

Report to: Cabinet



Date of Meeting 17 March 2021

Document classification: Part A Public Document

Exemption applied: None

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Electric Vehicle charging in public car parks

Report summary:

To consider proposals for introducing electric vehicle charging infrastructure into this Council's public car parks this year.

Recommendation:

To recommend to Council to delegate authority to the Strategic Lead Housing & Environment, Housing, Health & Environment in consultation with the Portfolio Holder for Property and Assets to agree and enter into legal documents to facilitate participation in the Innovate UK funded Exeter Rapid Charge Project including a lease(s) with the contractor to install and operate up to 30 rapid charging units in public car parks within the District.

Reason for recommendation:

To introduce significant electric vehicle charging infrastructure via the Innovate UK funded Rapid Charge project.

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Portfolio(s) (check which apply):

- Climate Action and Emergencies
- Coast, Country and Environment
- Council and Corporate Co-ordination
- Culture, Tourism, Leisure and Sport
- Democracy and Transparency
- Economy and Assets
- Finance
- Strategic Planning
- Sustainable Homes and Communities

Financial implications:

The financial details and risks are outlined in the report. As detailed the main objective will be not be a financial return; if parking charges are not applied to vehicles whilst charging then the income returned from our percentage of the electricity revenue will be less than the car park charge in most cases. However, this is only true if the car park is at capacity and these spaces would have been used. There are however other objectives being achieved as outlined.

Legal implications:

Full details of the Exeter Rapid Charge Project are to be provided by Service Lead Environmental Health & Car Parks to Legal Services and Service Lead Place, Assets & Commercialism. The appropriate legal documentation to enable participation in the Project together with the Lease(s) to be agreed between Legal Services and the Place, Assets & Commercialism department.

Equalities impact Low Impact

Climate change Medium Impact

This will have a small but positive “nudge” effect making the use of electric vehicles locally easier and creating an environment in which residents gain the necessary confidence to move away from ownership of a petrol or diesel car. There will be a net improvement in both local air quality and our overall indirect carbon footprint for our area should reduce.

Risk: Low Risk; The risks associated with the decision to lease car parking spaces to a charge point operator for a period of ten (DELETTI) or fifteen (Gamma Energy) years are assessed as being low. The arrangements effectively impose a constraint on how the Council can use its land during the life of the leases. Hypothetically, for example if the Council wished to develop a car park site for an alternative use then under the terms of the lease, compensation may become payable in respect of the designated bays. It is also the case that these parking spaces being leased to a charge point operator will then not be available for use by non-qualifying vehicles with the consequent loss of revenue if those drivers are forced to find alternative parking because the car park is already full. Clearly the intention is to encourage the adoption of qualifying vehicles and in total we are only contemplating designating a maximum of seventy such spaces from our portfolio total of over 5,100 available spaces.

Links to background information

Link to [Council Plan](#):

Priorities (check which apply)

- Outstanding Place and Environment
- Outstanding Homes and Communities
- Outstanding Economic Growth, Productivity, and Prosperity
- Outstanding Council and Council Services

Report in full

1.0 Introduction

This Council has now stated its commitment to tackling climate change and our priorities have been set out in our Climate Change [Strategy](#) and [Action plan](#). Within our detailed 5-year plan we have said that we will:

“...Encourage the development of a transport infrastructure that supports more low carbon travel options for people in East Devon. Reduce energy use and ‘embodied energy’ in the transport infrastructure. Encourage non-car travel for all sectors of the population, through targeted advice, incentives and enforcement. Support car share initiatives and low emission pool cars for essential business activities. Install electric car charging points in all car parks and explore the opportunities for charging points in other public spaces, street furniture etc. Campaign to reduce the air pollution from vehicles...”

For around 3 years now the Council has been working with other district council partners in a collaboration lead by Devon County Council to deliver appropriate infrastructure across the region to underpin and encourage the use of electric and plug in hybrid vehicles locally.

We have found that decision making has been difficult throughout this period due to a developing and often fast moving landscape with ongoing product innovation and subsidy opportunities from both EU initially and UK sources.

Alongside these projects our Streetscene fleet management colleagues and Service Managers are already working hard to deliver another action plan objective, to:

“Actively investigate and switch to low carbon council operated fleet and equipment, taking into account increased costs of such fleet and installing appropriate charging infrastructure. May take up to 2030 depending on the speed of development of commercial vehicles.”

We are now changing over to electric vehicles as leases expire wherever this is possible and we are actively developing our own network of chargers within depots and at Blackdown House. However because of the relatively limited range of electric vehicles there is within our fleet management plan, there is a clear need to add top-up charging opportunities within all of our towns so these public car parks proposals will be complementary.

1.1 Technical Considerations

In simple terms, we have seen the electric vehicle industry developing quickly over the last few years and in summary, the options for electric vehicle charging can be summarised in three approximate categories:

- Slow charging – typically 7kW AC charge units suitable for overnight charging of most vehicle types
- Fast charging – typically 22kW AC charge units suitable for some vehicles to provide a useful top up charge in typically 2 or more hours (also delivers a slow charge to other vehicles that have not been designed to utilise the AC fast charge option)
- Rapid charging – typically 50kW + DC charge units suitable for an increasing number of the latest electric vehicles (including the Nissan EV 200 vans that we are now adding to our fleet) and capable of delivering 80% top up to an empty battery within 40 minutes.

1.2 Business Models

Again, in very broad and simple terms our involvement with the electric vehicle charging industry can be at one of three levels:

1. The industry is happy to offer deals to the public sector in which a charge point operator will install and operate a charging network from a number of parking bays in key locations. The Council would enter into a lease agreement in respect of the land and the operation of the charge points would be wholly a matter for the contractor.
2. It is also an option for public sector bodies to commission and then wholly own and manage the charging infrastructure. The day to day maintenance and management (including monitoring of and payment for electricity) can of course be contracted out to a specialist company.
3. The option that seems to be emerging as the more popular at present in this rapidly evolving industry appears to be a more complex collaboration in which a single public sector body (or possibly a group of them) enter into an agreement with a charge point operator to share expertise, risks and benefits. Typically the arrangement will enable local authorities to roll out infrastructure with minimal levels of investment and reduced risk but unlike option 1, the Council would retain control over the specification of the charging infrastructure along with medium and long term benefits in the form of shared profits from the sales of electricity. The council would also be able to specify for example an arrangement to ensure that renewable energy sources (such as photovoltaics) and onsite energy storage to help smooth peak demand are built into contract specifications.

Following discussions with our Place, Assets and Commercialisation Team we were absolutely clear that in the present marketplace, option 3 would be our preferred option.

2.0 Exeter rapid charging project

We have recently been invited into discussions with a supplier as part of another limb of the Devon collaboration, this project began life focussing primarily on the needs of residents to charge vehicles in and around Exeter.

A supplier (Gamma Energy) has successfully won funding from [innovate UK](#) to work with Devon County Council and partners to deliver the following:

- To supply, install and manage rapid chargers delivering 50kW DC along with slow and fast AC connection options and a demand-smoothing battery storage solution with the battery holding sufficient charge for fully charging at least one vehicle.
- The cost to non-residents for rapid charging is 30p/Kwh (inclusive of VAT).
- Residents of each of the areas can receive a 10% discount (when they register with an app).
- For information, 20KWh provides approximately 50 miles and would cost around £6
- Also for information, Gamma Energy's solar park in Cullompton produces 5GWh of renewable electricity per year, enough to power 1,500 EVs for an entire year.

The project has already secured 11 sites within the city of Exeter and in total they have funding for 150 charge units.

Unlike the DELETTI programme, this project already has funding in place to deliver outputs on a relatively tight timescale and we understand that in effect Innovate UK require units to have been **installed and be operational by early summer 2021** to enable their use to be evaluated by the end of March 2022. This now presents this Council with an exciting opportunity provided we have the will and ability to act quickly.

Devon County Council and Gamma Energy have approached us inviting our interest in hosting these fully funded rapid charger units within some of our car parks where residents and visitors are likely to find them of value. Like DELETTI phase 2 there is no upfront cost to us and in return for hosting units on a peppercorn rent for a contract period of up to 15 years, we receive a 3% share in the increasing electricity revenue that arises over that period.

I have met on site with a representative of Gamma Energy and their initial interest in working with us amounts to installing and operating thirty 50kW rapid charging units locally. I have obtained similar quotes previously and the installation of just one such similar 50kW rapid charging unit is of the order of £40,000-£50,000.

Sites currently of interest:

- Exmouth Imperial Road short stay car park – 5 chargers (serving ten charging bays)
- Exmouth Town Hall short stay car park – 2 chargers (serving 4 charging bays)
- Lympstone car park – 2 chargers (serving 4 charging bays)
- Sidmouth Ham West and / or Roxburgh short stay car park – 4 chargers (serving 8 charging bays)
- Honiton Lace Walk short stay car park – 2 chargers (serving 4 charging bays)
- Honiton Blackdown House – 2 chargers (serving 4 charging bays)
- Budleigh Salterton Rolle Mews short stay car park 1 charger (serving 2 charging bays)
- Beer Central car park 2 chargers (serving 4 charging bays)
- Axminster West Street car park, 3 chargers (serving 6 charging bays)
- Colyton, Dolphin Street car park 2 chargers (serving 4 charging bays)
- Seaton Jurassic car park 3 chargers (serving 6 charging bays)
- Ottery St Mary Canaan Way car park (2 chargers (serving 4 charging bays)

3.0 Further information

3.1 Car Sharing

A potentially exciting element already emerging from this collaboration is interest from the proprietor of local Community Interest Company [Co-Cars](#). We will be carrying out some market testing locally with Co Cars over the coming weeks but the potential for dedicating some of the charge points set out above as a dedicated co-car hubs has already been identified. Officers have already expressed initial interest and are making an obvious connection with the Council's evolving green travel plan. The potential for co-car hubs at both Blackdown House and Exmouth Town Hall along with other possible locations is now being actively explored and this would in due course be the subject of a further report with recommendations, likely to link with other non-car park specific options already under consideration. This will include the possible roll out of additional [Co-Bikes](#) hubs around East Devon following their successful introduction into Cranbrook.

3.2 DELETTI phase 1

We are delighted to be an active partner in the County Council led Devon Low-carbon Energy & Transport Technology Innovator (DELETTI) programme. The £800,000 plus grant funding will prevent more than 300 tonnes of carbon from entering our atmosphere every year and that aligns perfectly with our own emerging climate change action plan.

We know that the government has stated that new petrol and diesel cars and vans cannot be sold after 2040 but we are expecting our residents and visitors to gradually move to so-called ultra-low emission (electric and plug in hybrid) vehicles before then and we are committed to doing everything we can to encourage that. It is impossible to encourage more people to use electric cars until there are more charging points, and more charging points are unlikely to be provided by the market until there are more electric cars on the road. We agree with the County Council's view

that this partnership programme will help to break that cycle. Fewer petrol and diesel cars will lead to a reduction in emissions, cleaner air and an improved quality of life for residents.

We have already procured our first official public charge points and these are being delivered under that contract this year and the project is currently in the statutory procurement standstill period. We will begin working with the successful contractor to install and operate fast charge points within the next few weeks and residents should see them “in the ground” soon. In East Devon there will be a new 22kW fast charging unit serving two adjacent charging-only parking bays in each of:

- Exmouth: Imperial Road Short Stay car park
- Honiton: Lace Walk short stay car park
- Sidmouth: Ham East Short Stay car park
- Seaton: Orchard Short Stay car park

The majority of funding for this project has come from a successful bid to the European Regional Development Fund and Council’s contribution to this project has been agreed as a maximum of £4,000 per unit, amounting to £16,000 in total. Subject to the Council approving the detail contained in the final lease document, the eight car parking spaces will be leased to the operator for a peppercorn rent and the Council will then take a share of the electricity revenue that we expect to increase significantly over the ten year operating period. All other costs associated with supply, installation, repair, replacement and management are borne by the successful contractor.

3.3 DELETTI phase 2

In addition we are now engaged in the project’s second phase, this time focussing on on-street residential charging as a priority. The phase 2 project is still at an early stage and the Council has simply committed to entering into an agreement with the successful contractor following another formal procurement process to provide ten-year leases for agreed parking bays within specified car parks for the provision of fast chargers. At present the car parks mentioned in our letter of intent, based on officer advice and potential supplier feasibility studies are:

- Broadclyst, The Green
- Ottery St Mary, Brook street car park
- Budleigh Salterton, Lower Station car park

At this stage it is not envisaged that the Council would need to make a financial contribution to the project.

3.4 Project Pipeline

Finally we have also submitted a bid for consideration by our Local Enterprise Partnership for £500,000 capital funding for the installation of additional EV charging points throughout the district, to enable more EV users to charge electric vehicles. The project supports the wider rollout of EV charging by Devon County Council on street and the Council’s response to the climate emergency. The funding would be focused on rapid EV charge points and would then enable this Council as it develops expertise through early adoption via the DELETTI and Innovate UK projects, to move into the Business Model identified as option 2 above.