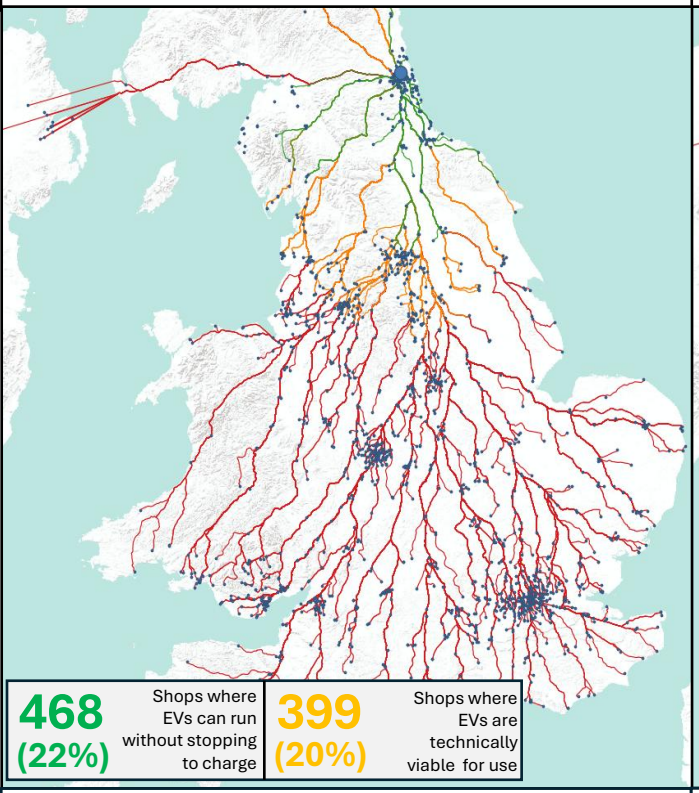
GREGGS ELECTRONIC VEHICLE (EV) ROLLOUT PRIORITISATION

MapHorizon

EV RANGE ON ROUTES FROM NEWCASTLE DISTRIBUTION CENTRE

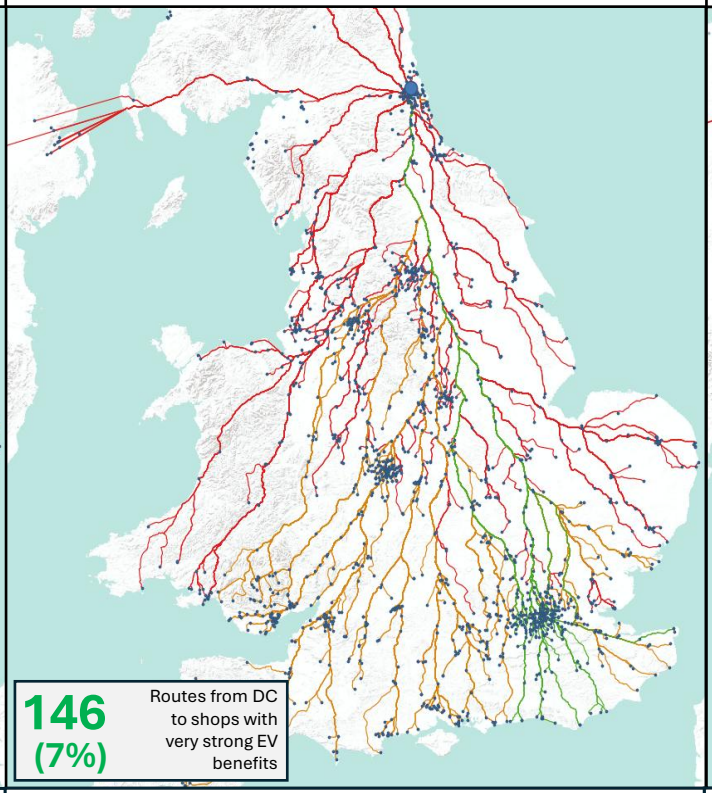


The range-class map for the Newcastle Distribution Centre (DC) divides the respective routes to shops into bands that show how far a medium sized 75kW electric delivery vehicle can reliably operate on a single charge (round-trip).

Green represents shops comfortably within the core operating radius where EVs can run without charging stops; **Amber** identifies mid-range routes where EVs are technically viable but may require careful planning or access to en-route charging. **Red** highlights outlying routes beyond the practical EV limit; where vehicle range constraints make electrification challenging.

The RAG banding helps identify which routes are "EV ready," which require mitigation (route redesign or additional charging), and which should be later-phase electrification targets.

EV IMPACT ON ROUTES FROM NEWCASTLE DISTRIBUTION CENTRE

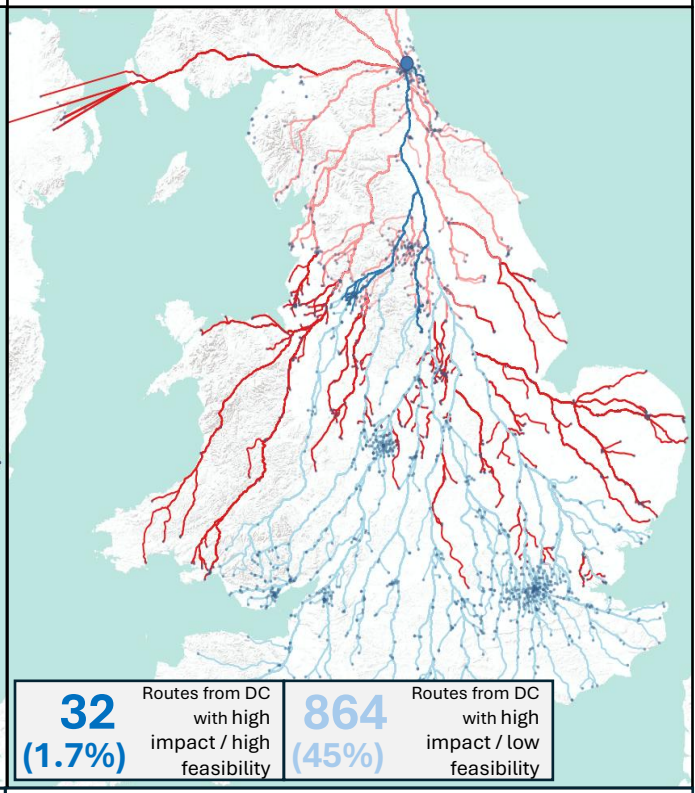


The EV Impact layer groups delivery routes into Low, Medium and High categories to reflect their relative contribution to Greggs' climate-transition objectives under ESRS E1.

Green (High-benefit) routes deliver the strongest decarbonisation and air-quality gains (based on average CO2 emissions per road & AQMA / CAZ locations) , **Amber** (Medium-benefit) routes provide a balanced transition case with moderate operational constraints, and **Red** (Low-benefit) routes offer limited near-term impact without further mitigation or infrastructure support.

This supports the prioritisation of EV deployment in line with impact-materiality (emissions and local environmental quality) expectations of ESRS E1.

ESRS E1 DOUBLE MATERIALITY ANALYSIS ON ROUTES FROM NEWCASTLE DISTRIBUTION CENTRE



Routes were assessed using a DM framework that separates environmental impact from operational feasibility. Impact was measured using the EV Impact score, while feasibility was assessed using previously calculated vehicle range assumptions and charging availability.

Routes were grouped into four categories: **Dark Blue** - high impact / high feasibility (prioritise now), **Light Blue** - high impact / low feasibility (plan and enable), **Pink** - low impact / high feasibility (opportunistic), and **Red** - low impact / low feasibility (deprioritise).

This approach enables a clear, phased EV rollout that maximises environmental benefit, supports ESG reporting, and targets investment where it delivers the greatest value without compromising operations.

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LEAP ASSESSMENT

Locate – EV range mapping identifies which shops and corridors fall within Green, Amber, and Red operational range bands from each distribution centre, indicating where single-charge EV operations are feasible. Charger-density analysis locates corridors with strong or weak public charging support, while the EV Impact layer highlights routes with the highest combined CO_2, AQMA, and CAZ/ULEZ exposure. Together, these layers locate where electrification opportunity and constraint coincide across the network.

Evaluate – These datasets are evaluated jointly to understand material transition exposure and impact under ESRS E1. Range feasibility reflects operational exposure, charger density indicates infrastructure resilience, and EV Impact scores capture the relative environmental and regulatory benefit of electrification. This enables the identification of routes that are both high-impact and operationally achievable, as well as those where benefits exist but delivery risk is higher.

Assess – By combining EV Impact and feasibility into a double-materiality framework, routes are classified into four categories: high-impact/high-feasibility (act now), high-impact/low-feasibility (plan and enable), low-impact/high-feasibility (opportunistic), and low-impact/low-feasibility (deprioritise). This allows the company to assess where electrification delivers the greatest value today versus where enabling actions or phased adoption are required.

Prepare – The company can prepare by sequencing EV rollout along high-impact, well-supported corridors, targeting charging investment or partnerships where feasibility constrains high-benefit routes, and optimising routing or depot boundaries to favour EV-friendly corridors. More constrained routes can be deferred until infrastructure or operational conditions improve, ensuring a phased, resilient transition aligned with ESRS E1 transition planning expectations.

Top 3 EV Rollout Mitigations

1. Prioritise "High-Impact, High-Feasibility" EV Corridors

Range mapping and EV Impact analysis highlight routes where electrification carries minimal operational risk and yields quick emissions reductions.

Action: Prioritise EV rollout Dark Blue routes supported by strong public charging, delivering efficient near-term Scope 1 decarbonisation.

2. Target Infrastructure Gaps to Reduce Transition Risk

Outer-range corridors with poor charger density represent transition and continuity risks as vehicle restrictions and clean-air policies evolve.

Action: Focus investment on store charging points or local partnerships along these weak corridors to build resilience, reduce reliance on diesel, and prepare for future mobility regulations.

3. Re-align Routes to Enhance Operational Resilience

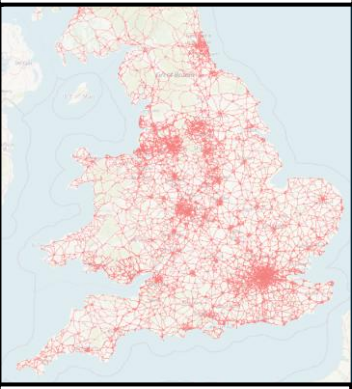
Some shops sit in EV range but off reliable charging corridors, increasing exposure to delivery disruption and AQMA/CAZ constraints.

Action: Reassign fringe shops to closer DCs or adjust route geometry to follow charger-rich corridors, classifying remote or poorly supported areas as later-phase electrification zones.

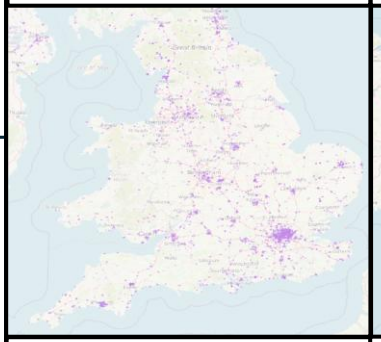
SOURCE DATA

Company Shops & Primary Distribution Centre

Ordnance Survey Roads (Open Zoomstack)



EV Charging Points (Overpass Turbo (OSM))



DEFRA / Local Authorities Air Quality Management Areas (AQMAs)

.gov.uk Clean Air Zones (CAZ) and London ULEZ

DFT GB Road Traffic Counts

National Atmospheric Emissions Inventory (NAEI) data