



Electric Vehicle Association Scotland

EVA SCOTLAND TARIFF GUIDANCE 2022

Billing for Public and Private EV Charging

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**TABLE OF
CONTENTS**

BILLING FOR CHARGING 1

Summary 1

Tariffs 2

 Minimum Fee not Connection Fee..... 2

 Unit Costs 2

 Definition of Billable Sessions 4

Overstay Fees 5

Appendix 1 Philosophy against per minute charging..... 8

BILLING FOR CHARGING

SUMMARY

EVA Scotland supports billing for charging, to ensure that each post owner is able to support and maintain the service offered, but also to encourage best practice amongst users at charge points, facilitating all journeys.

We support practices that encourage appropriate behaviours that maximise utilisation and availability of the charge points, while ensuring that access to equitably priced energy for all drivers is available.

TARIFFS

Minimum Fee not Connection Fee

EVA Scotland is opposed to any connection fee being imposed as part of charging tariffs. Such a fee encourages behaviour that is unlikely to support optimum utilisation and availability of charge points. Users tend to maximise their stays to minimise the unit cost. It also presents a continuous cost penalty to users based on battery size, with the greatest impact likely to fall on those least able to afford the additional cost.

We recommend a minimum fee for charger use, with a typical value being around £1, and not exceeding the equivalent per unit cost of 4kWh of energy delivered, commensurate with ensuring the post owner is at least cost neutral for any session.

Unit Costs

As part of our philosophy on billing for charging, we support and encourage the implementation of tiered tariffs.

The higher the rate of delivery of energy, the greater the cost should be. This should reflect the cost of providing and supporting the required infrastructure. We support a differential between Fast and JourneyChargers (Rapid chargers) in the order of 10 to 20% of the unit cost of energy supplied to the owner. The actual differential will vary from owner to owner, reflecting their particular circumstances, energy supplier and post maintenance contracts. We would recommend a that the differential never exceed 50% of the kWh unit cost paid by the post owner

The price point must reflect the needs of users without access to home charging, users who have a greater dependence on the public networks. Please see Table 1 for indicative values.

The energy market has the potential to be very fluid, so long term energy tariffs should be sought to achieve stable pricing at charge points, preventing price shock to drivers.

Tariff Signage

All relevant tariff(s) and overstay fees should be clearly visible to users at the charge point. This can be a physical label, or some form of electronic signage. A link or QR code to a remote website is not acceptable. Any preauthorisation amount shall be clearly indicated for contactless payment.

Where practicable, the charge point should clearly indicate the amount of energy delivered at the end of the session.

Definition of Billable Sessions

A critical component of billing for charging is the definition of a successful session. It is not unheard of for a device to fail to deliver energy, so a minimum delivery value threshold is required. In this scenario, the minimum fee is waived if the session is interrupted other than by the user and energy delivery is below the minimum fee. Only energy delivered would be billed. This will again help prevent the cost of administration of claims and appeals for such sessions.

To address EVs abusing charging bays as preferential parking, any [overstay fee](#) should apply irrespective of energy delivered.

OVERSTAY FEES

EVA Scotland recommends that all owners apply overstay fees.

Our position is to recommend time-based fees, applied after the maximum charge session time each owner permits. A solution that we would consider as the optimum starting point would be to charge £1 per minute overstay, with a ten-minute grace period. Anyone ending charging within the period would not be charged, but as soon as the overstay exceeds that ten-minute window, the **minimum** overstay fee would be £10. The fees would be collected as part of the standard transaction through back-office management system.

Each owner would need to define the maximum charge session length for themselves. Our guidance is summarised in Table 1.

The ideal would be for overstay fees to be universal across all owners. Recognising that it would however be problematic to allow the total to increment indefinitely, we proposed the upper limit that can be applied to any single infringement be set at whatever the local Penalty Charge Notice standard rate is. This would hopefully be appropriate to ensure that the cost of appeals and their administration is kept to a minimum.

	Unit Cost*	Maximum Time	Overstay fee per minute
Rapid AC or DC connection	£0.30	45 to 90 minutes	£1
DC Fast, 22kW	£0.24	120 minutes	£1
AC Fast 7 to 22kW, street or carpark	£0.18	Local decision/ in line with Traffic Regulations	£1
Long Stay Parking	£0.18	Local decision/regulation	Local Decision

TABLE 1: INDICATIVE TARIFFS INCLUDING OVERSTAY FEES

(*UNIT COSTS WILL REFLECT THE OWNERS ENERGY CONTRACTS)

For queries and support, please contact EVA Scotland on <mailto:info@eva.scot>

APPENDIX 1 PHILOSOPHY AGAINST PER MINUTE CHARGING.

If the battery pack on a car is cold, it takes longer for a car to charge. Thus "fuel" could cost more in winter than in summer if charged on a per minute basis. Although a rapid charger may be capable of delivering power at 50 kW, the power delivered to the car will be reduced as the state of charge of the battery increases. For someone with a small capacity battery this will happen within the normal expected dwell time on the rapid. But for a car with a much larger capacity battery, this power tapering effect may be less, if it happens at all during the dwell time. The driver of a small capacity battery will receive fewer kWh than the driver of a large capacity battery for the same time spent at the same rapid.

In order to avoid extremely high grid reinforcement costs, a hub may have been implemented such that peak demand, which should occur very infrequently, cannot be met at all. In this scenario, charging rates may be temporarily reduced by the control systems managing the hub at peak times

Per minute has potential issues and conflicts with Scottish Government policies on social inclusion and equality. Broadly, it will penalise the poorest in society most, while offering advantage to the most affluent. The growth of Time of Use/ Demand Side Response options on Rapid units is significantly more readily approached by pricing in the per kWh model. It generally simplifies price transparency, something key in helping users understand the merits of any options they may be offered, especially related to the not dissimilar offers they are already beginning to receive for home energy use. With most commercial networks in the UK offering per kWh pricing, maintaining direct comparability between pricing structures is key in helping users make informed choices. There is a very strong possibility that legislation will force this issue in the medium term, so creating disparity may also incur future costs.