### CHARGING FORWARD: Nottinghamshire's Electric Vehicle Chargepoint Framework



# Building a green future



### Foreword

Encouraging the uptake of green transport solutions is pivotal in reducing domestic greenhouse gas emissions and addressing the impact of pollution on public health. Nottinghamshire County Council acknowledges that the provision of electric vehicle infrastructure is key to motivate the transition to low emissions vehicles, and its importance in building sustainability across the transport sector.



This framework will detail how the council aims to work in collaboration with residents, partners and communities to establish a thriving public charge point network across the county. Its objective is to provide infrastructure that will inspire and reassure residents and visitors to utilise low emissions vehicles in Nottinghamshire, ultimately helping to shape a healthy, green and prosperous future for all.

**Councillor Neil Clarke MBE** Cabinet Member for Transport and Environment



# Building a green future

- Nottinghamshire County Council (NCC) is transforming its transportation infrastructure to progress towards our net carbon neutrality commitment by 2030.
- Nottinghamshire is embarking on an ambitious Electric Vehicle (EV) Chargepoint Framework which aims to increase the accessibility and appeal of low emissions travel solutions.



### The Nottinghamshire Electric Vehicle Chargepoint Framework

- An adequate provision of charging infrastructure is essential to allowing individuals to own and operate EVs (e.g. cars, vans, motorbikes, powered 2-wheelers etc).
- Therefore, Nottinghamshire County Council will play its role in enabling the provision of EV chargepoints across urban centres, rural areas, highways and public spaces.
- In the future, the private and public sector will cater to the diverse needs of EV drivers and will enhance user confidence and convenience in their journey across the county and our neighbouring authorities.

As of December 2023 across Nottinghamshire's seven districts, there are:

- ~6600 Privately owned plug-in EVs.
- ~375 Publicly accessible EV chargepoints.

Local authority data: Electric vehicles

and charging points (parliament.uk)

- By offering this accessible infrastructure, we aim to enable the public to make choices about vehicle type and facilitate the replacement of petrol and diesel cars with EVs. This will help to reduce tailpipe emissions and air pollution levels, and will ultimately diminish the impact of road based travel to help us progress towards our climate change and air guality ambitions.
- This framework will assist Nottinghamshire's residents, businesses and visitors in transitioning towards low emissions solutions.



### **Our Key Principles**

#### Accessibility and Inclusivity

- We are committed to **improving EV accessibility to all**, regardless of location, socio-economic status, or disability.
- We will play our part in the implementation of a network of charging points in **residential neighbourhoods**, **public car parks**, **workplaces**, **and commercial hubs**, ensuring complete accessibility to infrastructure for all users.

#### **Education and Awareness**

- The framework will place significant emphasis on public education and awareness campaigns.
- By informing residents about the benefits of EVs and the ease of charging. We aim to spark a behavioural shift towards greener transportation choices.

#### **Ensuring Sustainable Growth**

- We aim to take a collaborative approach that engages public and private stakeholders, local businesses, energy providers, and community organisations.
- Our goal is to secure funding, leverage expertise, look for continuous improvement, and work with Local Planning Authorities, private developers and landowners to ensure the adequate provision of public (and private) EV infrastructure is part of new developments.

#### **Creating Partnerships**

 We recognise that building a sustainable future requires collaborative efforts. As such, the strategy will foster partnerships with private businesses, energy providers, local authorities, public transport bodies and other stakeholders to move towards a unified approach to EV charging deployment.

#### **Integrating Smart Technology**

- By leveraging smart technology, we aim to ensure that charging infrastructure will be intelligent and integrated into Nottinghamshire's energy grid.
- Advanced features (e.g., real time charging data, demand response capabilities, and smart payment systems) will provide the opportunity to optimise energy usage and ensure cost effectiveness.

These principles will enable us the opportunity to **empower residents towards a cleaner, healthier, and more prosperous future for Nottinghamshire**. The framework focuses primarily on **providing charging points for the County's residents**, but will also meet the needs of **small businesses** and **visitors** by actively providing the required infrastructure for EV usage.



### Local Policies and Plans

One of Nottinghamshire County Council's top priorities is to make all services carbon neutral by 2030. The council has a range of local policies, plans and aspirations which aim to improve and develop Nottinghamshire through building a sustainable and investable network of resources. These include:

#### The Nottinghamshire Plan: Healthy, Prosperous and Green

- Helping people live healthier, more independent lives: By using our influence to create healthy and sustainable places, we will protect people from existing and emerging threats to health as we seek to reduce tailpipe emissions and their consequences on health.
- Strengthening businesses and creating better quality jobs: We will help Nottinghamshire's businesses to thrive and support them to comply with a changing world. This framework will help provide a charging network that will enable businesses to transition to EVs/charge their fleets.
- Making Nottinghamshire somewhere people love to live, work and visit: We will deliver Levelling Up to improve quality of life in our prioritised places, look to enhance and boost access to Nottinghamshire's natural environment, and create healthy and sustainable places that promote people's wellbeing. As EV infrastructure will look to be delivered in levelling up priority places and by encouraging a shift away from fossil fuel vehicles, we will help reduce the impact of transport on the local environment.
- Attracting investment in infrastructure, the economy and green growth: We strive to raise the national and international profile of Nottinghamshire and create the right conditions for investment and economic growth.
- Improving transport and digital connections: Our roads, transport and broadband infrastructure are essential for everyone. They bring friends and family together; grow businesses, markets, and employment opportunities; open up training and leisure; and keep Nottinghamshire well connected.
- Protecting the environment and reducing our carbon footprint: We're committed to protecting and enhancing Nottinghamshire's environment over the next four years and, by 2030, it's one of our top priorities to make all council activities net carbon neutral.

#### **Corporate Environmental Policy**

- In 2021 Nottinghamshire County Council declared a climate emergency and published the Nottinghamshire Plan, which aims to create a healthy, prosperous and greener future for all residents. The Council recognises the impact its decisions have on the environment and how its positions as a service provider, major employer, community leader and partner can have positive environmental outcomes. The policy outlines the Council's commitment to protecting and enhancing the environment for today and for future generations.
- Our EV strategy aims to support NCC's corporate policy by engaging with Nottinghamshire's residents, partners and communities to support the Council's environmental objectives and foster a greater environmental citizenship across the county.

#### Midlands Connect Strategic Transport Plan

- Midlands Connect's STP addresses the challenges our country faces amidst the global climate emergency. The STP recommends transport projects that can create a more productive, prosperous, and sustainable Midlands, with an **overall ambition to make the region fairer, greener and stronger for everyone who lives here**.
- By working in partnership and utilising key messages across the region, we can align our strategies to ensure that our priorities remain the same as the Midlands'.

#### Nottinghamshire Local Transport Plan

- The Nottinghamshire LTP seeks to set out the transport strategy and outlines a programme of measures which aim to improve the local transport network.
- This strategy will aim to replicate and push forward with the aims and objectives of the LTP to ensure that the EV network supplements the growth of Nottinghamshire's Road system.
- We will also look at how we will integrate further with the emerging EMCCA LTP to ensure we have a **clear cohesive approach across our region**.

#### Nottinghamshire Health and Well Being Strategy

- This strategy sets out the priorities for the Nottinghamshire Health and Wellbeing Board and how it plans to **improve the health and wellbeing of our residents and reduce health inequalities amongst our communities**.
- We look to create healthy and sustainable places by **promoting** good health, tackling the causes of health inequalities, and addressing the climate crisis.

#### Nottinghamshire's Net Zero Strategy

- This framework sets out how our five key ambitions of healthier and stronger communities, enhanced nature and heritage, greener economies, sustainable energy and infrastructure and clean transportation will work towards making Nottinghamshire net zero.
- To address sustainable transport solutions, we will develop and expand our public EV charging network across the county to help remove the barriers to EV ownership and utilisation. By improving access to charging infrastructure, we will aim to enable our residents and visitors to choose green travel alternatives.

### **National Policies**

There has also been a **range of national policy and strategy announcements** to facilitate **a transition to low emissions transport**. These include:

#### The Carbon Plan (2011), The Clean Growth Strategy (2017) & The Industrial Strategy (2017)

 These include Government plans for the reduction of greenhouse gas emissions and identify that transport has a critical role in meeting the Climate Change Act 2008 obligations.

#### Air Quality Plan for Nitrogen Dioxide (2017)

- Outlined the UK's plans for reducing roadside NO2 concentrations. In addition, the Government announced its plans to begin the phase out of all new diesel and petrol vehicle sales.
- Ministers also unveiled a £255m fund to help councils tackle emissions, including proposals for clean air zones to reduce pollution levels caused by traffic in some of the country's most congested cities.

#### Automated and Electric Vehicles Act (2018) & Ten Point Plan for a Green Industrial Revolution (2020)

- The Government will **begin to reduce** road traffic emissions, require motorway service areas and large petrol stations to install electric vehicle charge points, and ensure common infrastructure standards.
- To support the growing EV market, a commitment of £2.8 billion was made to help electrify the UK's transport, including significant investment in the creation of jobs in the EV supply chain.

#### United Nations Paris Agreement on Climate Change (2015)

• The UK Government is determined to turn this challenge into an opportunity by setting the lead and standard for future transport technologies and to limit global warming to well below 2°C.

#### Road to Zero Strategy (2018) & Net Zero Strategy (2021)

- Confirming the Government's ambition for new cars to be ultra low emission by 2035 as part of plans to make the UK the best place in the world to build and own an electric vehicle.
- The Government has also committed £1.3 billion to accelerate the roll-out of charging infrastructure, and an additional £620 million to support the transition to EVs.

Nottinghamshire County Council has reviewed the documents above in conjunction with guidance and support from the Energy Saving Trust and other Local Authorities in order to create a framework which supports our ambitions.

To work with partners on the provision and delivery of EV Chargepoints across Nottinghamshire.

Nottinghamshire County Council acknowledges that the **provision and delivery of local EV chargepoints necessitates a partnership approach**. To create a comprehensive charging network, we recognise the value of collaboration with partners across various sectors.



- Actively seek to collaborate with private entities, such as Chargepoint Operators (CPO's), District Network Operators (DNO's), and technology companies.
- These partnerships will assist in funding, designing, and implementing chargepoints in **strategic locations** across the county.

#### Community Organisations

- The support and involvement of community organisations and environmental groups are vital to ensure that the **needs and aspirations of local residents are at the heart of our framework**.
- Through actively engaging with these stakeholders, we can identify key locations for chargepoints and implement initiatives to raise awareness and promote EV uptake.



#### Funding and Investment Partners

- Actively seek funding and investment partners by collaborating with financial institutions, private investors, and government grant programs.
- Other than drawing down on Government Grants for EV charging, we do not intend to use any other Council funds to deliver the ambitions of this Framework.



#### Business and Commercial Hubs

Engage with local businesses, fleet operators, and commercial establishments to **aid the expansion of chargepoints** and incentivise the adoption of EVs among their employees and customers.



#### Local Authorities, Government Agencies and Transport Bodies

 Work closely with our local districts and boroughs, government agencies (Department for Transport, Office for Zero Emissions Vehicles and the Energy Savings Trust), and relevant authorities, to ensure a cohesive approach.

#### To increase awareness of available EV chargepoints across Nottinghamshire.

Nottinghamshire County Council understands that raising awareness about available local EV infrastructure is essential to encourage the widespread adoption of EVs. To ensure that residents, visitors, and businesses embrace the convenience and environmental advantages of EVs, we seek to educate, engage, and empower our residents and communities by applying the following approaches.

#### Informational Campaigns

- Through a combination of digital media, social platforms, print materials, and public events, we will deliver clear and accessible information about the locations and features of EV chargepoints within the county.
- These campaigns will highlight the **ease of charging, cost savings, and environmental benefits of EVs**, dispelling common myths and misconceptions.
- We will also look to provide information and to raise awareness of grants and funding available to organisations and individuals.

#### Interactive Digital Platforms

- Collaborate with **local businesses**, **community organisations**, and schools to spread awareness about EV infrastructure.
- Engaging these stakeholders will enable us to conduct educational workshops, presentations, and training sessions to promote the benefits of EVs.



#### Business and Community Outreach

- Signposting to existing interactive digital platforms to help users easily locate chargepoints, check real-time availability, and plan their journeys with confidence.
- Mobile apps, web portals, and digital maps will provide access to EV infrastructure information, allowing communities to navigate Nottinghamshire with ease.

#### To install EV chargepoint assets and to expand the existing public network.

As Nottinghamshire moves into a sustainable and electric future, we are committed to expanding the number of local chargepoints. We are determined to support a robust and accessible charging network that meets the needs of EV drivers across the county and encourages the widespread adoption of EVs.

### Strategic Planning and Location Identification

- Conduct **strategic planning** to identify optimal locations for EV chargepoints.
- Parking for chargepoints will not remove parking designated for people with a disability, spaces for car club cars, bus bays or bicycle parking.
- We will maintain a commitment to accessible spaces and seek to ensure disability parking is provided with chargepoints where appropriate. These will only be installed in locations where it is safe to do so and where parked vehicles will not impede current and planned future highway works, as set out in local and strategic transport improvement plans, and pre-existing development agreements.
- Chargepoints will not be installed in areas where installation will restrict access for other footway and road users or existing cycling infrastructure. They will be easily accessible and, where the primary user will be the public, will be available 24 hours a day.

### Smart and Scalable Infrastructure

- Embrace **smart charging solutions** that optimise energy usage, **promote load balancing**, and **integrate renewable energy** sources where applicable.
- By utilising smart technologies, we can manage the charging network efficiently and adapt to future EV demand.
- Our scalable infrastructure approach will **anticipate growth** and ensure that our network remains **reliable and adaptable** to the evolving needs of EV users.

### Multi-Modal Charging Solutions

115555

- Install a range of charging solutions, including rapid and fast EV chargepoints that cater to different vehicles and charging speeds.
- This includes fast-charging stations along major routes and highways for longdistance travel, and standard charging stations in urban centres, public car parks and residential neighbourhoods.

#### To seek further funding opportunities for local EV chargepoint infrastructure.

We recognise that **securing external** funding is critical to the successful implementation and expansion of our framework ambitions. To progress our vision and build a robust charging network, we will actively pursue various funding opportunities and partnerships.



#### **Public-Private Partnerships (PPPs)**

• Through collaboration with private entities, such as CPOs, energy companies, and technology providers, we can **pool** resources to assist in scaling up the chargepoint network.

> **Regional Development Funds**

 Seek support from regional development funds that are dedicated to sustainable growth, innovation, and green projects.

### Government Grants

- Explore **government grants** available at the national, regional and local levels.
- By tapping into these funding resources, we can bid to secure financial support for the installation and expansion of EV chargepoints.
- We will closely monitor relevant funding schemes, align our proposals with their criteria, and submit applications to maximise our chances of success.



#### **Innovation and Research Grants**

 Pursue externally funded innovation and research grants that support the development of smart chargepoints and new technology.

To ensure the sustainability of Local Electric Vehicle Infrastructure chargepoints across Nottinghamshire.

### It is crucial that we ensure the longevity and sustainability of our chargepoints.

With a commitment to environmental responsibility, innovation, and adaptability, we will work to safeguard the ongoing viability and effectiveness of our Local Electric Vehicle Infrastructure chargepoints.



- Our approach to EV infrastructure will look at future-proofing. We will invest in scalable charging solutions that can accommodate higher charging speeds and increased EV demand as the technology evolves.
- Regular assessments and upgrades will ensure that our charging stations remain up-to-date with technological advancements and are capable of meeting the needs of next-generation EVs.



#### Sustainable Funding Models

- Explore **sustainable funding models** to ensure the continued growth and maintenance of our chargepoints.
- Consider long-term funding mechanisms, such as green bonds, public-private partnerships, and revenue-sharing agreements.

#### Integration of Renewable Energy Sources

 Investigate the integration of renewable energy sources into our chargepoints.

 By investigating solar, wind, and other clean energy technologies, we can look to reduce the carbon footprint of EVs and enhance the overall sustainability.

 Maintain an open dialogue with our communities and actively seek feedback.

Community

Engagement

and Feedback

 Community engagement will help us understand the needs and expectations of our residents, ensuring that our infrastructure focuses on the user and effectively addresses their requirements.



### Lifecycle Assessments and Maintenance

- Conduct regular **lifecycle assessments** of our chargepoints to identify areas for improvement.
- **Proactive and routine maintenance** by our partners will ensure that chargepoints remain **operational and well maintained**, minimising downtime and enhancing the user experience.

## Charging forward

- We are committed to ensuring that the transition to electric vehicles is **seamless and convenient for all**. Our framework focuses on installing chargepoints at **strategic locations** across the county, empowering residents, businesses, and visitors with **the confidence to embrace EVs**.
- We are pursuing the integration of renewable energy sources, maximising the potential of smart charging solutions, and leveraging the latest EV technology. By working with public and private entities, local businesses, energy suppliers, and community organisations, we will drive progress towards a shared goal through partnership working.
- Education, awareness and community engagement are at the core of our strategy, ensuring that every resident is able to contribute to the overall vision. Through informative campaigns, interactive digital platforms and public events, we will disseminate knowledge and inspire enthusiasm for electric vehicles.
- Nottinghamshire County Council's Electric Vehicle Chargepoint Framework is evidence to our commitment to a cleaner, more sustainable future. Our goal is to develop a county where EVs are the norm, are powered by renewable energy, and are integrated into the day to day lives of our communities.





