Response from Charge Point Operator Char.gy

How do we provide outside the home charging for people without driveways in the condensed streets of central Leicester? We have proven that using existing electricity supplies (lamp columns) is a viable method of providing hyperlocal on-street charging in the suburban areas of Leicester. However, there are more constraints in the denser parts of the city but we believe these are solvable.

There are two general strategies we can employ:

- 1 Increase Charging Point Availability (Low-Cost Installations): This strategy focuses on overcoming technical limitations and minimising installation costs for new CPs.
- 2 Optimise Access to Existing Infrastructure: This approach aims to maximise utilization of existing on-street charging points by improving accessibility and user convenience.

Strategy 1 - Increase Charging Point Availability (Low-Cost Installations)

Older, denser areas of Leicester may have lamp columns that are too small, poorly positioned, or in inadequate condition to support standard charging infrastructure installations. We can overcome this challenge by replacing unsuitable lamp columns with new ones specifically designed to accommodate CPs. We have successfully implemented this in other London boroughs, which provided the Council with new assets with a renewed 25-30 year life span. We believe we can emulate this in Leicester.

The availability of existing electrical infrastructure to power on-street CPs in denser areas might be limited. To address this challenge, we can explore repurposing currently unused or "redundant" electricity supply points within the existing network. This includes investigating the potential of utilizing decommissioned phone cabinets as power sources for on-street charging points.

In some instances, there may be a complete absence of suitable existing electricity supplies to support on-street charging points. For these specific areas, we can propose the commissioning of new, individually metered supply points on the unmetered network. These dedicated supply points would specifically cater to 5.5kW bollard CPs. Individual installations allow for a flexible and adaptable network, with CPs strategically placed throughout the community to meet resident needs. This eliminates the need for large clusters and ensures optimal coverage within the targeted area. The ability to install CPs individually allows for a data-driven approach, placing them in locations with the highest resident demand.

The solutions outlined above all contribute to minimising both street furniture clutter and installation costs

Strategy 2 - Optimise Access to Existing Infrastructure

Existing on-street CPs might be underutilised due to limited parking availability or accessibility issues. By focusing on improving access and user convenience for existing charging points, we can potentially reduce the total number of chargers required.

Implementing designated parking bays specifically for EV charging ensures that these points are readily available for residents to use when needed - this eliminates situations where charging points are blocked by non-EV vehicles. When a CP clear and accessible, more users can benefit from charging throughout the day through successive charging sessions. By enabling the residents to utilise existing infrastructure more it is possible to minimise the need for more CP installations for that area, reducing overall install costs.

By deploying these two strategies together we can bypass some of the technical limitation in Leicester's urban areas, keep the overall initial capital investment for installation low and pass these benefits on to residents in the form of lower charging prices - making EV charging a more accessible and affordable option.