

electricity
north west

Bringing energy to your door



Decarbonisation of our Fleet

14-September-2021

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Countdown to decarbonisation of transport



2019

33% of all UK CO₂ emissions linked to transport



UK ends sale of new petrol and diesel cars and vans

2030

2020

EVs account for 18% of all new car sales



All new cars and vans in UK to be fully emission free at the tailpipe

2035

2020

7% of all UK vehicles registered in North West



Peak electricity to increase by 1.6 – 2.4 times 2020 demand

2040

2022

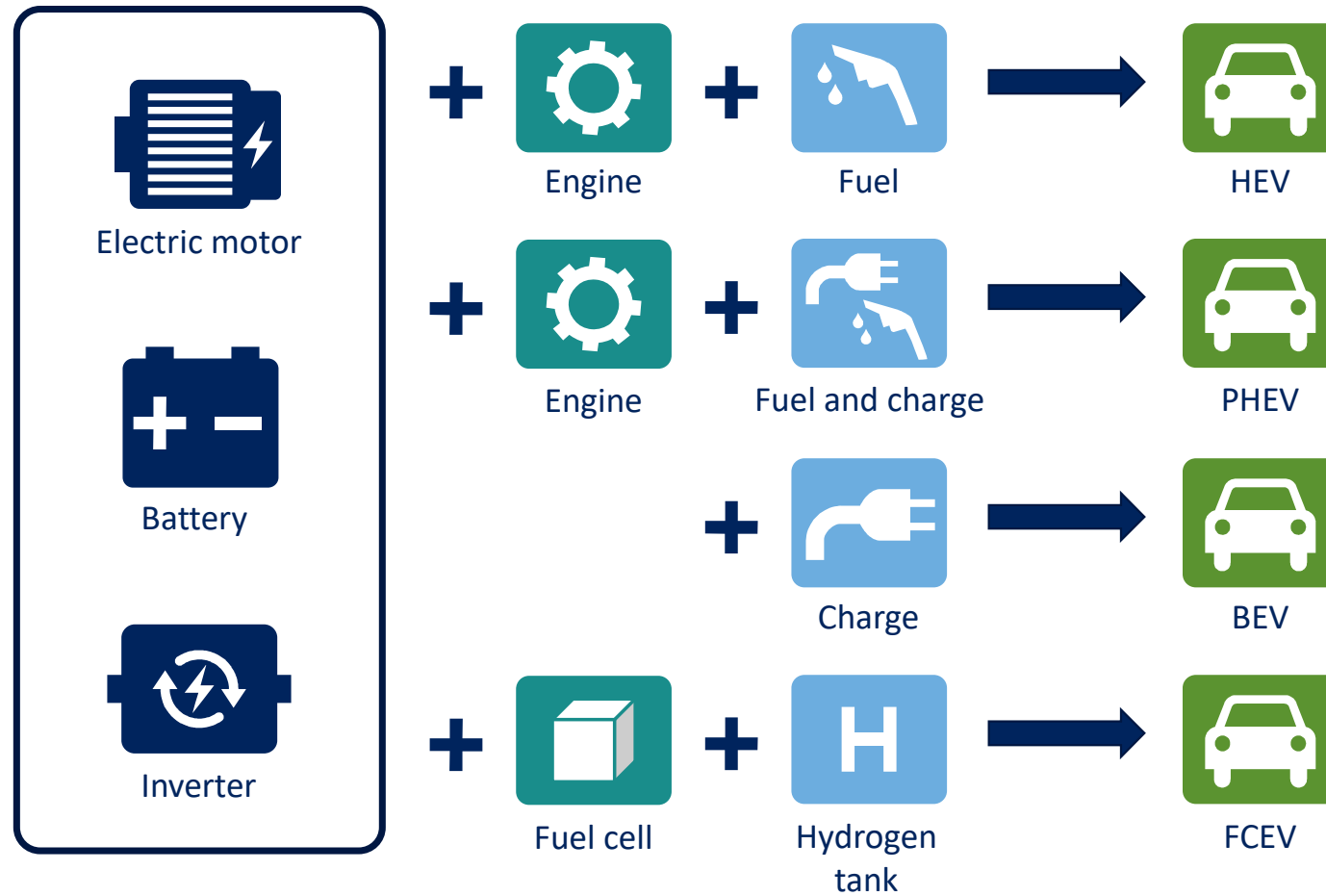
GMCA to implement clean air zone



Over 3m EVs connected to regional network

2050

Electric vehicle core technology

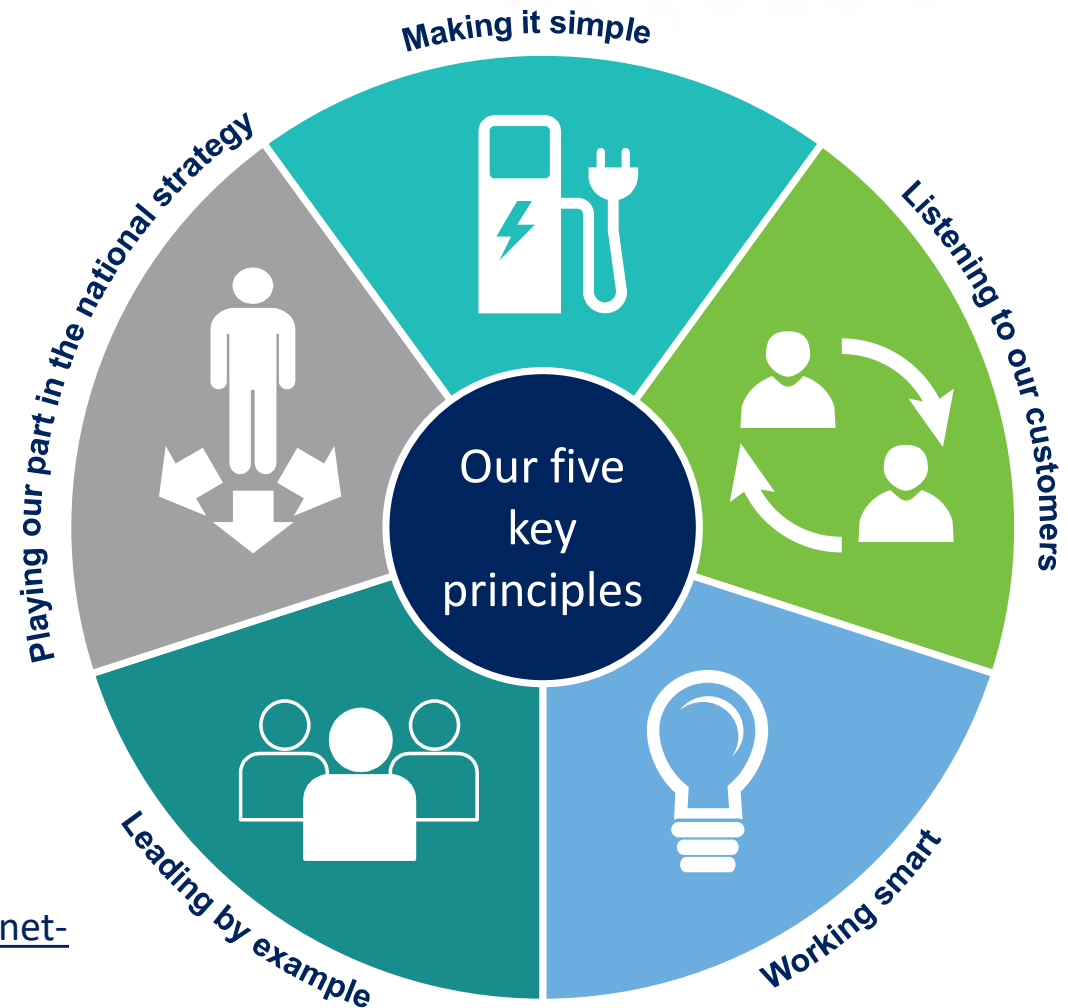


Our electric vehicle strategy



Our electric vehicle strategy sets out the actions we will take to lead and support our customers and wider stakeholders on our journey to decarbonise the region's transport

<https://www.enwl.co.uk/go-net-zero/our-plans-to-go-net-zero/our-electric-vehicle-strategy/>

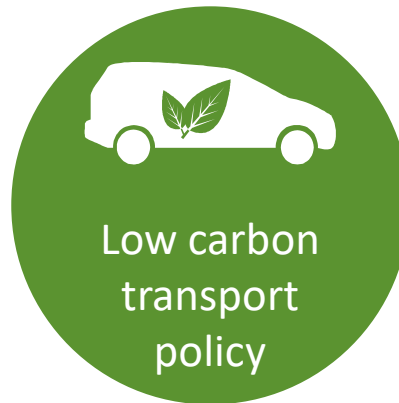


Leading by example



We will lead the transition to EVs in our region by identifying opportunities to decarbonise transport in our own business

We are committed to promoting the uptake of low emissions vehicles and reducing our overall impact on climate change. All of our sites, EVs and electrical equipment are already powered by 100% renewable electricity



Reasons why we are not transitioning the entire fleet



Vehicle practicalities

- Lack of the types of vehicles we currently require particularly 4 x4's, Large vans, HGVs, specialised plant
- Payload and weight restrictions, especially for towing
- Low ranges for heavy vehicles
- Need to be able to offer additional service whilst idling – Winches, equipment charging, cabin heating/cooling, welfare facilities, hiab lifts etc....

Operational issues

- Charging capabilities especially during power outages

Financial

- EVs, particularly commercial and HGVs are still more expensive upfront than their ICE equivalents (80%-120%)
- We are a regulated business, so spending is capped

Environmental

- Lots of embodied carbon already in the vehicles we own
- Hybrid equivalents don't always offer reductions in overall emissions (depending on main driving mode)
- The majority of the fleet is less than 9 years old, and as such comply with Euro 6 standards

Opportunities and targeted projects



- Earlier adoption/Quick wins
 - Company Car Early Termination Programme
 - Introducing pooled small Van resources
 - Commercial vehicle home charging (smart cable trials)
 - EV Fuel cards to facilitate EV retail rapid charging
 - Depot charging facilities
- Review Funding methods – leasing over shorter durations (reducing from 4 years to 3 years)
- Stepping stones to Commercial EV fleet
 - PHEVs
 - Use of decarbonised alternative fuels
 - Trialling of FCEVs when these become available



Review every replacement with EV solution first

Typical Replacement Policy



Vehicles will be considered for replacement if they fit into any of the following criteria.



Vehicles that fall in to the 789 rule may still be deemed fit for purpose.

Commercial EV Plan – By March 2028



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Future impact of fleet decarbonisation and CAZ

Vehicle Type	ICE Replacement Value of fleet	Proportion changed to EV by March 2028	Additional EV Capital expenditure	Count of proposed EV vehicles
Fault Tech vehicles	£775,000	100%	£390,600	31
Fork Lift Truck	£198,000	100%	£0	11
Mini Digger	£752,000	90%	£719,100	43
Jointers Van	£8,400,000	50%	£1,872,000	120
Flat Bed	£299,000	50%	£48,100	7
4X4	£4,583,000	30%	£322,140	36
Van Medium	£200,000	20%	£23,360	2
Van Small	£1,596,000	20%	£376,200	23



- Payback is achieved mainly through fuel savings and potential future avoidance of local charges (such as clean air zones and other future local authority action).
- Currently only commercial assets that have a total expenditure payback of 8 years or less are being considered for replacement with an EV.
- Assumptions on potential EV availability and advancement in technology are being made within our plans. E.g. LGV EV assets are not considered viable until after 2027.
- Particular focus is being put on replacing the vehicles which operate predominantly within North West conurbations and those which have operating patterns which would suit an EV e.g. Fault technicians, planners
- Currently there are 14 categories of vehicles and plant which ENW have no plans for electrification (185 vehicles) these include Trucks, customised specialist vans, tracked plant. As solutions become available we will form plans to replace or decarbonise these vehicles.
- 35.6% of the commercial fleet planned to be replaced with electrified alternatives by March 2028 (273 of 767)

Car Approach



Our goal is that every new car leased by the company will be a low emission vehicle (HEV, PHEV or BEV) by 2023

	2021				2022												2023											
Current	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23		
Live PlugIn Company Cars = 32																												
	Ordered = 28 CARS (60 CUMULATIVE)																											
					Invited to Swap = 80 CARS (140 Cumulative)																							
					Review ALD Batch and Scheme Progress				Additional Roll Out (ALD Batch) = 100 CARS (240 CUMULATIVE)																			
					Remaining = 64 CARS (304 CUMULATIVE)																							

Data for direct leased company cars

- Open Scheme to allow as many EVs as possible
- Cost Neutral - due to savings from national insurance, fuel costs, and maintenance
- Current Market making Early Term more attractive

Current colleague company car figures: 48 BEV, 10 PHEV

Colleagues in in cycle to work scheme 127

Electric mini-diggers



- Each vehicle has reduced our carbon emissions by 64 tonnes CO2 equivalent a year.
- Running and servicing costs are significantly lower, and they are five times quieter than traditional diesel equivalents.
- Practical for the type of work we typically do i.e a few hours of digging in order to find and fix a fault in underground cables.
- The battery is low down in the vehicle so provides better ground purchase



Depot Charging



The chargers installed at our sites are a mix of slow, and fast charge points to allow colleagues to choose the most appropriate charging speed for their needs.

We will continue to expand the number of charge points at our sites to meet the growing demands for EV charging for colleagues and visitors.

Key challenges are:

- Predicting charging patterns and requirements
- EV charge point size
- Site import capacity requirements, whilst installing other innovative technologies e.g. ground-source heat pumps).
- EV charging infrastructure costs and ease
- EV unit options – We have basic systems (plug and go) across our estate. Investigating: fob-access, load balancing, Smart charging, back office monitoring & billing.
- Diversification – promoting home charging and reducing range anxiety.

118 EV charge points
available for colleagues
and visitors at 15 sites



QUESTIONS & ANSWERS



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Please contact us if you have any questions or would like to arrange a one-to-one briefing about our EV strategy