# **Electric Vehicle Charging Survey**



In the UK, there are over 31.7 million cars currently on the road with an increasing number of Electric Vehicles joining these numbers on a monthly basis.

At the end of May 2020:

- Over 300,600 vehicles with the ability to be 'plugged in' (~0.95%)

The breaks down as:

- Over 119,600 Battery Electric Vehicles (BEVs) were on the road (~0.38%)\*
- Over 181,000 Plug-in Hybrid Electric Vehicles (PHEVs) were on the road (~0.57%)\*

In line with our Parking Strategy objective to 'assess demand and incorporate support for alternative sustainable travel methods within our car parks', we undertook an online survey which ran for a period of 4 weeks from 6th April 2020 which gathered over 400 responses from residents.

The aim of the survey was to understand

- Where do Electric Vehicle users want to see charging points installed?
- The behaviour of Electric Vehicle users
- Would residents be willing to pay for the Electricity they use when charging?
- The barriers that prevent people making the switch to Electric Vehicles

The results of the survey will inform our plans as we assess car park sites for suitability and progress to the installation of Electric Vehicle charging points.

# Electric Vehicle Charging Survey 2020 This year the Council plans to increase support for electric vehicles. These survey results will inform the installation of charge points in a selection of our town centre car parks later in the year.

<sup>\*</sup>Source - https://www.nextgreencar.com/electric-cars/statistics/





Within HDC car parks, there are currently 3 charging points each capable of charging 2 vehicles located at:

- Tan Yard (St Neots)
- Bridge Place (Godmanchester)
- Cattle Market (St Ives)

These charging points were installed as part of a charging network called 'Source East' which has since disbanded and the charging points are beyond serviceable condition and currently inactive.

As part of Parking Strategy, our Vision set out to 'promote environmental sustainability by supporting alternative fuel and travel method'.

The Council has agreed a capital figure to be invested into charging points in 2020/21 of £37,000 which will see

- 2 charging points installed in St Neots
- 2 charging points installed in St Ives
- 2 charging points installed in Huntingdon

Each of these charge points will have the capability to charge 2 vehicles simultaneously and will be split between 2 car parks in each town.



## Electric Vehicle Ownership - Huntingdonshire



In the UK, the average number of vehicles per 1000 inhabitants is 471\*. In relation to the total population of Huntingdonshire (177,350) we can estimate the number of vehicles within the district to be 83,532 which equates to:

- 792 vehicles with the ability to be 'plugged in'

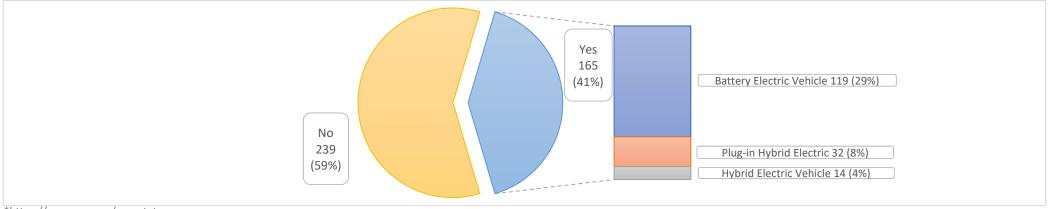
#### This breaks down as:

- 315 Battery Electric Vehicles
- 477 Plug-in Hybrid Electric Vehicles

We began our survey by asking participants 'do you own an electric vehicle' with the results show in the chart below. Whilst not representative of the overall makeup of the district, the results demonstrate engagement with a high proportion of the districts Electric Vehicle users with 151 responses from owners of 'plug-in' capable vehicles (19% of the estimated number within the district).

#### This breaks down as:

- 119 responses from Battery Electric Vehicle Owners (38% of the estimated number within our district)
- 32 responses from Plug-in Hybrid Electric Vehicles (7% of the estimated number within our district)



<sup>\*</sup>https://ec.europa.eu/eurostat

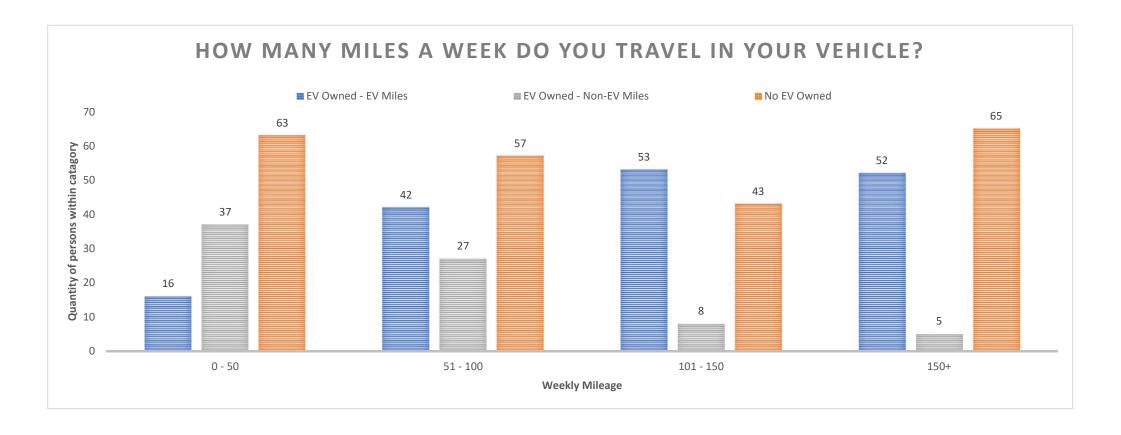




Survey participants were asked to 'How many miles a week...' they travelled.

#### The trends show us that:

- Higher 'weekly mileage' is as likely for both Electric Vehicle users and Non-EV users.
- Lower 'weekly mileage' is more common for Non-EV users than EV users.







Survey participants were asked to rank their top 3 'barriers to ownership' from the following list:

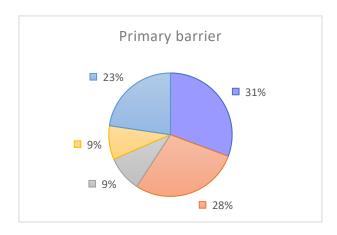
Purchase cost of the vehicle

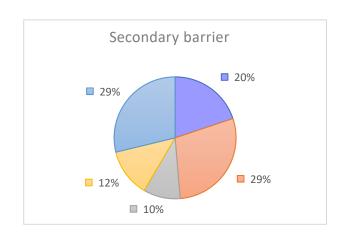
## Availability of charge points at my destination

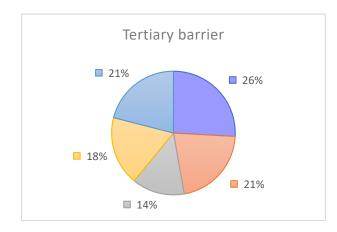
I'm not planning to change my vehicle anytime soon

Availability of charge points at my home

Limited travel range of the vehicle







The top 3 results consistently were:

Purchase cost of the vehicle

Availability of charge points at my destination

Limited travel range of the vehicle

# **Electric Vehicle Charge Points**

All survey participants were asked a number of questions about electric charging points.

The first question asked was

'If the Council were to install charge points, do you feel this would help increase electric vehicle usage?'

The majority (86%) of responses indicated that an increased number of electric vehicle charge points would increase electric vehicle usage.

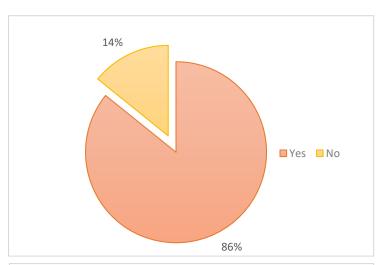
The second question we asked participant was

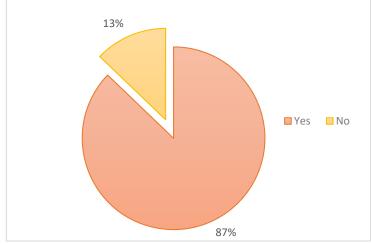
'Do you feel it is fair for electric vehicle users to pay to charge?'

The majority (87%) of all responses indicated that it was fair to ask Electric Vehicle users to pay a fee for charging.

Of those who currently own Electric Vehicles, 83% think that it is fair for a fee to be paid for charging.







## Locations



All survey participants we asked where they would like to see charging point installed. The question allowed for 'free text' responses to be submitted which have been analysed and broken down into the categories of:

Long Stay Car Parks

Short Stay Car Parks

On-street Facilities

Leisure Centres

Retail & Hospitality (e.g. cinemas & restaurants)

Parks

At individuals homes

Other (this covers petrol stations and along highways)



# Summary



Having run the survey for a period of 4 weeks, it can be considered that our survey findings are representative of public opinion on Electric Vehicle Charging having captured:

A total of 404 responses

151 responses from owners of 'plug-in' capable vehicles which is ~19% of all users within the district.

Location:

The result show that within each of the towns, change points should be split equally between long & short stay car parks.

50

Long Stay Car Parks Short Stay Car Parks On-street Facilities

250

200

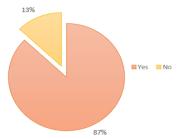
150 100

80 61
22 21 15
6 Leisure Centres Retail & Hospitality Parks At Homes Other

Charge Point - Preferred Location Categories

Charges:

The results show that 87% of respondents think it is fair to pay to use electric charging facilities within our car parks.



### **Next Steps**

- 1.Undertaking of site surveys with suppliers to determine technical feasibility for charge point installation. This will result in the shortlisting of sites.
- 2. Reporting into the O&S/Cabinet cycle prior to installation of charge points.