

What you need to know about selling electricity to Electric Vehicle users

The Innovation Link

The Innovation Link is here to support innovators that can benefit current and future consumers in the energy sector. We aim to explain what the rules mean, so innovators can bring new products and services to market.

Innovators have asked us a wide range of questions and a number of common themes are emerging. We plan to publish various documents that address these common issues.

Talk to us

If you have feedback about this guide, suggestions for further guides, or you want to talk to us about your innovation please contact us.

You can reach us at innovationlink@ofgem.gov.uk

Electric Vehicles

None of us can escape the fact that Electric Vehicles (EVs) are coming in a big way! There are lots of predictions out there about the rate of EV uptake, but what they all agree on is that the number of EVs on our roads is going to increase dramatically in the near future, reflecting their vital role in decarbonising the UK's transport sector.

EVs blur the line between the energy and transport sectors in a way we've not seen before. This raises some challenges but also the potential for huge innovation. The rollout of EVs could provide consumers with more opportunities to engage in the retail market and in non-traditional ways. We're keen to realise these potential benefits for consumers.

We've received a number of questions about what rules apply when selling electricity to EV users. This paper aims to provide guidance in this area, covering a range of different scenarios. We expect it will be particularly useful for chargepoint operators, local authorities, EV users, fleet operators, trade associations and other innovators looking for opportunities in this space.

This paper is focused on the retail elements of selling electricity to EV users. It doesn't cover other regulatory considerations that apply to EVs, such as technical standards or network connection issues. Useful links and contacts are provided at the end of this guide.

What are the usual rules about selling electricity?

- Selling electricity usually amounts to the **supply** of electricity.
- Supply is a licensable activity meaning that any business wanting to supply electricity has to be licensed by Ofgem to do so.
- The electricity supply licence sets the rules that these companies (suppliers) must abide by.
- There are some limited circumstances where supplying electricity can be undertaken without a licence: the electricity supply exemptions.
- The rules are designed to ensure that the consumers of electricity are protected.

Unusual circumstances about EV charging

The activities that need a supply licence (or exemption) are set out in law. However, EVs do not fit neatly into the conventional rules and obligations.

Most notably, the rules set out that a licence is required when supplying electricity to a 'premises'. This is further defined as any 'land, building or structure'. We've taken the view that, under most circumstances, an **EV will not be a premises** (although there may be future EV use cases that stretch this conclusion!). This means that in most scenarios, selling electricity to the end EV user **would not be supply**.

But, we do consider that the conveyance of power to the chargepoint (or other charging infrastructure) is supply. A chargepoint or other fixed charging infrastructure, would constitute a premises (since it is a 'structure') and so would be captured under the definition of supply.

Let's explore what this means for EV charging in what we see as the four most likely scenarios:

- Scenario 1: Charging EVs at home.
- Scenario 2: On-street charging.
- Scenario 3: Destination charging.
- Scenario 4: Charging en-route.

Scenario 1	Charging EVs at home
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This scenario is expected by many to be the most common and convenient way to charge an EV. **Selling electricity to a home (or business) is definitely supply.** How this electricity is used is up to the consumer, whether that's to boil a kettle, watch TV, charge a mobile phone or charge an EV. This is the case whenever charging happens at the EV users' property, for example, a business or Local Authority charging their own EV fleet at their work property.

A number of offerings already exist that are targeted specifically at EV users, such as new tariffs that offer cheaper electricity overnight. We expect to see more of these targeted products in future, especially to enable and encourage smart EV charging; that is, shifting the time of day that an EV charges, or varying the rate of charge.

In the future, it might also be possible to have [more than one supplier supplying electricity to a single meter point](#). This could see further EV-specific offerings.

Scenario 2	On-street charging
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This is charging an EV at a public chargepoint on the road. These could be dedicated chargepoints or could use existing street infrastructure, such as lampposts. Charging in this way is likely to be particularly common in urban areas where EV owners lack their own off-street parking.

Chargepoint operators selling electricity directly to EV users would not normally, in our view, need a supply licence. **This is because this activity usually isn't supply. However, there will have to be supply involved in getting the electricity to the chargepoint.**

A number of different models already exist for billing for use of these chargepoints, such as subscription models or pay-as-you-go. The rules of 'supply' will be relevant for supplying electricity to the chargepoint, however, in selling the electricity to EV users, these chargepoints are not likely to be bound by supply rules but, rather, broader consumer protection rules.

Supplies to EV chargepoints should generally be metered, however, some street furniture (such as lampposts), are categorised as unmetered supply points. Where EV chargepoints are incorporated within these it may be permissible for supply to these chargepoints to continue to be unmetered, provided this is agreed by the supplier, relevant network operator and customer.

A special measurement system must be used that ensures accurate consumption is recorded for the EV user and for industry systems in these unmetered scenarios. Further information can be found in this [guidance on unmetered supplies](#).

Scenario 3	Destination charging
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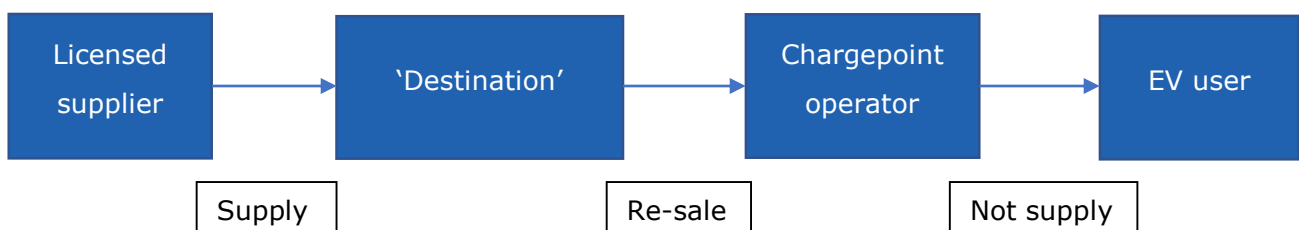
This is charging at a location where an EV may be left for a period of time, such as a supermarket car park or potentially a workplace. A number of business models could exist here, such as the destination offering free charging, or renting out their parking to a third party who then sell electricity to the end EV user.

The rules that apply here are similar to those for on-street public charging: **the selling of electricity to the end EV user is not usually supply**.

Selling electricity to the destination itself, would be supply (likely to a non-domestic premises).

An example might involve the destination, such as a supermarket, being supplied with electricity and then selling this to a chargepoint operator on the site, who then sells the power to the EV user. Although the sale of power to the EV user is not supply, the transaction between the supermarket and the chargepoint operator would be supply. This transaction may be covered by an exemption and so wouldn't need a supply licence. The rules around the supply exemptions are complex and case specific. However, generally speaking, where you buy electricity from a licensed supplier and then resell this from your premises, this could be classed as 're-sale'. The exemptions regime provides for a number of 'classes' of supply: Class B specifically allows for re-sale.

This is shown below:



There are 'Maximum Re-sale Price' (MRP) rules that apply to Class B supply. These usually mean you can't charge more than you pay for any re-sold electricity. This is to protect consumers in scenarios where they have no choice but to be supplied in this way. However, these MRP rules don't apply when re-selling to a non-domestic customer, as is likely to be the case here.

Scenario 4

Charging en route – the ‘forecourt’ model

This model is perhaps the most similar to our current experience of refuelling cars with internal combustion engines: charging an EV on a forecourt. This could be a forecourt of a standalone ‘petrol station’, a dedicated EV charging forecourt or as part of a wider motorway service station.

As with previous scenarios, an EV would not normally be considered premises and so the sale of electricity to the EV user would not normally be supply. But, as with scenarios 2 and 3, we would consider the chargepoint itself a premises.

Some of these sites may have complex ownership and letting arrangements, involving multiple parties, such as a chargepoint operator, forecourt owner and perhaps a service station owner. Depending on site configurations there may be various supply relationships between parties.

As with scenario 3, these may require an electricity supply licence, or be covered by a supply exemption. It is the responsibility of the parties to identify whether they require a licence and to obtain such a licence if necessary, based on their own legal advice.

Where to find other relevant information

- The [Office for Low Emission Vehicles](#) works across Government to support the market for ultra-low emission vehicles, including EVs. It co-ordinates new legislation for EVs, such as the [Automated and Electric Vehicles Act 2018](#). They have also recently [consulted on potential ‘smart charging’ requirements](#).
- Due to publish their main report in November 2019, the [EV Energy Taskforce](#) was launched in Autumn 2018 to suggestions to Government and industry to ensure that the GB energy system is prepared for and able to facilitate the mass take up of EVs.
- The Electricity Supply Standard Licence Conditions can be found on [Ofgem’s licensing pages](#).
- There are also [guides to the supply licences](#) and further information on [licence exemptions](#).

General consumer protection rules apply to all EV users, including those not covered under the more extensive protections that exist in an electricity supply licence. These apply much like they do for users of petrol stations today. Whether additional protections are required is being considered by Government, and the work of the EV Energy Taskforce will help inform Ofgem’s work to facilitate the rollout of EVs, whilst ensuring that energy consumers are protected.

Feedback

The Innovation Link team are keen to hear from industry and prospective innovators about areas in which we could provide further clarity on the current rules and regulations, in order to enable greater innovation.

Please get in touch on innovationlink@ofgem.gov.uk with any suggestions.

The legal bit

Nothing in this note is to be taken as providing legal advice and it is not a substitute for independent legal advice on your own circumstances. It is your responsibility to assess compliance with regulatory requirements.

This note is provided without prejudice to any decision or action Ofgem may take in an individual case in the future, including enforcement or any other regulatory action.

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It is worth noting that supplying electricity without a licence is a criminal offence and government is also a prosecuting authority for this offence. The views taken by the Innovation Link or by Ofgem on a particular matter will not necessarily be the same as those taken by government or by other stakeholders. Context is important and many situations will depend on their own particular circumstances. Ultimately, only a court can give a definitive interpretation as to how a particular statute is to be applied to a particular situation.