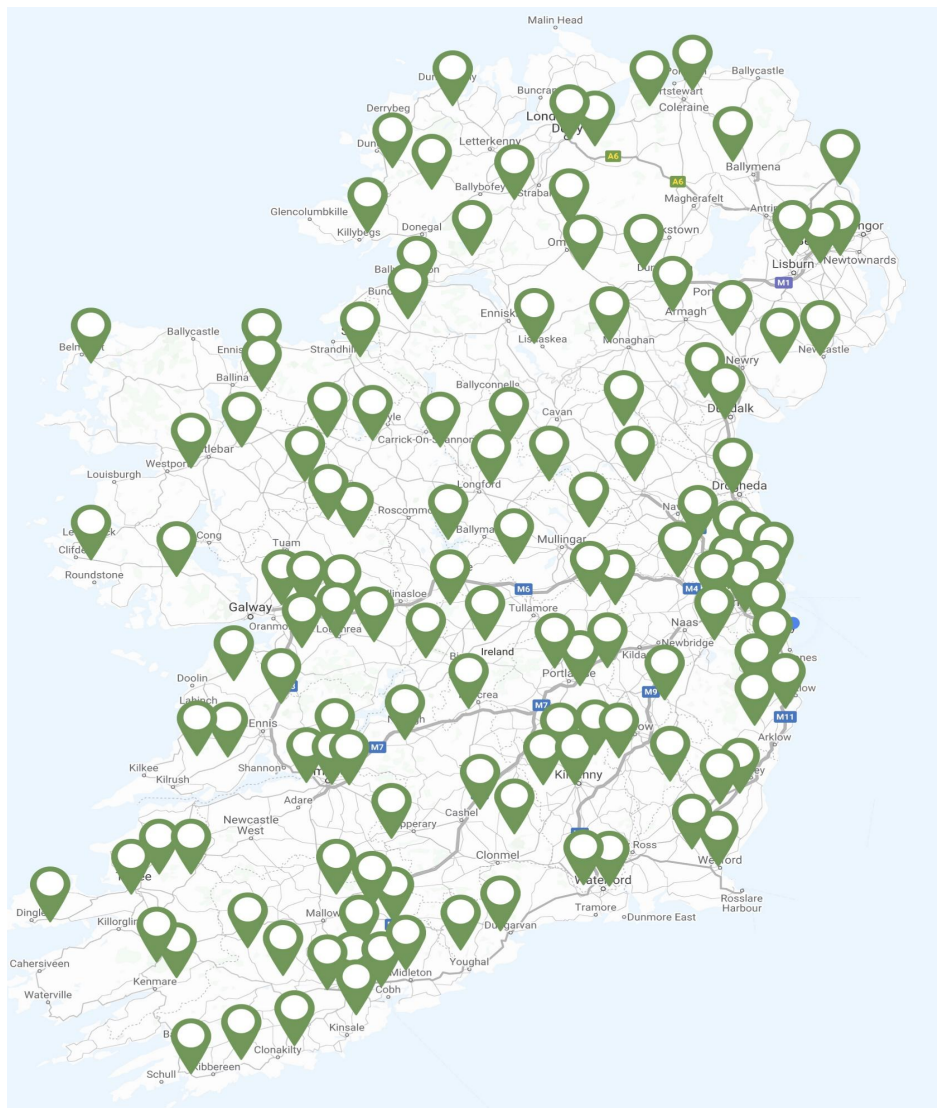




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Charging Infrastructure Outlook

John Byrne – Head of ecars



- Largest EV Charge Point Operator on island of Ireland
- Established 2009
- Fully interoperable between RoI & NI
- Over 1,350 charge points on the island of Ireland
- ~230 Fast (50kW) Chargers containing three points/connectors on each
- 10 High Power Charging hubs (150kW)
- Significant presence across GB



We are currently undertaking a major €20m investment programme in conjunction with CAF to upgrade and expand our charging network. The scope includes:

- Replacing 520 / 1,000 Standard charge points
- Upgrading 52 Standard chargers to Fast (50kW) chargers
- Deliver 52 High Powered Charging hubs which can charge multiple EVs simultaneously



So far....



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- Over 248 (496 points) standard (22kW) chargers have been upgraded all over Ireland



- 36 standard (22kW) chargers have been upgraded to fast (50kW) chargers



High Power Charging (HPC)

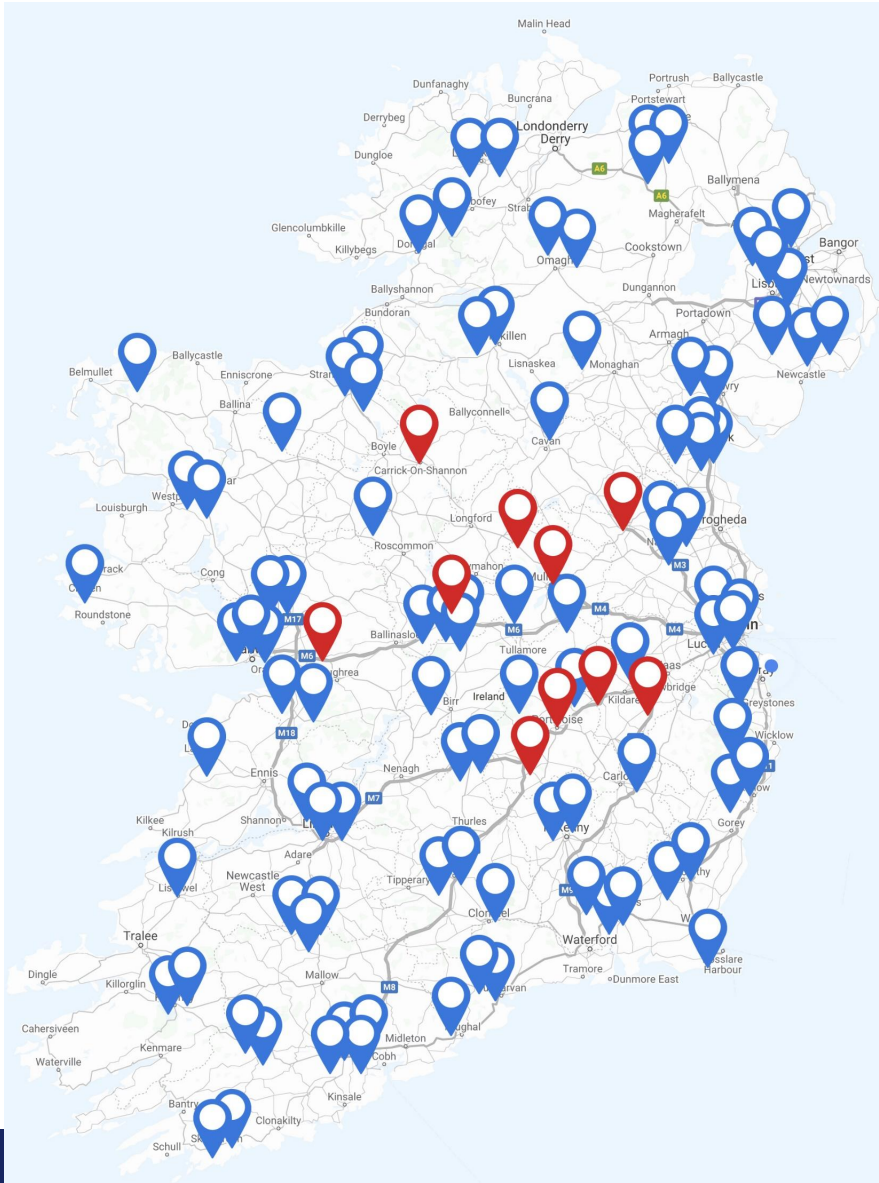


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We've installed ten multi-bay hubs so far in 2021.

These hubs are capable of delivering 100km of range in as little as 6 minutes and are located:

- Kilcullen, Co Kildare (M9)
- Junction 6, Kiltullagh, Co Galway
- Junction 17, Portlaoise (M7/8)
- Kells, Co Meath
- Athlone (N6)
- Lunney's Service Station, Carrick on Shannon (N4)
- Ballinalack, Co. Westmeath
- Mullingar
- Ballacolla, Co. Laois
- Junction 14 (M7)



Investment Benefits



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- Always within 35km of nearest charger
- These upgrades have led to increased reliability, capacity and strength of the ESB public electric vehicle charging network
- The programme started in October 2019 and at that time the uptime was **85%** - 2021 Uptime across our networks **>98%**
- **86%** customers believe that reliability of the network has improved over the past 18 months
- Average charging speeds are now considerably faster with higher number of fast and HPC chargers

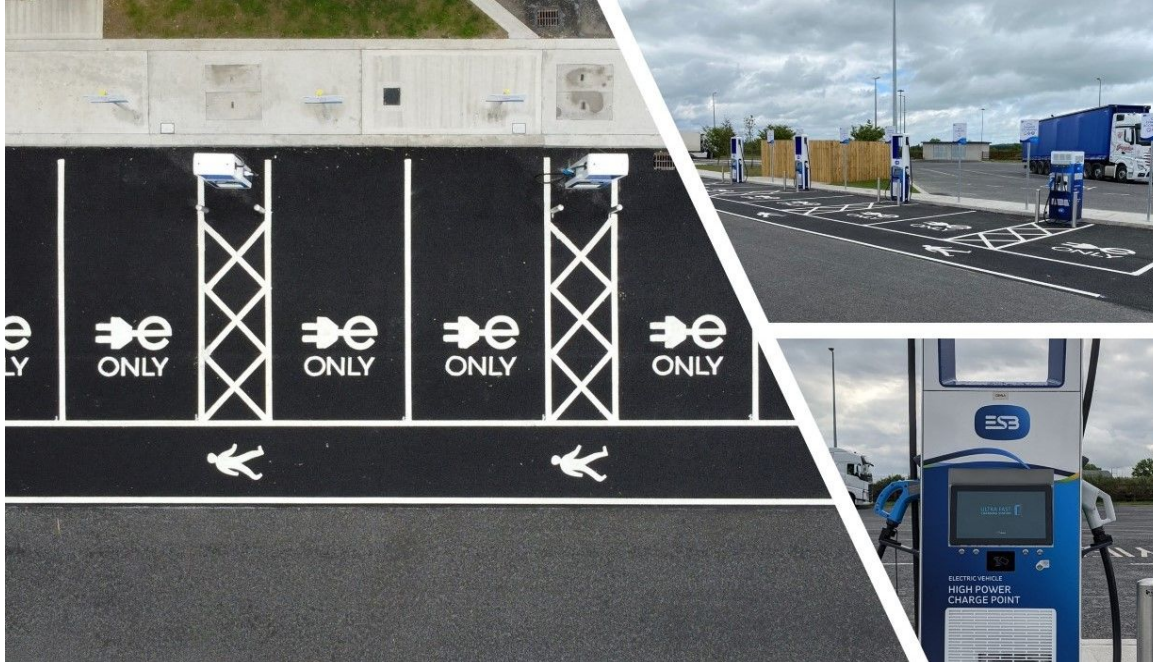


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Our focus will be on hub build out:

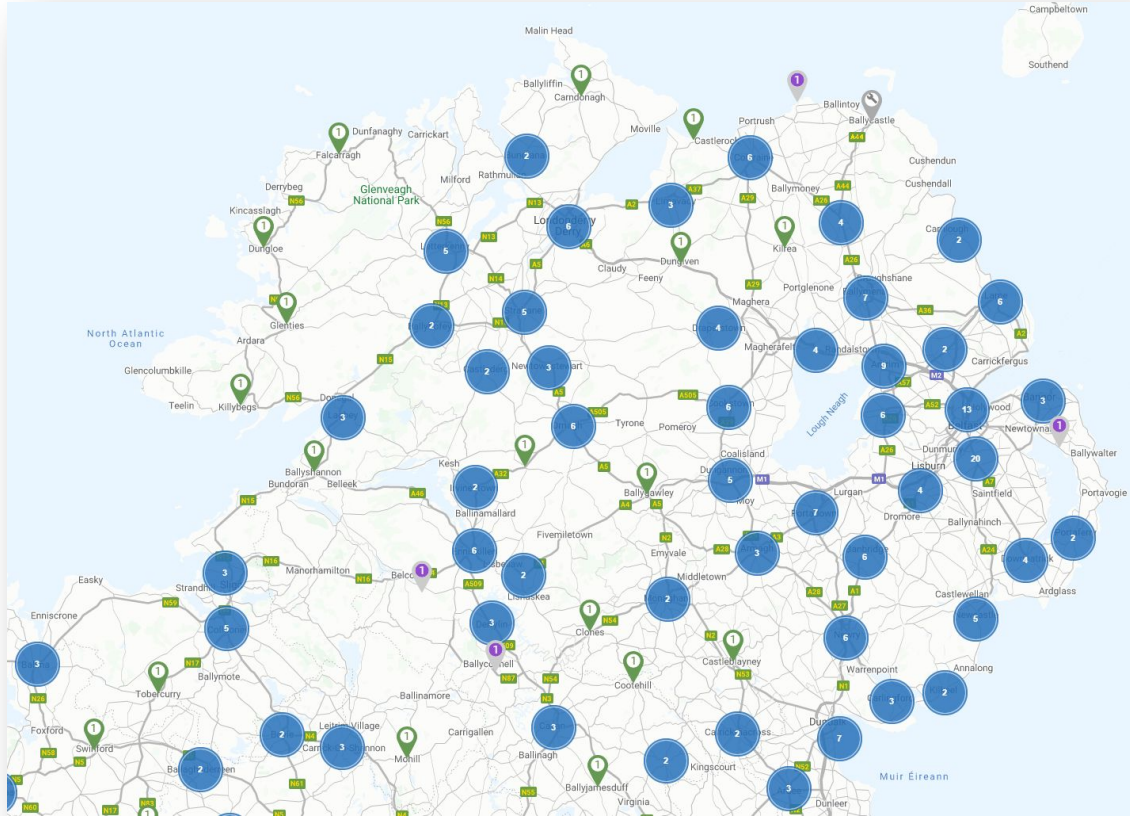
43 High Power Charging hubs will be built in next 24 months

Tier 1: 4 HPC – 8 EVs simultaneously

Tier 2: 2 HPC – 4 EVs simultaneously

Tier 3: 1 HPC & 1 Fast – 3 EVs simultaneously

Northern Ireland



- Interoperable network of 150 Fast (22kW) & 17 Rapid (50kW) chargers installed as part of a consortium approach a decade ago
- ESB ecars is upgrading 20% in two waves in Q3 & 4

West Midlands

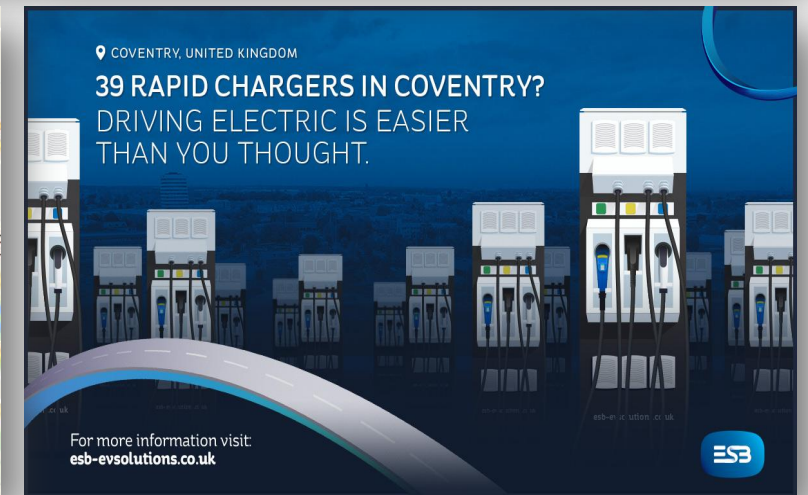
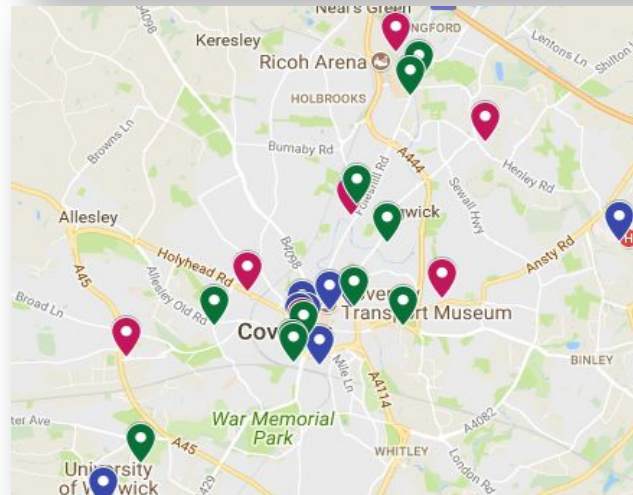
Birmingham

Installing over 200 fast (22kW) and Rapid (50kW) chargers in partnership with the City Council – the first chargers went live in June, with the remaining due over the coming two years



Coventry

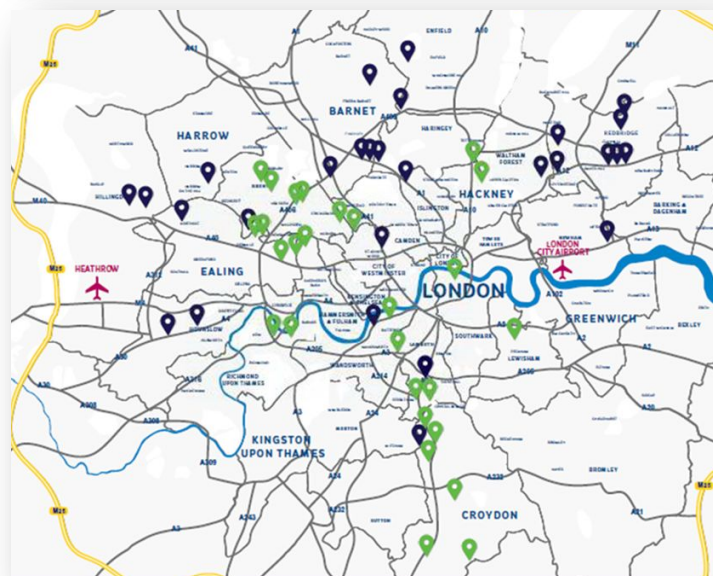
39 Rapid (50kW) chargers installed



London



Over 120 Rapid (50kW) chargers installed as part of Transport for London's rapid charger roll out



Glass Yard flagship site - 8 vehicle fast charging hub launched in September

Glassyard Hub - London



The Outlook



- Accelerating EV uptake – move to full electric
- Vehicle architecture & charger technology
- Continuing innovation in grid connection methodology
- Intuitive digital offering and customer experience
- Continued investment in charging infrastructure essential to stay ahead of growth



**ELECTRIC VEHICLE
CHARGE POINT**

ESB customer care
+353 1 258 3799
esb.lefocars

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Thanks & Get in touch!

For more visit esb.ie/ecars