FAQs: Electric Vehicles

Does NELC have an EV infrastructure strategy?

Yes, you can find it on the webpage (<u>Electric vehicles (EV)</u>) then select 'Electric vehicle charging strategy' under 'Related documents.

Has the council received government funding for publicly available EV infrastructure rollout?

The Council have several funding streams available from the Government and are currently working through the application process to meet the funding requirements.

Will the Council make an application for LEVI (Local Electric Vehicle Infrastructure) funds?

Yes.

Is there any support for fleet/workplace charge points?

The Office for Zero Emissions Vehicles (OZEV) currently provides grants: <u>Electric</u> <u>vehicle chargepoint and infrastructure grant guidance for installers - GOV.UK</u> (www.gov.uk).

Will the Council be installing electric vehicle charge points on-street or just in car parks?

Both – the council will be rolling out charge points on-street and public car parks.

Can a ChargePoint be installed close to where I live?

Should you wish to request one near your home please submit a suggestion form. You can find the link to this on the NELC website. Each case is considered on its own merit.

Does your electric vehicle charging infrastructure strategy include specific considerations for elderly and / or disabled users?

Yes. Charge point operators design charge points with consideration of PAS1899 standards (Guide for Accessible Public EV Charging Stations).

Will designated parking spaces for EV charging provide suitable disabled accessibility?

Where possible we will provide accessible parking bays.

Do you support or provide information to residents to make finding charge point services easier?

The easiest way to find charge points is to use ZapMap (<u>EV charging stations & electric vehicles - Zapmap (zap-map.com)</u>. Further information will be provided on the council's website as charge points are installed.

What cable management solutions do you offer for on-street residential charging?

It is currently against existing Road Traffic Acts to cable above or across, on or under the pavements. Residents wanting to charge their car from home must do so within the boundary of their own property. Any cables or wires being used to charge a vehicle across the pavement are a violation of the Highways Act (1980).

What myth-busting answers are available currently?

Websites such as the following offer a variety of myth-busting answers:

- Electric vehicles: debunking the myths Energy Saving Trust
- Putting The Brakes on Five EV Myths | DriveElectric
- <u>Electric car mythbuster Admiral</u>

Do EV's weigh more than petrol or diesel cars?

On average, an EV weighs 200-300kg more than a petrol equivalent because of the weight of the battery and electric motors. However, a large petrol or diesel car weighs more than an average-sized EV. Structures, like roads, bridges, and multi storey car parks are built to withstand much greater loads than even the heaviest EV. Incidentally hybrids can be even heavier as they have a petrol or diesel engine plus a heavy-duty battery and electric motor.

Are new EVs more expensive to buy than their petrol or diesel equivalents?

The short answer is yes – however it is very likely that prices will continue to come down like many new technologies eventually do, as development and demand improves.

Don't EV tyres degrade more quickly?

Data is becoming more available, but the short answer is possibly on the front tyres on front wheel drive cars, but no difference on rear tyres. Also, if the car is driven with less torque or using eco mode then the expectation will be that tyre degradation will be as good as combustion engine vehicles.

The RAC has written an interesting piece for those wanting more information: <u>Do</u>

EVs produce more pollution? | RAC Drive

Are EVs more expensive to insure?

Typically EV's are more expensive to buy than a petrol or diesel car therefore attract a higher premium, however car insurance is a highly competitive industry and there are many variables such as age, occupation, whether parked on street or off street, locality, and the number of years without a claim that can bring the premium down. This is before the many variables within each car are assessed for insurance such as power and performance, safety and security.

For the views from a leading UK car insurer visit <u>Electric Car Insurance - EV Insurance</u> <u>Quotes - Admiral</u>, or find a recent cost comparison exercise done by Auto Express at Why is electric car insurance so expensive? EV vs ICE cost analysis.

Can EVs tow caravans?

Like all other cars, EVs must be 'type approved' in order to tow a caravan or trailer and there are now some new models available with this certificate. The likelihood is high of more availability as technology improves and demand increases.

For more information, visit <u>Electric car towing capacity: can you tow a caravan with</u> an electric car? | BuyaCar.

Are EV batteries drained more quickly with air conditioning or heating systems switched on?

The short answer is yes; much like a petrol or diesel car's mpg rate is reduced by using an air conditioning unit. The battery is discharged quicker, but it is likely to be addressed by improved technology. Similarly, an electric car's heater being used

extensively on a very cold day will reduce the range of the car, but it is not seen to be a major deterrent and technological advances will likely produce improvements.

What incentives are there currently to purchase an EV?

There have been and still are several incentives from the UK government for the purchase of new EVs. There is currently a vehicle road tax exemption in place, as well as free parking for EVs in some cities. However, incentives can and do change and therefore we suggest the reader does their own research as part of their decision-making into whether to buy an EV for themselves.

Why are EV's better for the environment than petrol or diesel cars?

EV's are powered by electricity and therefore they have zero tailpipe emissions, unlike their petrol or diesel counterpart. The carbon footprint created from the CO2 emissions is a major contributor to increasing the Earth's core temperature. Greener methods of producing electricity are also improving through increased in renewable energies such as wind farms and solar panels.

Are EVs suited to long journeys?

Pure electric vehicles have an average range of around 200 miles, with many models able to go further on a single charge. It's also worth noting that 68% of journeys we make yearly are under five miles. But if you want to travel further – you can.

Are there enough public charge points?

Charge points may be less noticeable than petrol stations, but the UK is now home to a well-connected public charge point network. There are over 50,000 electric vehicle charging points in the UK. According to <u>Zapmap quarterly statistics</u>, the number of

ultra-rapid charge points in the UK has increased by 68% since September 2022. What's more, <u>Zapmap's calculations</u> show that the UK is likely to reach 100,000 charging devices by August 2025 and this will be necessary to keep up with demand. In our local area this matches our own intentions and expectations.

Is 'home-charging' worth the investment?

You can save money in the long run by installing a home charge point. There are upfront costs to install a home charger (the average cost of installing electric car charger prices range from £800 – £1,200). However, you can expect to save money over time due to the lower cost of electricity compared to petrol or diesel. Recharging your EV at home will normally result in the greatest cost savings.

You may be able to save more money by charging overnight with an off-peak overnight electricity tariff. There's also financial support available, which can help to keep the cost down. The Office for Zero Emission Vehicles' EV charge point grant offers renters or flat owners with off-street parking either £350 or 75% off the cost of installing a home charge point currently. Incentives will likely change over time.

Can the national grid support an increase in electric vehicle charging i.e. does it have capacity?

Estimates show that if we all switched our petrol or diesel vehicles to electric overnight, we would experience only a 10% increase in demand, fitting comfortably within the grid's capacity.

Can the energy grid support more charging?

The answer is yes. You may be surprised, but the highest peak electricity demand in the UK is 16% less than 18 years ago, according to <u>National Grid statistics</u>. Our

phones, computers, and washing machines have become increasingly energy efficient, reducing the grid's demand. As the number of electric vehicles on the roads continues to grow, there will be an increasing demand for electricity consumption. Of course, making the shift overnight would be challenging. But the growth in EVs is happening gradually. This allows the National Grid to understand charging patterns and plan.

Aren't Electric vehicle batteries wasteful and very difficult or impossible to recycle?

Developments in battery component extraction mean processing centres can extract 98% of battery materials for recycling or reuse. Electric vehicle batteries can be recycled at processing centres. Some companies can even remove your electric vehicle battery and put it to use in your home or sell it on for commercial use. If you have solar panels, an electric vehicle battery can be repurposed to store the electricity they generate, helping keep your electricity costs down. Electric vehicle batteries that aren't repurposed are now shipped to EU processing centres. This is a short-term solution as the UK Government is working with partners to set up a sustainable battery recycling chain in the UK.

Does the authority manage charge points directly or do they work with a partner organisation to handle implementation on their behalf?

This is still in process of being confirmed. Updates will be found on the NELC website.

What are current numbers of charge points and estimated totals by end of 2024 within the local authority?

This will be aligned with our EV strategy once published.

Are there any government websites with more details?

For more details, head to:

- Electric vehicles: costs, charging and infrastructure GOV.UK (www.gov.uk)
- <u>Electric vehicle chargepoint and infrastructure grant guidance for installers</u> GOV.UK (www.gov.uk)

How much range can I get from 1 hour of charge?

Below are some typical charge point speeds and the likely mileage gained as a guide. The figures are not absolute as the rate of charge is dependent on a number of factors such as network conditions, weight of vehicle and quality of the battery.

Slow-Fast:

3.7kW – up to 15 miles.

7kW – up to 30 miles.

22kW – up to 90 miles.

Rapid-Ultra Rapid:

50kW – up to 90 miles on a 30-minute charge.

150kW – up to 200 miles on a 30-minute charge.

350kW – over 200 miles in just 20 minutes (although few cars are capable of this yet)

What are the Council doing to increase the number of publicly available charge points?

The Council are eligible for Government funding to roll out EV charging points and will continue to pursue the funding available. Over the foreseeable future EV charge

point roll out will gain momentum and more public charge points will become available, in line with the NELC EV Strategy.

How many charge points do we need in North East Lincolnshire?

The Council's EV Strategy identifies that to keep up with demand number of charge points will need to be substantially increased. Estimates for the number of charge points required by 2025 and 2030 are as follows.

Year	Standard	Rapid Charge	Total Charge
	Charge points	points	points
2023	30	7	37
2025	250	114	364
2030	681	114	795