Provision of Electric Vehicle Charging Points in New Developments

Guidance for Developers November 2018

Why do we need Electric Vehicle Charging Points in the City?

Cardiff was named as one of the most polluted cities in the UK in a recent Lancet report and improving local air quality and health by reducing emissions from road traffic is a crucial priority for the Council. Providing an accessible network of electric vehicle charging points will play a vital role in facilitating the uptake of electric vehicles, which is a necessity to deliver air quality and health improvements.

The use of electric vehicles is a key measure in reducing emissions locally and therefore the provision of charging infrastructure to facilitate and stimulate this change is essential. Electric vehicle ownership in Cardiff is forecast to rise rapidly by 2030 when total licensed electric vehicles in the UK is estimated to reach 13.6 million and achieve 60% of vehicle market share. This represents a huge rise in ownership levels in the city from just 250 electric vehicles registered at the end of 2017 and it is important that developers recognise and respond to this change.

The Council is committed to providing a comprehensive charging network increasing the number of charging points around the city. **This document sets out the Council's expectations for the provision of electric charging facilities in new development across the city** and will be used as a basis for discussion and negotiation with developers**.**

This document incorporates latest ULEV guidance and provides information and advice to developers on how opportunities for the use of electric vehicles can be maximised, particularly through the provision of charging points in new residential and commercial developments.

What are the Benefits of Providing Charging Points in the City?

Residential Homes and Flats

- Meets the needs of residents who own an electric vehicle,
- Makes the property more attractive to potential buyers and renters,
- Makes owning an electric vehicle viable for potential purchasers,
- Encourages the use of electric vehicles in the local area and helps improve air quality,
- A dedicated charge point will increase the speed, safety and security of the charging facility,
- A dedicated charge point can be installed in the most convenient location possible for the vehicle,
- Flats will accommodate the charging requirements of residents, visitors and third party maintenance companies who service the apartments,
- Boosts your corporate environmental credentials.

Car Parks

- Accommodates the rapidly increasing number of electric vehicles,
- Helps ensure your car park is preferred over others by electric vehicle drivers,
- Creates a more environmentally friendly destination and improves air quality,
- Encourages the use of electric vehicles in the local area,
- Helps advertise your car park, by choosing for it to appear on online maps and apps that publicise charging locations.

Commercial Buildings and Offices

- Results in a significant reduction in fleet costs and taxation,
- Accommodates visitors who own an electric vehicle,
- Makes owning an electric vehicle viable for employees,
- Provides charging for your fleet vehicles,
- Boosts your corporate environmental credentials.

Hotels and Restaurants

- Meets the needs of customers who own an electric vehicle and attracts more passing trade,
- Attracts more business from customers outside of evening times, e.g. during the day for business meetings and lunches,
- Can help advertise your business by choosing for it to appear on online maps and apps that publicise charging locations,
- Offers something different to your competition,
- Boosts your environmental credentials.

What should be provided?

There are many types of electric vehicle charge points to choose from and it is important that the most suitable charge points are installed to meet the needs of future occupiers and customers, staff or other visitors to the building.

The Council will support proposals which seek to deliver opportunities for the use of electric vehicles. To assist, the following table provides a starting point to the levels of provision which could be delivered through new development proposals.

Council Expectations on the provision of electric charging points	
Houses	**One electric vehicle dedicated charging point** (up to 7 kW (32A) where possible) **or installation of passive wiring** to allow future charging point connection per house with garage or driveway.
Flats	**At least 10% of parking bays** should be provided with dedicated electric vehicle weatherproof charging points.
Commercial Development, Car Parks and Community Facilities	**At least 10% of parking bays** should be provided with dedicated electric vehicle weatherproof charging points.
Public Transport Facilities & Taxi Ranks	Charging infrastructure will be required to facilitate the conversion of bus and taxi fleet, using **appropriate technological solutions at suitable locations across the city**.
Future Proofing	Subject to agreement with the Local Planning Authority standard provision may also require **installation of groundwork/ passive wiring at the outset** to enable further future installation to match demand.

Examples of appropriate charging rates:

Residential and Commercial Premises (Offices, Workplaces)

A power rate of between 3.7kW (16A) to 7.4kW (32A) is preferred to charge pure electric vehicles. Full recharge of a 30 kWh battery electric vehicle on this type of charger usually takes between 4-8 hours.

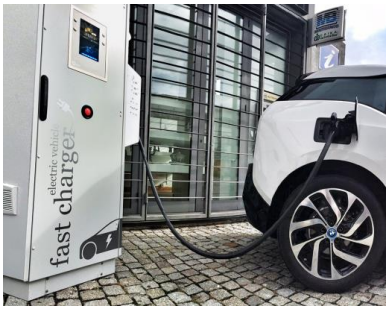
Community Facilities (Schools, Health Centres, Community Centres, etc.), Shops, Hotels and Restuarants

Appropriate charging equipment for destinations such as community facilities, shops, hotels, restaurants etc depends on the likely parking duration at each location. Minimum 3.7 kW (16A) chargers may be sufficient in long stay parking areas.

High Turnover Parking

Where the proposed parking is likely to include relatively short duration high turnover use, such as a short stay car park or supermarket, it would be appropriate to install 'rapid' electric vehicle charging points with a charging rate of at least 43 kW/63A. This type of charger will typically achieve an 80% charge of a 30 kWh battery electric vehicle in 30-60 minutes.

Note: An electric vehicle charging scheme submitted in support of a planning application will also need to include information that identifies how the charging equipment will be managed, e.g. who can use the charging points, access and payment arrangements, who will maintain the equipment.



Sources of Further Information

- Cardiff Electric Vehicle Charging Feasibility Study, Arcadis, March 2018;
- IET Code of Practise for Electric Vehicle Charging Equipment Installation; and
- BS7671 IET Wiring Regulations

This document is available in Welsh / Mae’r ddogfen hon ar gael yn Gymraeg

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