DYNAMON

FLEET DECARBONISATION: REDUCING RISK, NOT JUST EMISSIONS

PRACTICAL LESSONS FROM REAL-WORLD PUBLIC SECTOR FLEET TRANSITIONS

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THE REALITY COUNCILS ARE FACING

The Pressure Is Increasing

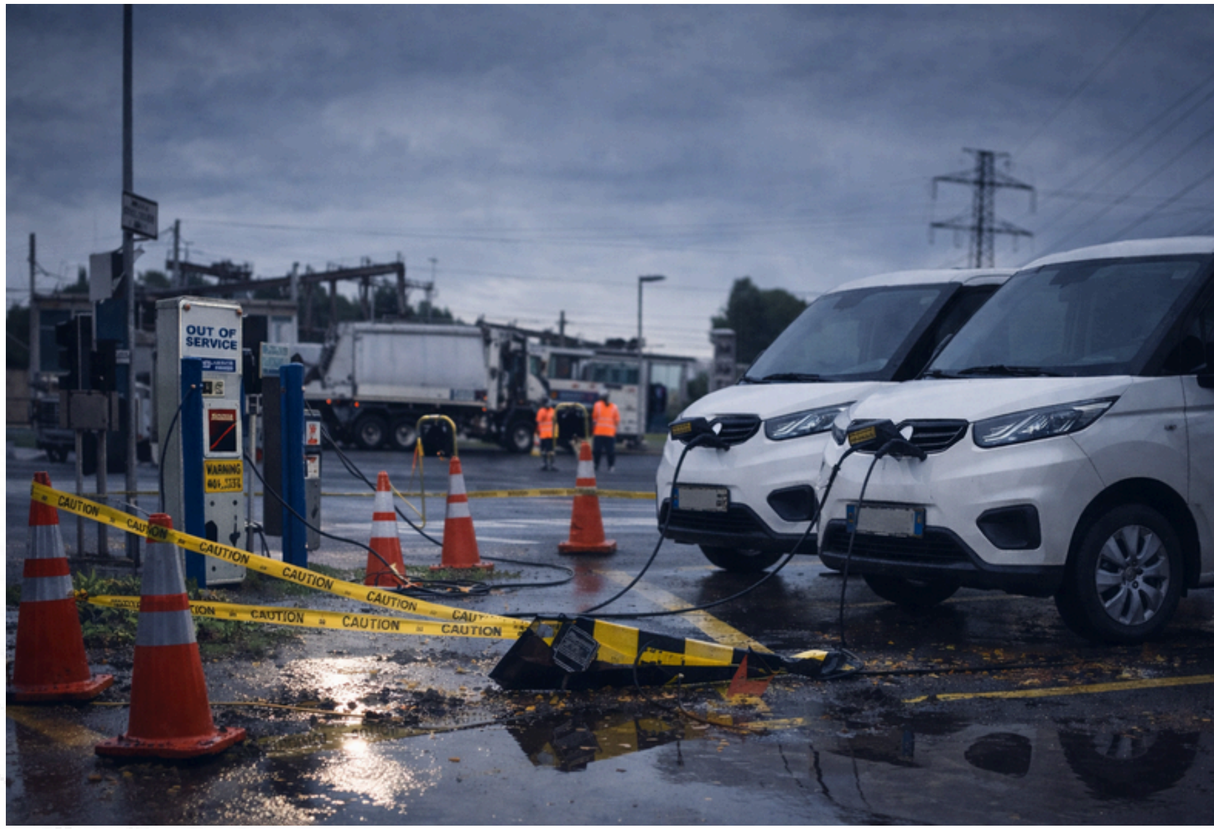
- Net zero commitments
- Budget constraints
- Service continuity expectations
- Grid capacity uncertainty
- Political scrutiny

? SOUND FAMILIAR

The challenge isn't just emissions — it's balancing climate ambition with operational reality.

THE REAL RISK

The biggest risk isn’t not electrifying. It’s electrifying badly.



Overbuying infrastructure

Installing more chargers than operational data actually requires, locking in unnecessary capital spend.

Underestimating energy demand

Failing to model real usage patterns, leading to site overload or unexpected grid upgrades.

Buying EVs that don’t fit routes

Selecting vehicles without testing real-world duty cycles and edge-case scenarios.

Phasing too aggressively

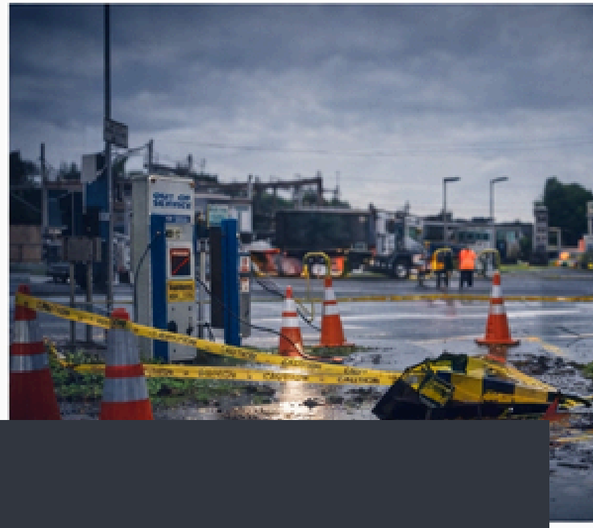
Rolling out faster than operational readiness allows, increasing service risk.

Creating operational disruption

Disrupting frontline services through poor sequencing and infrastructure misalignment.

THE 4 PLANNING MISTAKES WE SEE

Transition risk is usually created before the first charger is installed.



Buying vehicles before modelling real-world routes

Over-specifying rapid chargers “just in case”

Not aligning transition to replacement cycles

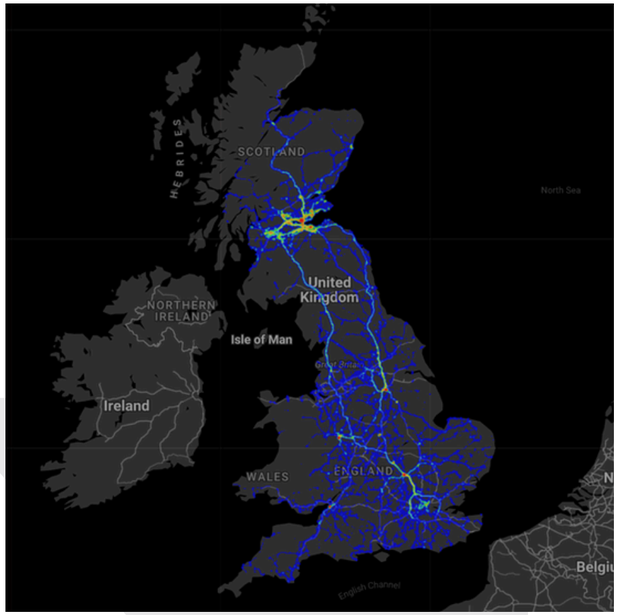
Separating fleet and estates planning

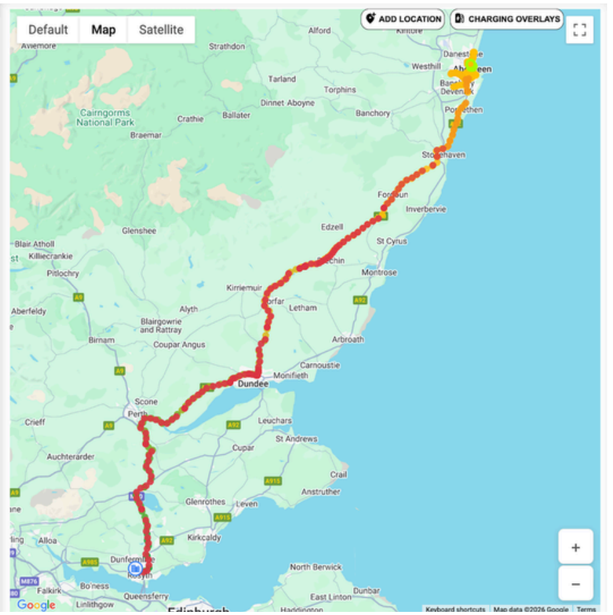
WHAT CHANGES WHEN YOU START WITH DATA

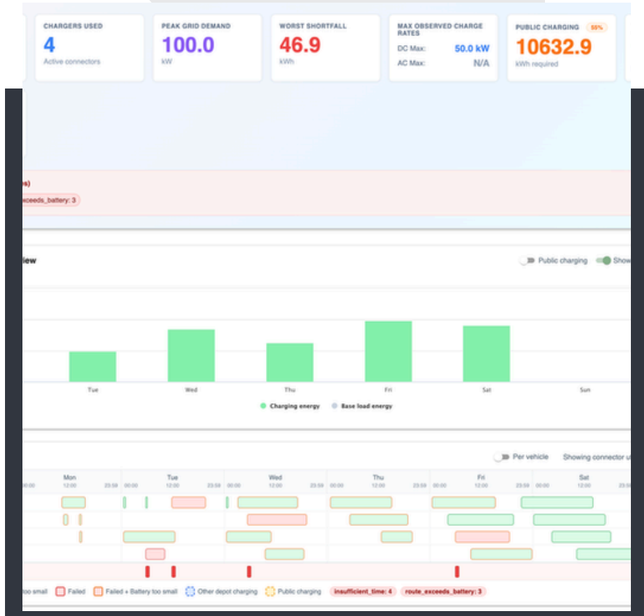
Operational Data Changes the Conversation

- Vehicle Feasibility
- Energy Demand
- Infrastructure Requirement
- Phased Financial Plan

? HAS ANYONE TAKEN THIS APPROACH YET?







Operational data removes guesswork from multimillion-pound decisions.

ROUTE ANALYSIS

RouteZERO

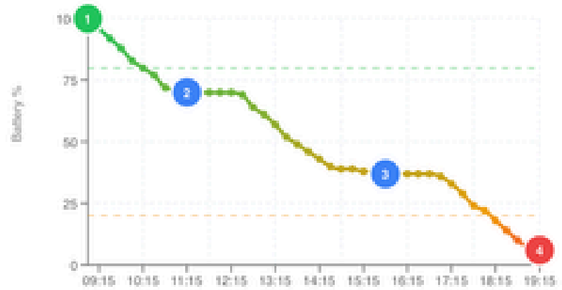
Vehicle | Route | Results

Route Summary

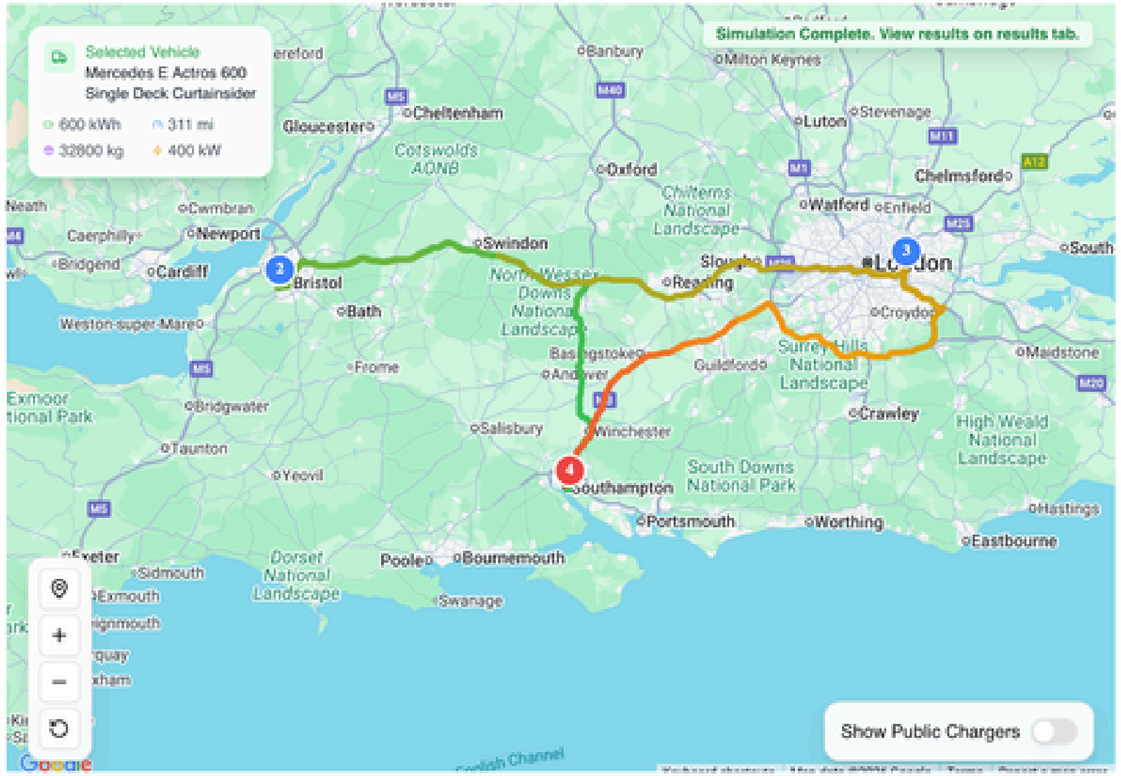
Total Distance: 345 mi	Total Time: 10h 26m
Energy Used: 470 kWh	Route Efficiency: 136.12 kWh / 100 mi.
Charge Stops: 0	Final Battery Level: 6%

Low Battery Warning | No on route charging

Battery State of Charge (SOC) Over Time



Well to Wheel Environmental Impact



JOURNEY SEGMENT	DISTANCE	DEPARTURE / ARRIVAL TIME	DRIVING TIME	STOP TIME	SOC
1 Southampton Football Club → Ashton Gate Stadium	106 mi	09:00 11:22	2h 22m	1h 0m	Start 100% End 70%
2 Ashton Gate Stadium →	128 mi	12:22	3h 35m	1h 0m	Start 70%

INFRASTRUCTURE DESIGN

Scheduling Results

Infrastructure design analysis complete

SUCCESS RATE	CHARGERS USED	PEAK GRID DEMAND	WORST SHORTFALL	MAX OBSERVED CHARGE RATES	PUBLIC CHARGING 1%	THIS SITE CHARGING 99%
99.8%	5	110.0	3.0	DC Max: N/A	40.3	3836.5
453 successful / 454 total	Active connectors	kW	kWh	AC Max: 22.0 kW	kWh required	kWh delivered

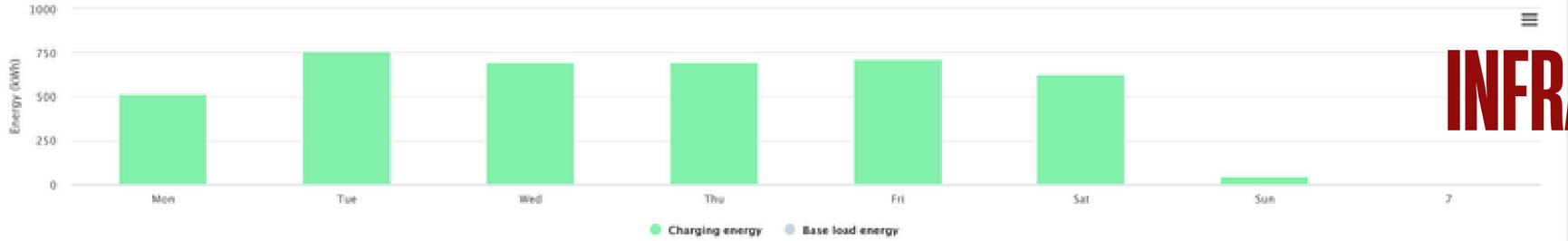
Failure Analysis (1 departures)

insufficient_time: 1

Energy & Power Overview

Public charging · Show daily totals · Daily energy (kWh)

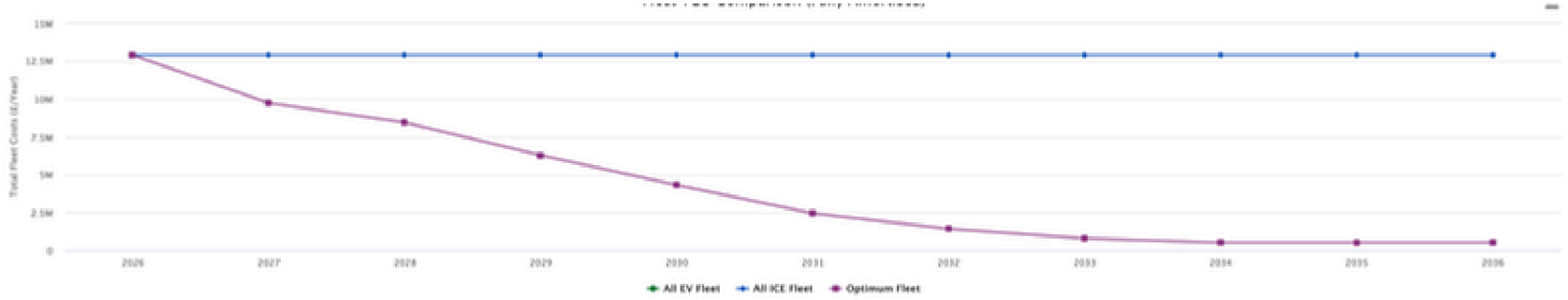
Ignoring site fuse limit

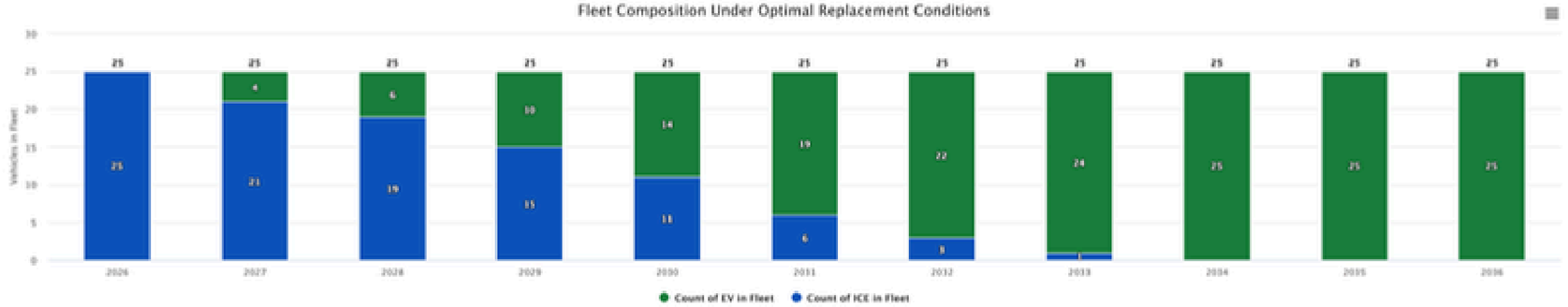


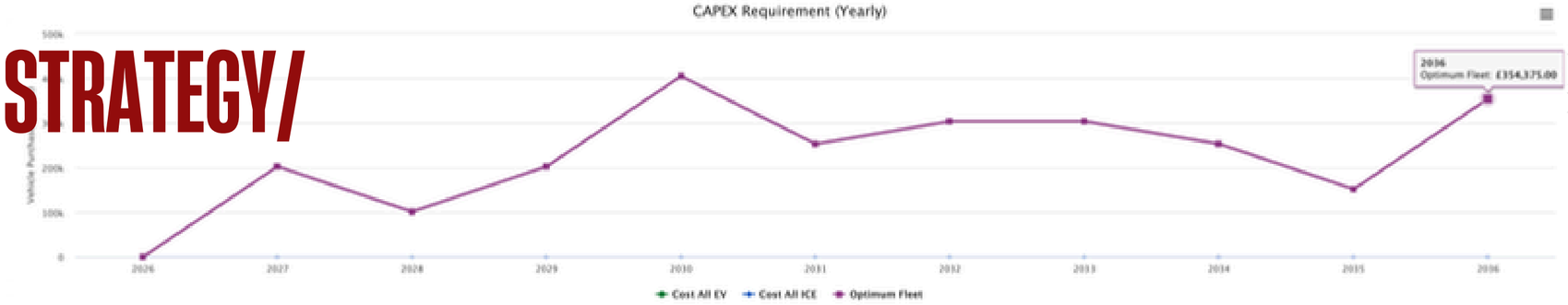
Charging Schedule

Per vehicle · Showing connector utilisation across the selected week

ROLLOUT STRATEGY/ TCO







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DISCUSSION

WHERE ARE YOU FINDING THE BIGGEST BLOCKERS?

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