

Case study

East Lothian Council

East Lothian is a semi-urban, semi-rural area of Scotland where East Lothian Council (ELC) are striving to make electric vehicle (EV) chargepoints accessible to all.

Providing on-street chargepoints for people without off-street parking, and therefore the opportunity to install their own private chargepoint, is a key part of their much wider EV strategy.

Challenge

By 2018, several of East Lothian's chargepoints were no longer operational, resulting in unfavourable press.

The charging network needed to be upgraded, particularly with an Air Quality Management Area (AQMA) in Musselburgh and the declaration of a Climate Emergency by the council.

Solution

Implementing the Travel Policy saved the Trust In 2019, ELC received a grant of £37,500 from the UK Government's Office for Low Emission Vehicles, through the On-Street Residential Chargepoint Scheme (ORCS). They installed five dual-socket 22kW chargepoints in council-owned car parks and residential streets.

ELC's grant application included a sixth location on a street in a conservation area where a resident without off-street parking had requested a chargepoint. However, it was found that placing a chargepoint in this location would significantly reduce the pavement width.

ELC prioritise active travel and did not want to hinder pedestrian access. One solution was to install the chargepoint on a rubber island in the carriageway, but this could not be completed within the project timescale.

Alternatively, ELC are now looking to trial chargepoints integrated into bollards with most of the technology underground, to reduce street clutter.

As well as considering resident requests, ELC has a data-driven approach to selecting locations, analysing the probability of households having driveways, number of cars parking on-street and pavement widths.



Figure 1: Possible island chargepoint solution

Results

East Lothian's chargepoint network has grown from five chargepoints in 2014 to 54 in 2019, with expansion planned to 160 by 2023. This includes rapid chargepoints as well as the on-street chargepoints funded by ORCS.

There has been a huge increase in chargepoint usage across the network. Between April and June 2018 and October and December 2019, the amount of energy drawn from the charging network jumped by 33 times from 2,700 to 89,000 kWh.

ELC are planning their chargepoint network for the long term. By carefully selecting the right chargepoint type for each location and ensuring there is capacity in the electricity supply to add further chargepoints at each location, they are ensuring future network growth will be quicker and cheaper as EV demand increases.

"I was interested in buying an EV when replacing my car and did some research into them. Unfortunately, due to the location of my house I wouldn't have been able to easily plug in at home so was pleased to discover that East Lothian Council was able to support me."

Derek McLean, Stenton resident

To learn more about the On-street Residential Chargepoint Scheme, [visit our website](#).