

## Members' Library Service Request Form

Date of Document	12/05/23
Originator	Ian Lennox
Originator's Ref (if any)	
Document Title	Electric Vehicle Charging Tariff Update

Please indicate if access to the document is to be "unrestricted" or "restricted", with regard to the terms of the Local Government (Access to Information) Act 1985.

Unrestricted	<input checked="" type="checkbox"/>	Restricted	<input type="checkbox"/>
--------------	-------------------------------------	------------	--------------------------

If the document is "restricted", please state on what grounds (click on grey area for drop-down menu):

For Publication
-----------------

Please indicate which committee this document should be recorded into (click on grey area for drop-down menu):

East Lothian Council
----------------------

Additional information:

Authorised By	Tom Reid
Designation	Head of Infrastructure
Date	02/06/23

For Office Use Only:	
Library Reference	48/23
Date Received	02/06/23
Bulletin	Jun 23

**REPORT TO:** Members' Library Service

**DATE:**

**BY:** Executive Director for Place

**SUBJECT:** Electric Vehicle Charging Tariff Update

---

## **1 PURPOSE**

To advise members of an upcoming rate change for charging from public vehicle chargers and the expansion of peak/off-peak pricing across more of our estate.

## **2 RECOMMENDATIONS**

2.1 That members note the new rates and structure.

## **3 BACKGROUND**

3.1 East Lothian was one of the first local authorities in Scotland to set rates for charging at public vehicle chargers, in order to encourage drivers to charge at home where they were able to do so, and to avoid undermining private investment in this infrastructure. Since then (2020) we have revised rates once (in July 2022) to reflect changing energy costs to ELC, domestic rates to users and the rates charged by comparable commercial operators.

3.2 From 1<sup>st</sup> July 2023, new rates will apply to all East Lothian's public vehicle chargers. These rates will continue to generate an income to cover the increased cost of electricity and influence driver behaviour by encouraging charging outwith peak times (where peak is defined as 1600-2000), when the energy is more likely to be generated by green sources such as wind and hydro. When vehicles are charged rapidly or at peak times at a national level then carbon intense gas or nuclear sources of power may be called in – something which East Lothian Council should avoid exacerbating. Peak/off-peak pricing helps drivers to understand that even though Battery Electric Vehicles have zero tail-pipe emissions, the energy they use to recharge may include embedded carbon which they can control via their choice of charging times.

3.3 Last year we hosted trials of this model (initially via the BEIS funded "[Agile Street](#)" project) on a small scale then normalised it across our chargers networked to our Connected Kerb and Fuuse back-offices (around a third of our On-Street and Destination chargers). We have started to extend this functionality to our Destination and Journey chargers networked to the

ChargePlace Scotland back-office and expect to complete this roll out by 1<sup>st</sup> July. Several commercial operators of similar types of chargers already apply similar peak/off-peak models.

- 3.4 The new rates are set to ensure that people who are not able to charge at home are not overly penalised by higher costs. Therefore the cheapest rates at our many On-Street and Destination charging sites will only slightly exceed the Standard Variable Rate domestic electricity price cap, as set by UK Government’s Energy Price Guarantee
- 3.5 Furthermore, the new rates will continue to support development in the private Journey charging sector by not undermining existing operators’ rates (which have increased since we last revised ours in 2022). East Lothian’s Journey and High-power Journey charger rates will therefore continue to be determined by benchmarking against the median comparable commercial operators in East Lothian.
- 3.6 Peak times will be defined as between 1600-2000, 7 days a week. A discount of around 20% will be offered for charging off-peak. This is comparable to the times and discounts offered by the Tesla Supercharger network (the only other UK network to fully normalise peak/off-peak rates).
- 3.7 Final price per kWh rates will be decided and communicated to Members and the public during the first two week in May and applied from 1<sup>st</sup> July. They are expected to be as follows:

	On-Street chargers		Destination chargers		Journey chargers (43-50kW)		High-power Journey chargers (> 50kW)	
	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
<b>Current price per kWh</b>	£0.35	£0.25	£0.25	£0.25	£0.40	£0.40	£0.50	£0.50
<b>Price per kWh from 1st July</b>	£0.45	£0.35	£0.45	£0.35	£0.75	£0.60	£0.80	£0.65

- 3.8 For comparison, the only comparable commercial operators in East Lothian are PodPoint at Lidl, Prestonpans (1 x 43-50kW Journey charger), and Osprey Charging Network at Marston’s Inn, Dunbar (1 x 43-50kW Journey charger) and Haddington Retail Park (3 x 75kW High-power Journey chargers). These operators’ prices are currently:

	On-Street chargers		Destination chargers		Journey chargers (43-50kW)		High-power Journey chargers (> 50kW)	
	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
<b>PodPoint (price per kWh)</b>	n/a	n/a	n/a	n/a	£0.65	£0.65	n/a	n/a
<b>Osprey (price per kWh)</b>	n/a	n/a	n/a	n/a	£0.79	£0.63*	£0.79	£0.63*

\* Only as part of Osprey’s “Seven-Eleven” pricing trial for Octopus Electric Juice customers

- 3.9 For comparison, the [RAC estimates](#) that, converted to comparable pence per kWh, rates are £0.60 for petrol and £0.70 for diesel. Our most

expensive off-peak rate is still therefore cheaper than diesel and only 5p more expensive than petrol per kWh. Drivers can fill their vehicles for less if they choose to use our On-Street and Destination chargers which offer prices of nearly half that of Petrol and Diesel. The savings drivers can make in their carbon emissions and impact on air quality are also significant.

- 3.10 In time we will seek to implement enhanced peak/off-peak pricing using more dynamic rates that are directly linked to carbon embedded with the electricity available on the South of Scotland’s distribution grid. Rates would then vary at approximately half hourly intervals, similar to many domestic “Agile” energy tariffs. However, implementation of this enhanced pricing model requires further work and may be a topic of a future innovation project that ELC will seek to lead or host.

**4 POLICY IMPLICATIONS**

- 4.1 None

**5 INTEGRATED IMPACT ASSESSMENT**

- 5.1 The subject of this report does not affect the wellbeing of the community or have a significant impact on equality, the environment or economy

**6 RESOURCE IMPLICATIONS**

- 6.1 Financial – The tariff structure and rates ensures full cost recovery when we dispense electricity for charging cars.
- 6.2 All costs involved in connection with the implementation of this tariff can be accommodated within the Roads revenue budget.
- 6.3 Personnel - None
- 6.4 Other – None

<b>AUTHOR’S NAME</b>	Ian Lennox
<b>DESIGNATION</b>	Roads Asset and Regulatory Manager
<b>CONTACT INFO</b>	<a href="mailto:ilennox@eastlothian.gov.uk">ilennox@eastlothian.gov.uk</a> ; <a href="mailto:mhaddow@eastlothian.gov.uk">mhaddow@eastlothian.gov.uk</a>
<b>DATE</b>	5 <sup>th</sup> April 2023

## APPENDIX 1: TARIFF FROM 1<sup>st</sup> July 2023

- **High-power Journey chargers (>50kW)** – our only high-power chargers are at Wallyford Park & Ride, situated not far from the trunk road, in bays designed to accommodate longer vehicles or even small buses. These up-to-150kW chargers will charge vehicles very rapidly and are not designed for long stays, and hence an over-stay fee is applied as well as enforceable parking restrictions limiting use to 45 minutes.

Our peak tariff rate is set at just above the median price of charging at these speeds from a commercial operators

High-power (peak/off-peak): **80p/65p per kWh (£3 minimum charge)**

- **Journey chargers (43-50kW)** – the largest settlements in East Lothian have at least one Journey charger. These are designed for people passing through, or for those who need a top-up in a hurry. It is important that they have a high turn-over so that they are available when needed, and hence an over-stay fee is applied as well as enforceable parking restrictions limiting use to 45 minutes.

Our charges have been set at the median price of charging at these speeds from a commercial operator

Journey (peak/off-peak): **75p/60p per kWh (£3 minimum charge)**

- **On-street chargers ( $\leq 22$ kW)** can be found in places where people without off-street parking would expect to leave their vehicles overnight. We are prioritising installing on-street chargers in hot-spots where multiple dwellings have no safe place to park and charge from home. This minimises the amount of 'behaviour change' required from individuals looking to switch to an electric vehicle; they can park close to home, as they always have, and benefit from the most affordable rate.

On-street (peak/off-peak): **45p/35p per kWh (£2 minimum charge)**

- **Destination chargers ( $\leq 22$ kW)** are located at East Lothian council sites where people might expect to leave their vehicles unattended while they go shopping, or attend to other business. Parking is restricted to plugged in vehicles but no time limits apply. This allows people who live nearby but do not have the ability to charge at home and for whom we have not yet provided nearby On-street chargers, to access charging. For this reason, the rates are set to be the same as the on-street chargers.

Destination (peak/off-peak): **45p/35p per kWh (£2 minimum charge)**