

Canllaw Gwefru'r Fflyd Fleet Charging Guide



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Types of Charger

We have two types of charger for fleet use.

Rapid DC chargers provide power at 50 kW (125A), use either the CHAdeMO or CCS charging standards. These are the most common type of rapid EV charge points currently, having been the standard for the best part of a decade. These are the larger units with tethered cables.

Both connectors typically charge an EV to 80% in 20 minutes to an hour depending on battery capacity and starting state of charge.

Below is one of the rapid charging units we have at our depots:



Fast AC chargers provide between 7kW and 22kW depending on the vehicle and phasing of the supply. The Renault Kangoo can draw at 22kW whereas some other EVs have an onboard converter that restricts the charge to 7kW. A 7kW charger will recharge a compatible EV with a 40-kWh battery in 4-6 hours, and a 22-kW charger in 1-2 hours.

These are the posts that you see in the depots and can charge 2 vehicles at once. You must use the type 2 cable provided with the vehicle when connecting from the vehicle to the ChargePoint.

Below is an example of the fast-charging units we have in the depots:



For both chargers the cable will lock into the vehicle and charger once charging is initiated and will unlock when you end the charge.



This is a CCS socket which will be on the Renault Kangoo. Think of this as your fuel port. There will be a way to open the charge port on any vehicle much the way you would do a petrol/diesel vehicle. Please remember to shut it after the cable has been removed.



These are the two types of cable that will connect into the socket. A type 2 to type 2 cable (on the right of this image) should be supplied with each vehicle. This cable will connect from the charger to the socket on the fast-charging posts. The cable on the left is what is included on the tethered rapid charging units and plugs directly into the socket from the ChargePoint. It will be a thicker cable than the type 2 one.

Most vehicles will charge quicker to 80% but then the charge speed will drop. If you're above 80%, the car will slow the maximum charging power to avoid the cell voltages exceeding their limit (which would damage the battery). For the fast chargers this isn't as noticeable as say a rapid charger.

How to initiate a charge

Initiating a charge can be done via the RFID card assigned to each vehicle and works in a similar way to a conventional fuel card.

For the fast chargers:

- Firstly, open the port on your vehicle and connect your cable from this port to the charger itself.
- Go to the charging unit with the screen.
- Touch the screen to light up and activate.
- Select the RFID symbol on the touch screen.
- Hold your RFID card to the card reader symbol below the screen.
- On the screen will appear the charging pillar numbers and corresponding charger type.
- Select your pillar number from the symbols – this will turn the light on the pillar blue indicating the pillar and charge are active.
- Tap the card on the RFID reader again to stop charging when needed.

For the rapid chargers:

- Firstly, open the port on your vehicle and connect the tethered cable from the unit to the port on your vehicle.
- Touch the screen to light up and activate.
- Select the RFID symbol on the touch screen.
- Hold your RFID card to the card reader symbol below the screen.
- Select the CCS symbol from the screen.

- This should then turn blue and the charge should be initiated.

Charging etiquette

Use the charging network across the county to top up when necessary and utilise the correct infrastructure available. If you have ½ hour for lunch use a rapid charger. If you have a meeting lasting 1-2 hours then use the fast charger.

There is no need to stay longer than an hour on any of the rapid chargers.

Locations

Current depot locations that can be used to charge fleet vehicles:

- **Trostre Depot** – Trostre Road, Llanelli. SA14 9RA
 - 6 x 7-22kW fast chargers & 3 x 50 kW rapid chargers
- **Cillefwr Depot** - Alltynap Road, Johnstown, Carmarthen, Dyfed, SA31 3QX
 - 4 x 7-22kW fast chargers & 2 x 50kW rapid chargers
- **Glanamman Depot** – Glanamman, Ammanford, SA18 1LQ
 - 2 x 7kW chargers

Other sites that can be used:

- **Cross Hands Rapid Charging Hub** - Cross Hands, Cross Hands, Llanelli. SA14 6RJ
 - 4 x 50kW rapid chargers & 1 x 150kW ultra rapid charger
- **Castle car park** – Llandovery, SA20 0AP.
 - 2 x 50kW rapid chargers
- **Carregamman Car Park** – Ammanford, SA18 3AD
 - 2 x 50kW rapid chargers
- **Station Terrace Car park** – Llanybydder, SA40 9XX
 - 2 x 50kW rapid chargers

Please note that charging should be prioritised at depot locations due to cheaper charging rates.

The wider charging network and other sites will be available soon.