

Guide to New GreenFlux Smart Charging App

The GreenFlux Smart Charging App Reward

- Electric Nation will give you an initial £10 Amazon voucher as a reward for participating in this part of the project
- Then, for every unit of “cheap” electricity (according to our simulated tariff) you use to charge your EV we will add to this reward
- But, if you choose to charge when electricity is “expensive” we will take money off your reward for each unit of electricity you use to charge you EV
- If you always charge using “expensive” electricity (according to our simulated tariff) your reward could pass zero and go negative – don’t worry! We will cap your loss at nothing (£0.00) and will not be asking for money from you.

Why are we doing this?

To see whether EV users can be incentivised to charge off peak we are adding a reward scheme to the trial. This will be included in a new version of the Greenflux app: this incorporates a **simulated** Time of Use Tariff¹ – an electricity tariff where the price of a unit of electricity (kWh) varies through the day. During the trial you will continue to pay your energy supplier for the energy used to charge your car as normal. The simulated tariff will be used to generate a reward balance, which you will receive at the end of the trial as an Amazon voucher.

The table below illustrates the simulated tariff used by the GreenFlux App.

	00:00	06:30	16:30	19:00	22:30	00:00
Tariff						
Optimise Cost	10p	12p		No Charging		10p
Optimise Time & Cost	10p	12p		22p to 11p		10p
Optimise Time	10p	12p	29p	22p to 11p		10p
Your Reward						
Optimise Cost	+5p	+3p		No Charging		+5p
Optimise Time & Cost	+5p	+3p		-7p to +4p		+5p
Optimise Time	+5p	+3p	-14p	-7p to +4p		+5p

The table shows the tariff periods - Electricity is most expensive from 4:30pm to 7pm, at 29p per unit, and cheapest, at 10p per unit, from 10:30 pm through the night to 6:30am.

¹ This is a simulated tariff for the Electric Nation project only (based on real GB electricity price information) and is used for illustration purposes and calculation of the GreenFlux Smart Charging App Reward only. This simulated tariff does not apply to your other household electricity consumption.

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If you chose to use the new GreenFlux Smart Charging App you have three profiles to choose from

- **Minimise Cost** – The GreenFlux App will charge your EV when electricity prices are low
- **Optimise Time & Cost** – a compromise, the GreenFlux App will avoid charging your EV when the cost is highest, but will charge during the “Taper Tariff ” period from 7pm to 10:30pm
- **Optimise Time** – The GreenFlux App will charge your EV from the moment you plug it in (after the normal pause which you’ve experienced during the trial), whatever the cost.

Optimise Time is the Default setting and if you never use the app you will continue to experience charging as before.

You can change your choice at any time, though during a charging transaction this may take up to 15 minutes to activate.

For the project, Electric Nation has created a Smart Charging Reward. We’ll give you £10 to start with and we will increase your Reward for using electricity cheaper than a nominal 15p per unit (00:00 to 16:30 and 20:00 to 00:00). If you charge during the time when electricity is more than 15p per unit (outside the times above) then your reward balance will decrease (limited to £0, we won’t ask for money from you!), as shown in the lower table above.

Your choice of preference in the app, coupled with when you plug your EV in and how much charge your EV needs, will determine how much the electricity used to charge your EV would cost.

You can find out more about the GreenFlux Smart Charging App Tariff in *The GreenFlux Smart Charging App “Tariff” Explained document*

The one thing that remains the same is that all chargers within the trial will continue to be monitored during charging – if the total electricity demand of all active chargers at any time exceeds the capacity limit then charging management will occur.

Normally this happens on weekdays between 4:30 and 7:30pm.

By choosing Minimise Cost or Optimise Time & Cost you will avoid charging at this time altogether

If you choose Optimise time and plug in before or during the peak period then your charge may be managed.

But, if enough people opt for Minimise Cost and Optimise Time & Cost then charging load is spread across the evening and charger management may be short, minimal or might not be needed at all.

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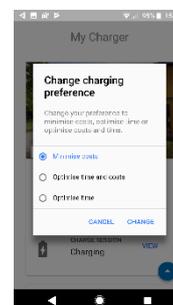
Get going with the GreenFlux Smart Charging App

1. Install or update your GreenFlux Smart Charging App through Play Store (Android phones) or the Apple App Store (iPhones).
2. Login using your Charge Card Identifier number and you will be taken to the App Home page. Contact the customer support line if you have any difficulties finding the app, or logging in.

3.  Click the gear wheel to select your Charge Schedule option then click “Change” to save your choice

You can change your choice at any time, though during a charging transaction this may take up to minutes to activate.

Your Smart Charge Reward Balance and charging status is also shown on the home page.



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4.  When your EV is charging click “View” for more information. This page shows your smart charging limit and the current being drawn by your EV. The graph shows the past 2 hours of your charging transaction.

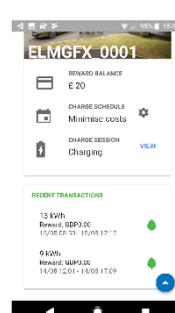
The “Request High Priority” button can be used at any time but only really has effect when a demand management event is in progress or when a demand management event is likely (normally this is weekday evenings from 4pm to 7pm)

Demand management events are usually indicated when your smart charge limit is below the charge rating of your EV.

e.g. 16A, 13A or 0A when your EV is rated 32A or 13A or 0A when your EV is rated 16A.

The current drawn by your EV can differ from your allocation, this is normal, especially when your EV is finishing charging.

Note that when you first plug in your charge session may be paused after 1 minutes of charging for up to 14 minutes and then start charging again. If you have chosen Minimise Cost or Time & Cost the pause may be much longer depending on when you plug in.

5.  Swiping up on the Home screen will reveal recent charging transaction data on your charger

Each transaction record shows how many units of electricity your EV took in the transaction (kWh)

The reward you earned in the transaction (or penalty taken away)

The transaction start and end time (plug in to plug out)

6. You can use a timer on your EV with this app if you wish, with the following limitations for each app preference:

Minimise Cost	If the timer means the car is due to start charging between 16:30 and 22:30 it will not start until 22:30
Optimise Time & Cost	If the timer means the car is due to start charging between 16:30 and 19:00 it will not start until 19:00
Optimise Time	No restrictions