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Subject: Expansion of Electric Vehicle (EV) Charge Points – On-street Provision Update

Report to: Environment Committee – 13th September 2022

Report by: Miranda Lee, Head of Customer Services

SUBJECT MATTER

To provide Members of the Environment Committee an update on current EV charge point provisions and further progress & opportunities to further expand the EV charge point network across the borough.

RECOMMENDATION

To note the progression of next steps to work in partnership with Norfolk County Council on this exciting project to expand the EV Charge Point network in the borough of Great Yarmouth.

1. INTRODUCTION

- 1.1 Great Yarmouth Borough Council (GYBC) along with other district councils has been working with Norfolk County Council (NCC) on plans for the expansion of EV Charge Points across Norfolk.
- 1.2 GYBC has already made provision and implemented a number of EV Charge Points (CP) across council-owned car parks in the towns of Great Yarmouth and Gorleston. The majority have been funded following successful applications for 75% funding to the Office for Zero Emission Vehicles (OZEV)* through their ORCS scheme (On-street Residential Charging Scheme) with a further 25% contribution from the supplier (BMM Energy Solutions).

Table 1 – Current Provision GYBC Car Parks

Location	EV Charge Point Type	No. of EV CP	Servicing No. of bays for charging
Fullers Hill CP, GY	Rapid	1	2
Market Place CP, GY	Fast	2	4
King Street CP, GY	Fast	2	4
Greyfriars Way CP, GY	Fast	2	4
Beach Coach Station CP, GY	Fast	2	4
Euston Road CP, GY	Fast	2	4
St Nicholas CP, GY	Fast	2	4
Marina Centre CP, GY	Fast	3	6
High Street CP, Gorleston	Fast	1	2

**Fullers Hill CP Rapid EVCP funded by Highways Agency as part of Eastern Region Bid*

Table 2 – Charge Types

Charge Type	Power	Typical time to charge (full charge)
Rapid	50kW	20 mins – 1hr
Fast	7kW – 22kW	3-4 hrs
Domestic/Slow	3kW – 6kW	8-12 hrs

Table 3 - Usage and impact to date

Charge Type/CPO	No of Charge Sessions	CO2 saved (kg)
SWARCO – Rapid CP from April 19	2432	31,300
BMM – Fast CP from May 21	980	11,426

1 Ton of CO2 saving equivalent to 6 Trees

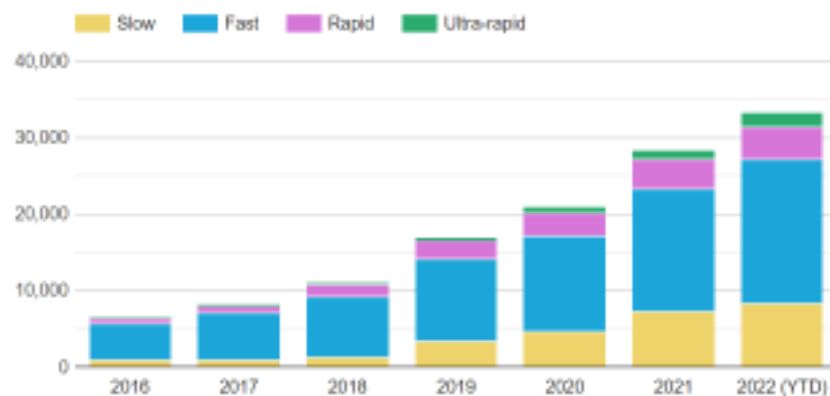
Total CO2 saving = 256



- 1.3 **UK Charge Point Network Growth** - There has been significant growth in the number of public charge points in the UK since 2020 with nearly 7,500 chargepoints added to the UK network representing a growth rate of 36%. According to published statistics the East of England represents 6.6% of the overall UK distribution.

Graph 1

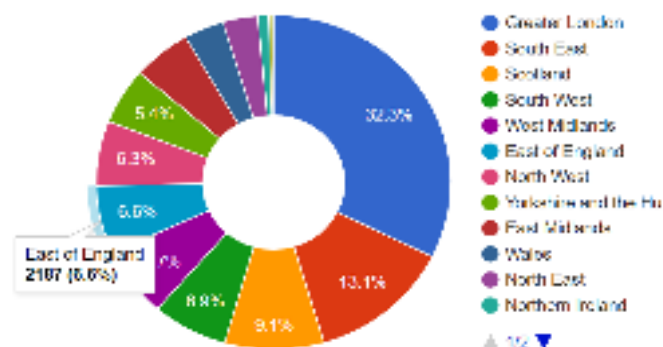
Number of public charging points by speed (2016 to date)



Source: Zap-Map database. Updated: 31st July 2022

Graph 2

Distribution of UK charging points by geographical area



Total charge devices: 33281. Source: Zap-Map database, 31st July 2022

2. FUTURE PLANS

- 2.1 Further car park locations are currently being explored with our existing partner BMM Energy Solutions, specialist suppliers and installers of EV equipment. It is anticipated this will lead to a third application for funding under the OZEV ORCS Scheme later in the year with BMM making a further contribution for the balance of funding.
- 2.2 In collaboration with other districts across the county, NCC recently submitted an application for funding to OZEV under the Governments pilot LEVI (Local Electric Vehicle Infrastructure) scheme with the aim to increase charging capability along the coastal areas and on the Broads. This is with a view to benefitting the local tourism sector and visitors thereby promoting multiple modes of green tourism through the provision of road vehicle, micro-mobility and boat charging hubs as well as to increase the number of charges in rural areas across the county.
- 2.3 GYBC locations included in the LEVI bid covered postcode locations in Hemsby, Martham and Winterton along with Great Yarmouth Yacht Station.
- 2.4 Although this initial application has been unsuccessful for the pilot scheme, ongoing discussions around progressing funding this project will continue with OZEV.

3. FURTHER OPPORTUNITY

- 3.1 Work to progress opportunities to increase EV Charge Points in the borough continue in alignment with the Great Yarmouth Sustainability Strategy & Action Plan.
- 3.2 GYBC has been part of ongoing discussions with NCC and other districts as part of the Norfolk Climate Change Partnership where the EV Charging Task & Finish Group was set up from October 2021. This group has ambitions to prioritise the acceleration of charge point deployment, making the most of funding opportunities to assist the rollout in a large, rural county where the market is less responsive to need and opportunity.
- 3.3 More recently GYBC and NCC have been in preliminary discussions with a potential supplier already working on a project in Norwich. GYBC have an exciting opportunity to work with NCC on a new pilot project for the borough of Great Yarmouth to expand EV charging locations/capability across the area which could lead to a larger project over a phased period covering the next 3-5 years.
- 3.4 Specifically looking to provide 'on-street' locations, initially looking to identify areas for the first pilot phase which could be delivered this year, the proposed solution utilises existing power in street lights to provide the EV Charge.
- 3.5 **Street Lights Power** - Lamposts normally have a larger electricity supply than the street light actually needs. These type of chargers working from a street light can work at 5kW. That is enough power to be able to charge a 60kW battery overnight, or to top-up following an average daily commute in just over an hour.

Street Lights - Kerb side

**Street Lights – Positioned back of pavement
(Kerbside bollard)**



Additional possibility of utilising power from on-street P&D Machines



- 3.6 Identification of initial locations could result in the use of a combination of the two assets and could look to serve areas where we know there is a current and growing need, but also some residential areas across Gorleston, Great Yarmouth & Caister on Sea where there is no, or very limited home charging capability. The areas selected would be a good test and provide ongoing intelligence regarding use and need from residents and visitors which are likely to change over the coming years.
- 3.7 Investigation & feasibility into initial locations for a pilot are already underway with aspirations to have the installations completed by the end of this year.

4. NEXT STEPS

- 4.1 Member engagement – Members of the Great Yarmouth Transport & Infrastructure Steering Group have been updated on progress and consulted on potential locations for the initial pilot.
- 4.2 Procurement – Norfolk County Council will be the lead organisation as the Highway Authority and are investigating the appropriate procurement route.

5. FINANCIAL IMPLICATIONS

- 5.1 Based on initial discussions around funding options, it is likely that through a procurement exercise, a partner supplier willing to fund/invest 100% of the cost of the total project would be sought with opportunities to look at profit share arrangements between the three parties.
- 5.2 By seeking a 100% funding contribution we eliminate the requirement to apply for partial Government funding and this should simplify and speed up the process of project delivery.

Area for consideration	Comment
Monitoring Officer Consultation:	As part of ELT
Section 151 Officer Consultation:	As part of ELT
Existing Council Policies:	Sustainability Strategy
Financial Implications (including VAT and tax):	Yes, as outlined in the report
Legal Implications (including human rights):	Procurement
Risk Implications:	No
Equality Issues/EQIA assessment:	Yes
Crime & Disorder:	No
Every Child Matters:	No