

Battery Saver Report

Property Details:

[REMOVED FOR PRIVACY]

This report was created using eob.co.uk.

Battery saver report

The following report was based on half-hourly meter readings from: [REMOVED FOR PRIVACY] between 01-04-2024 and 31-03-2025 using a 10kWh battery capable of charging at 5kWh.

62.7%

Decrease in cost

£1886

Bill Reduction

Current Data information

Below is your current data usage

Data	Value
Electricity purchased from the grid	13758.39 kWh
Electricity exported from the property	5287.45 kWh
Octopus import tariff	Flexible Octopus
Solar/Wind/Hydro Detected	Yes
Octopus export tariff	Outgoing Octopus

Proposed Installation

Below is the proposed battery installation

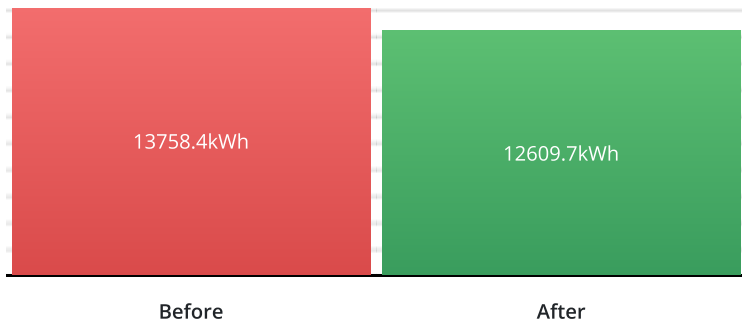
Product	Value
House Battery (usable battery size)	10 kWh
Inverter (Charge Speed)	5 kWh
Inverter (Discharge Speed)	5 kWh
Install Cost	£7400
Allow Grid Charging	Yes
Octopus import tariff	Intelligent Octopus Go
Octopus export tariff	Outgoing Octopus

Overall impact of Proposed Changes

The information below shows the impact of installing a battery and inverter in this property. The dates used were from 01-04-2024 to 31-03-2025. Please note, whilst this is using data from the smart meter, we still class this as an estimate as various factors can affect the figures. e.g. the customer may use more electricity next year.

Grid usage

The below chart shows how much electric was pulled from the grid during the time period specified.



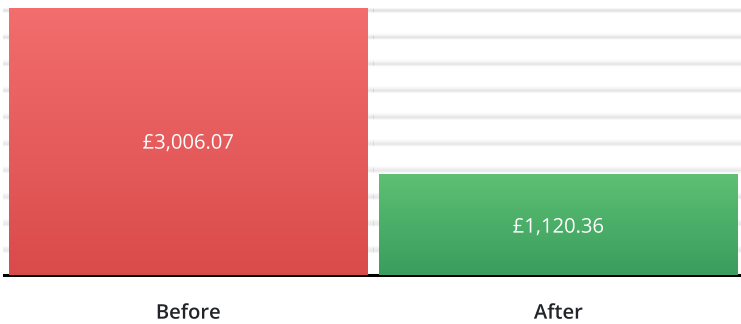
Grid Reduction

1148.7

kWh reduced

Total Financial impact

The below chart shows how much the electric bill at the property would drop based on the current tariff. This includes daily connection fees. Income from existing renewable sources such as solar has been deducted from the total (excludes FIT payments).



Cost Saving

£1,885.71

saved

To achieve the savings outlined, the following settings will need to be applied:

- The battery will need to be set up to charge from the grid (see charging times section below).
- The import tariff will need to be Intelligent Octopus Go
- The export tariff will need to be Outgoing Octopus

Grid Import Monthly breakdown

This section shows how the changes would have affected your import consumption.

Monthly import comparison figures

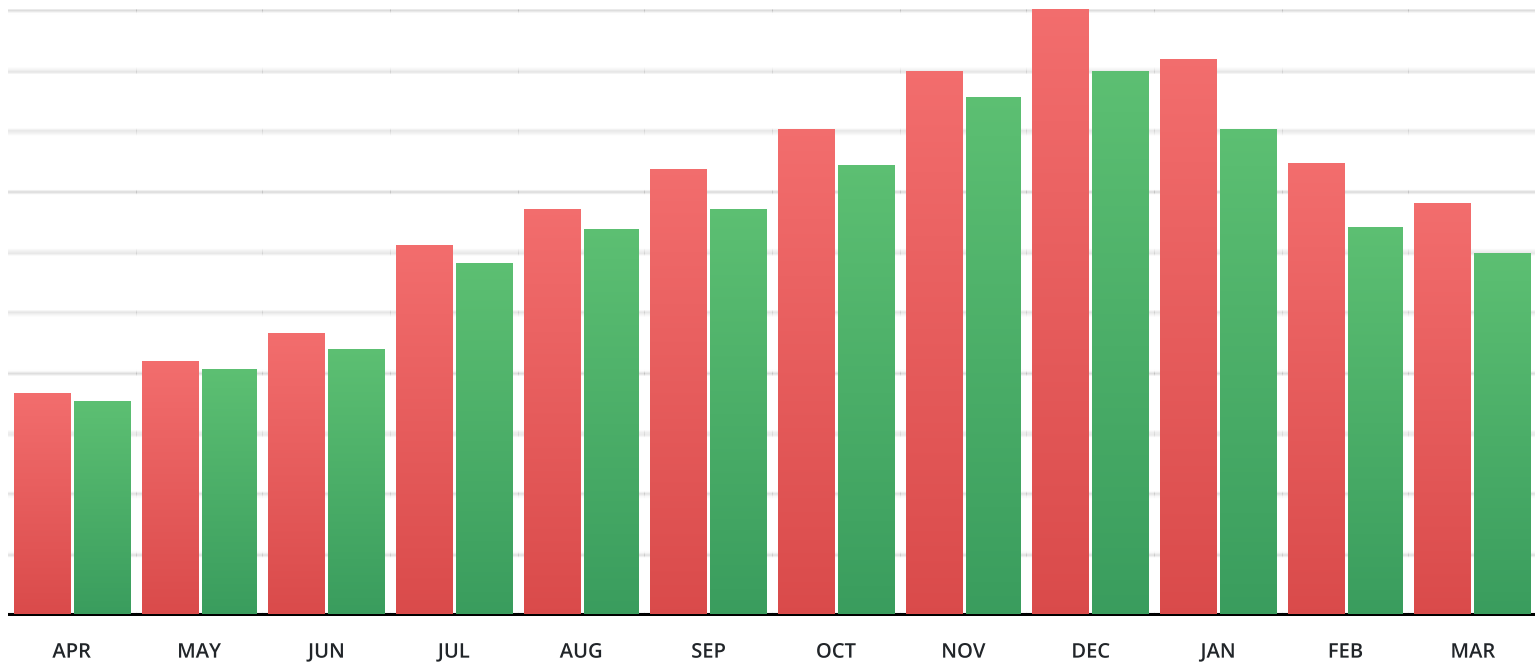
The below figures are a monthly breakdown of the kWh pulled from the grid before and after installation.

Month	Before install	After install
2024-04	602.43 kWh	583.39 kWh
2024-05	690.33 kWh	668.64 kWh
2024-06	770.51 kWh	723.32 kWh
2024-07	1012.87 kWh	963.43 kWh
2024-08	1108.83 kWh	1052.20 kWh
2024-09	1219.80 kWh	1107.31 kWh

Month	Before install	After install
2024-10	1327.34 kWh	1232.82 kWh
2024-11	1487.68 kWh	1414.48 kWh
2024-12	1658.99 kWh	1486.17 kWh
2025-01	1519.09 kWh	1327.34 kWh
2025-02	1234.48 kWh	1059.83 kWh
2025-03	1126.05 kWh	990.76 kWh

Monthly import comparison chart

The below chart shows grid usage before and after the proposed battery install in a visual form.



Why are my import figures still high?



As you selected to allow charging from the grid, the application has automatically simulated charging your batteries with cheap electric. Due to this, the amount of electric you are using may still be similar (even if you have solar) but the cost should have decreased.

Once your batteries are fully charged, there's no capacity to store any additional renewable energy, so any surplus generation must be exported. Many users regard solar power as "free," but when you export to Octopus Energy you can receive £0.15 per kWh. That means your solar energy has a real value of £0.15 / kWh - not zero. To maximise your returns and shorten your payback period, charge your battery at off-peak rates (so long as they're below £0.15 /kWh) and export any surplus solar at the £0.15 /kWh rate. This approach lets you profit more from your solar array while reducing your overall energy costs.

Monthly import cost figures

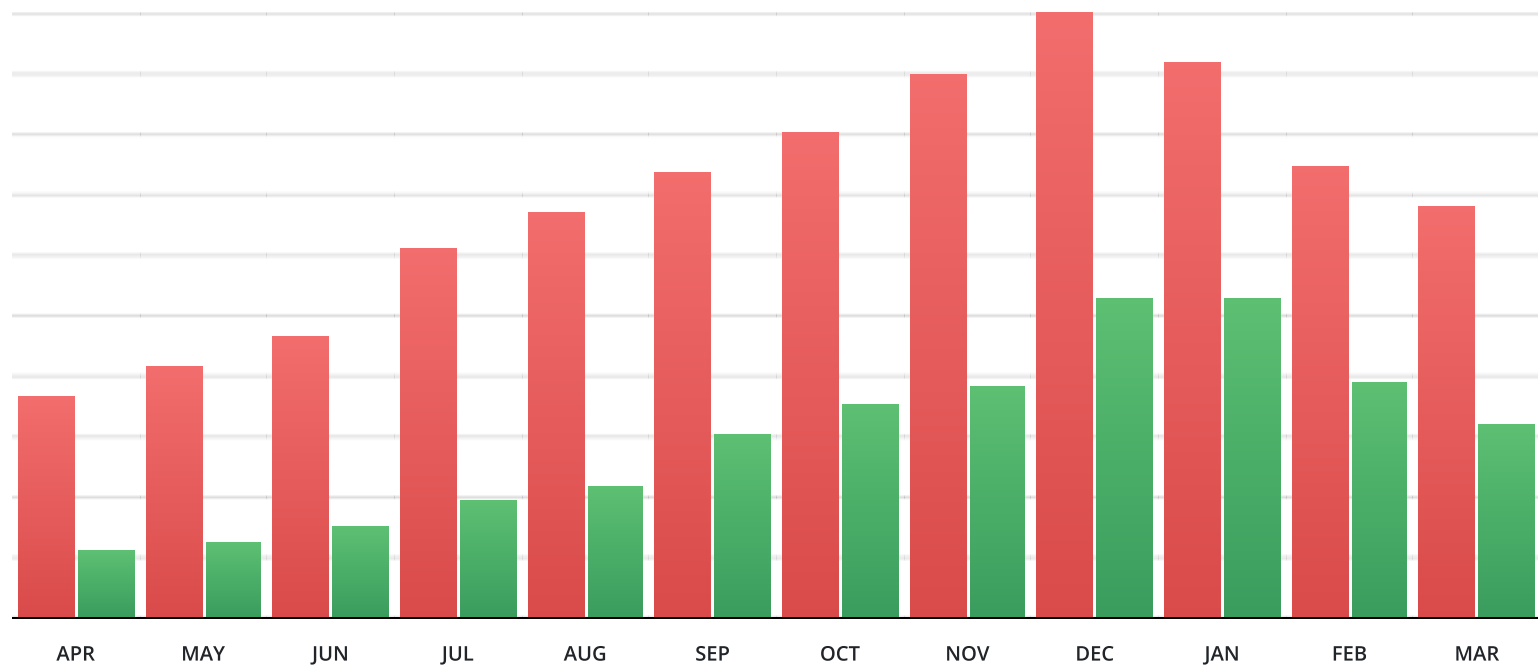
The below figures are a breakdown of the monthly cost before and after installation.

Month	Before install	After install
2024-04	£158.42	£48.21
2024-05	£181.28	£54.09
2024-06	£202.76	£64.39
2024-07	£266.44	£84.28
2024-08	£291.85	£93.30
2024-09	£321.15	£132.05

Month	Before install	After install
2024-10	£349.56	£152.66
2024-11	£392.02	£166.35
2024-12	£437.00	£230.49
2025-01	£399.96	£229.83
2025-02	£325.28	£169.34
2025-03	£296.50	£138.85

Monthly import cost comparison chart

The below chart shows the monthly cost (£) before and after the proposed install in a visual form.



Grid Export Monthly breakdown

This section shows how the changes would have affected your export energy.

Monthly export comparison figures

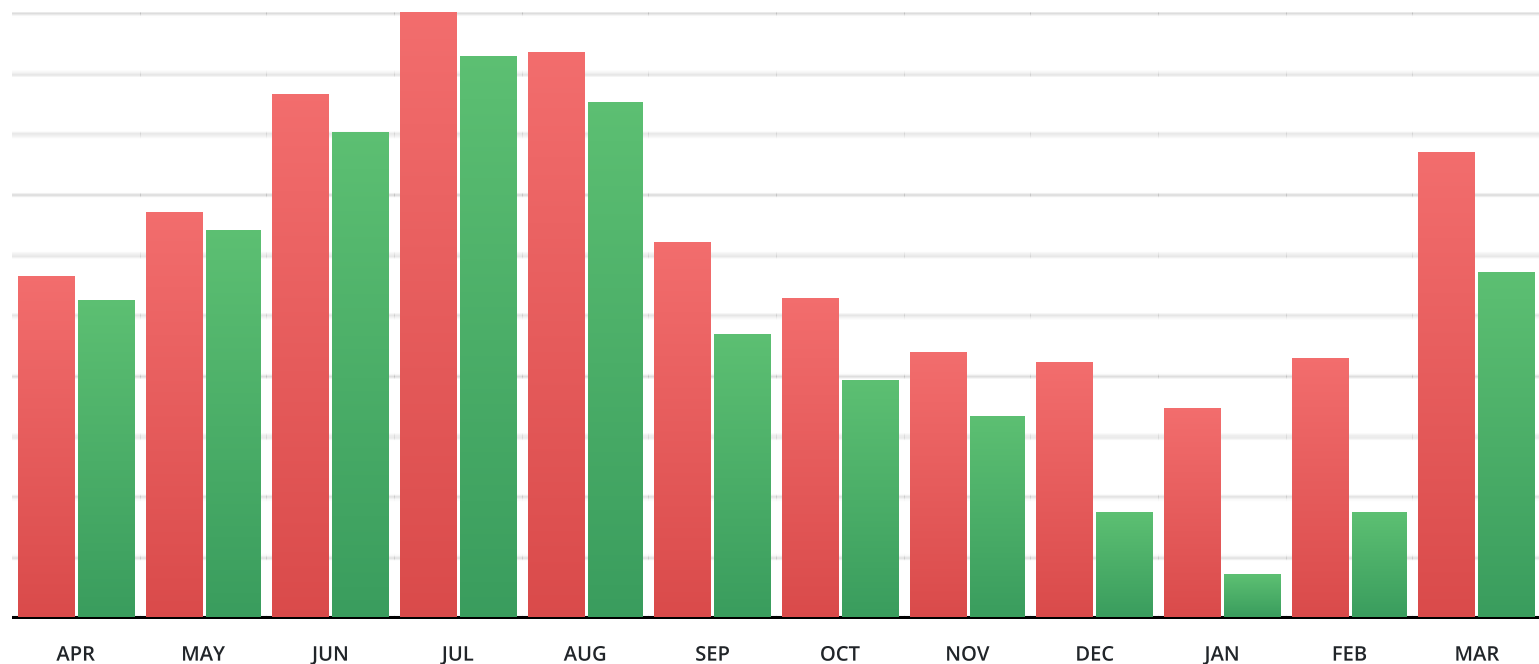
The below figures are a monthly breakdown of the kWh exported to the grid before and after installation.

Month	Before install	After install
2024-04	393.19 kWh	364.15 kWh
2024-05	467.82 kWh	446.13 kWh
2024-06	603.35 kWh	558.47 kWh
2024-07	698.18 kWh	646.17 kWh
2024-08	650.64 kWh	594.88 kWh
2024-09	432.81 kWh	326.86 kWh

Month	Before install	After install
2024-10	367.96 kWh	273.46 kWh
2024-11	304.99 kWh	231.66 kWh
2024-12	294.12 kWh	120.93 kWh
2025-01	240.32 kWh	48.13 kWh
2025-02	297.24 kWh	120.87 kWh
2025-03	536.82 kWh	397.43 kWh

Monthly export comparison chart

The below chart shows kWh export before and after the proposed battery install in a visual form.



Monthly export value figures

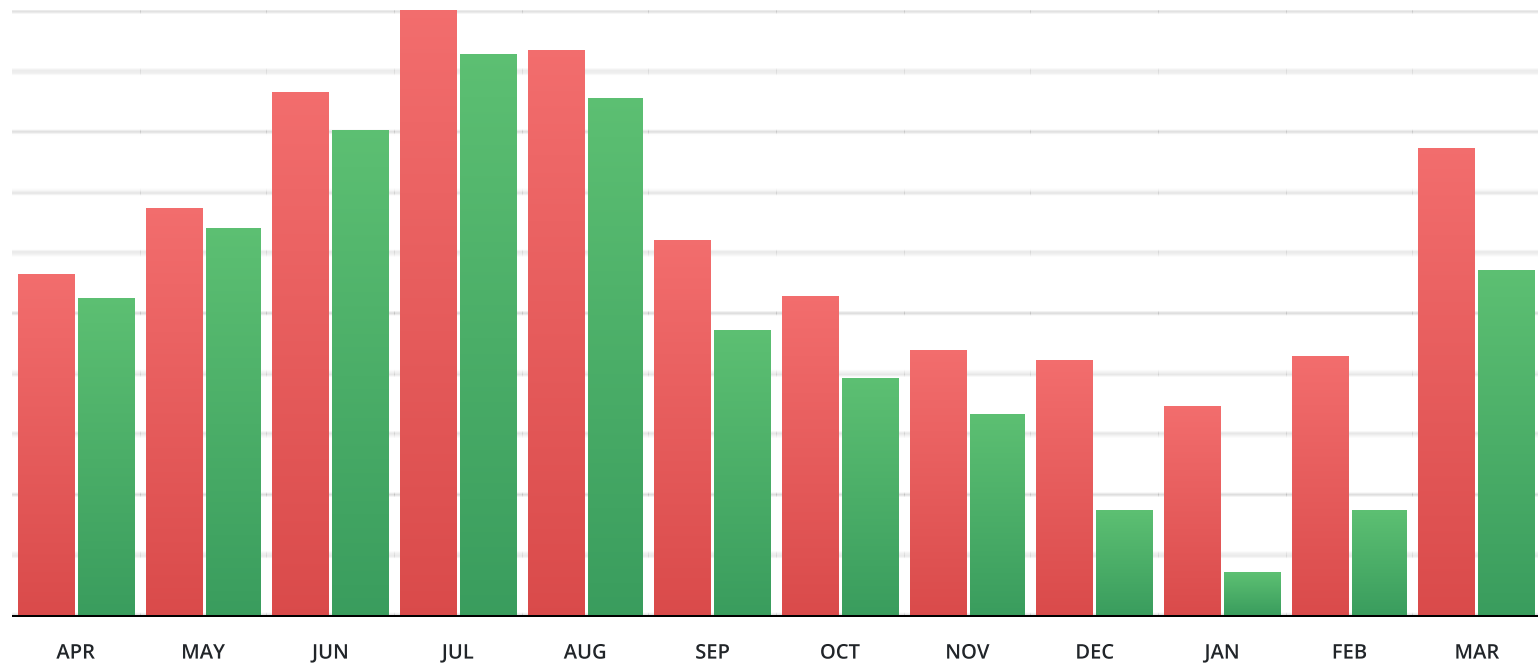
The below figures are a breakdown of the monthly export before and after installation.

Month	Before install	After install
2024-04	£58.98	£54.62
2024-05	£70.17	£66.92
2024-06	£90.50	£83.77
2024-07	£104.73	£96.93
2024-08	£97.60	£89.23
2024-09	£64.92	£49.03

Month	Before install	After install
2024-10	£55.19	£41.02
2024-11	£45.75	£34.75
2024-12	£44.12	£18.14
2025-01	£36.05	£7.22
2025-02	£44.59	£18.13
2025-03	£80.52	£59.61

Monthly export value comparison chart

The below chart shows the monthly export (£) before and after the proposed install in a visual form.



Return on Investment

This section shows how long the return on your investment would take to pay off using only the savings made.

Return on Investment (ROI)

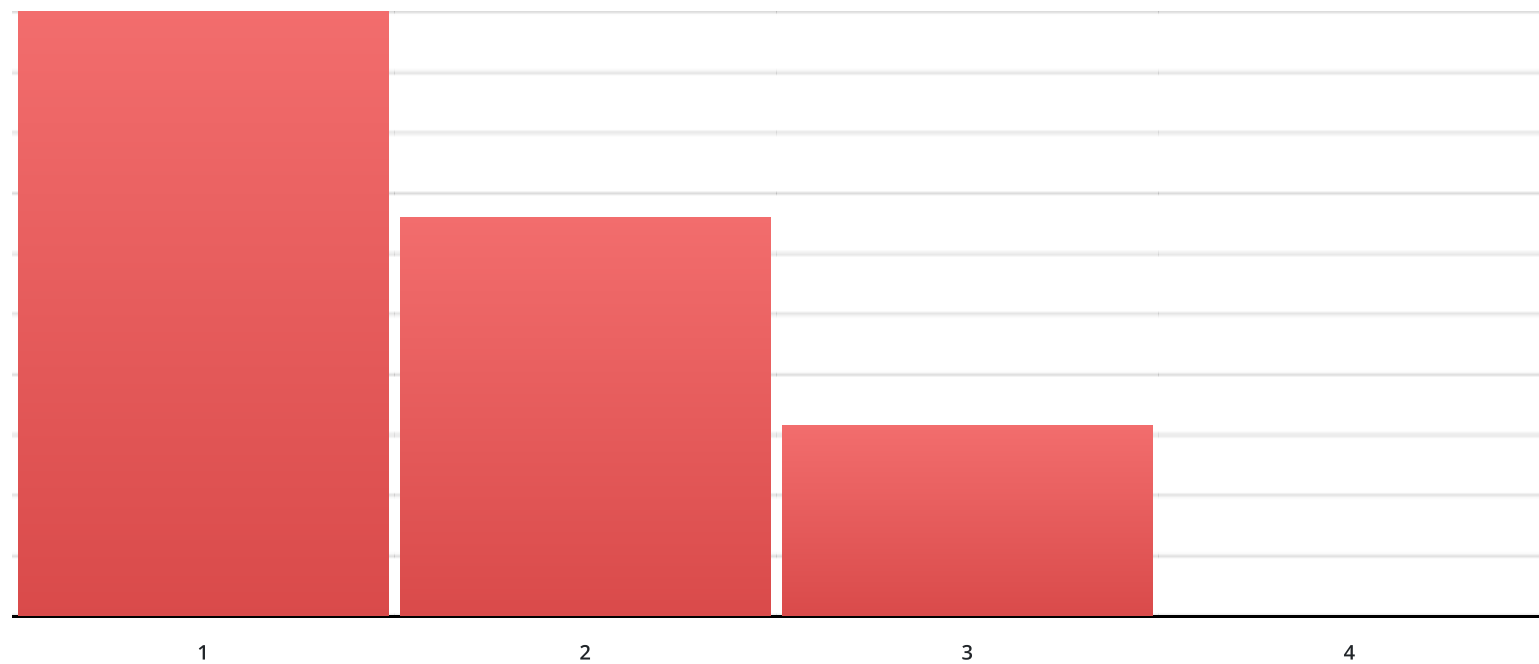
This table shows how many years it takes to pay off the installation cost of £7,400.00 using annual savings of £1,885.71.

Year	Remaining Install Cost
1	£5,514.29
2	£3,628.58

Year	Remaining Install Cost
3	£1,742.88
4	£0.00

ROI Bar Chart

This chart visualises the remaining installation cost for each year until the cost is fully paid off.



Tariff Information

This section explains the tariffs used for the calculations. Please note, prices are based on the current tariff prices. While you may have a fixed cheaper tariff at the moment, when this ends, you would be moved to the new prices automatically. As such, it makes sense to calculate future predictions using the current prices per kWh.

Old Import Tariff Details

Details	Value
Tariff Name	Flexible Octopus
Tariff Code	VAR-22-11-01
Standing Daily Charge	£0.4572820
From 01:00:00 to 01:00:00	£0.263689 per kWh

New Import Tariff Details

Details	Value
Tariff Name	Intelligent Octopus Go
Tariff Code	INTELLI-VAR-24-10-29
Standing Daily Charge	£0.4545150
From 01:00:00 to 05:30:00	£0.070004 per kWh
From 05:30:00 to 23:30:00	£0.27773 per kWh
From 23:30:00 to 01:00:00	£0.070004 per kWh

Old Export Tariff Details

Details	Value
Tariff Name	Outgoing Octopus
Tariff Code	OUTGOING-VAR-24-10-26
Standing Daily Charge	£0.0000000
From 01:00:00 to 01:00:00	£0.15 per kWh

New Export Tariff Details

Details	Value
Tariff Name	Outgoing Octopus
Tariff Code	OUTGOING-VAR-24-10-26
Standing Daily Charge	£0.0000000
From 01:00:00 to 01:00:00	£0.15 per kWh

Battery Charging Details

To achieve the savings listed, a charging schedule was applied to the battery. Charging the battery when the electricity is cheap, has two benefits.

- It allows you to cut your bills by charging the battery up with cheap electric and discharging it to your house when required (helping to avoid you drawing electricity from the grid at higher rates).
- More of your solar energy (if you have solar installed) will be exported rather than used on site. Although this might sound unexpected, it can actually boost your earnings. Solar energy isn't "free" once it's generated—it has value based on what you get when you export it, not just the cost of creating it. For example, with the "Outgoing Octopus" tariff, each 1 kWh of exported solar energy is valued at £0.15. In other words, using 1 kWh of your solar energy means you lose out on making £0.15 since you aren't selling that energy. If purchasing electricity from the grid costs less than £0.15 per kWh, it makes financial sense to buy the cheaper grid power and then export your valuable solar energy. Essentially, by charging your battery when grid rates are low, you can sell your solar power at a higher price—a "buy low, sell high" strategy similar to how the stock market works.

Please direct your installer to set up your house battery to charge at the below times once you have your export tariff set to Intelligent Octopus Go.



Charge the battery from 01:00:00 to 05:30:00 at
£0.07000350 per kWh.



Charge the battery from 23:30:00 to 01:00:00 at
£0.07000350 per kWh.

Eco credentials

By storing excess solar generation in your home battery, you reduce the amount of electricity drawn from the grid—which carries an associated carbon cost. Each kilowatt-hour of solar energy stored and used instead of grid power directly lowers your CO₂ emissions, thereby reducing your overall carbon footprint.



Carbon Savings

143.59

kg CO₂ saved per year



The same as

6.6

fully grown trees



Petrol Cars Removed

0.08

cars per year

How the carbon figure is calculated.

We take the change in your annual grid use (in kWh) and multiply it by 0.125 kg CO₂ per kWh (which is the same as 125 g CO₂ per kWh).

$\text{CO}_2 \text{ (kg/year)} = \Delta \text{ kWh} \times 0.125 \text{ kg CO}_2/\text{kWh}$.

How the tree count is calculated.

We take your annual CO₂ savings (in kg) and divide by the amount one tree absorbs per year (21.77 kg CO₂).

$\text{Trees needed} = \text{CO}_2 \text{ (kg/year)} \div 21.77 \text{ kg CO}_2/\text{tree}$.

How the car figure is calculated.

We take your annual CO₂ savings (kg CO₂/year) and divide it by 1749 kg CO₂ per average UK petrol car:

$\text{Cars removed} = \text{CO}_2 \text{ (kg/year)} \div 1749 \text{ kg CO}_2/\text{car}$.