Fuelling our road revolution with renewable energy — and how innovation is putting customers in control and unlocking grid flexibility

Fiona Howarth,
CEO Octopus Electric Vehicles
Climate change: UK government to commit to 2050 target

By Roger Harrabin
BBC environment analyst

Global sea levels may rise more than two metres by 2100

‘We’re closer to business as usual than what we would hope,’ says Professor Jonathan Bamber

Phoebe Weston Science Correspondent | @phoe0 | 1 day ago |
36 comments

Global sea levels could rise by more than two metres by the end of this century if emissions continue in a “business as usual” scenario, a United Nations body has warned.
Carbon from transport only down 3% since 1990

2018 UK greenhouse gas emissions are provisionally estimated to be lower than in 2017

- Total Greenhouse Gas emissions: 449 MtCO₂e (3% decrease)
- Carbon dioxide emissions: 364 MtCO₂e (2% decrease)

Energy supply (including power sector): 7% decrease
- Business: 0% change
- Transport: 3% decrease
- Residential: 3% increase
- Public: 4% increase

1990-2018:
- Total Greenhouse Gas emissions: 449 MtCO₂e (44% decrease)
- Carbon dioxide emissions: 364 MtCO₂e (39% decrease)

BEIS, Mar 2019: 2018 UK GREENHOUSE GAS EMISSIONS, PROVISIONAL FIGURES
PLUS big impacts at a local level
Meet the cars here today…
So – why isn’t everyone driving one?
Introducing...

The one-stop-shop for everything you need to go electric
What do we offer at Octopus EV?

- The cars (including financing)
- Renewable energy tariffs for EV drivers
- Smart charging for your EV
- Expert support for every step of your electric journey
And our events let drivers get behind the wheel

84%

drivers more likely to switch to an EV having driven one
We believe buying energy should be as simple as buying cornflakes.

Get my switch started in under 2 minutes

Rated 5 stars for customer service

based on 4206 customer reviews
QUESTION 1:
How to increase the supply of EVs into the UK

Some suggestions:

Increase penalties on polluting vehicles & support cost of electric vehicles

Ensure there are emissions targets for car manufacturers in the UK

Support large scale educational & test drive programme
QUESTION 2:
What about the impact on the energy system?
We launched our OctopusGo tariff in June 2018

The tariff designed just for EV drivers

Automatically charge during the cheapest hours - no need to get out of bed

From the award winning company

octopus energy

Save >90% on fuel vs. petrol / diesel

And it’s 100% renewable

5 pence/kWh
00:30-04:30 every day

1-2 pence/mile
We are partnering with smart charging companies

**The Zappi**

Automatically charge at off-peak rates on Octopus Energy Go

Compatible with solar panels

from £459 fully installed

after £500 government grant
We offer time-of-use pricing that reflects costs

AgileOctopus

Half-hourly pricing that reflects cost

Pricing release day before at 4:30pm

APIs available to enable 3rd party developments

octopus.energy/agile-report
Try it for yourself

Explore how shifting your electricity use could save you even more, using the profiles beneath the chart.

Half-hourly unit rates over the last 12 months, averaged across all regions (including VAT).

Select a profile to see how your costs change, based on when you use electricity

- Family home
- Working 9 to 5
- Night chargers
Why does this work?

5p plastic bag tax
= 95% reduction in use
Agile Octopus consumers shifted consumption out of the peak period by 28% and reduced CO2 emissions (UK Carbon Intensity data).
EV drivers demonstrate the greatest sensitivity to price signals

Electric Vehicle Agile Octopus customers reduced their peak-period consumption by 47%
<table>
<thead>
<tr>
<th>Agile customer cohort</th>
<th>Annual savings vs Octopus 12M Fixed Tariff</th>
<th>Annual Savings vs Big 6 average SVT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full sample</td>
<td>£45</td>
<td>£188</td>
</tr>
<tr>
<td>Top 25% most engaged</td>
<td>£91</td>
<td>£229</td>
</tr>
<tr>
<td>Bottom 25% most engaged</td>
<td>£0.80</td>
<td>£170</td>
</tr>
<tr>
<td>EV drivers</td>
<td><strong>£132</strong></td>
<td><strong>£338</strong></td>
</tr>
</tbody>
</table>
Agile Octopus customers have a markedly different consumption profile compared to all other Octopus customers – Agile works.
Others are integrating with us to make it easier

The Ohme cable

Automatically charges when AgileOctopus is cheapest

Can retrofit with existing chargers

from £199 for Octopus Energy customers

from:

The Intelligent EV Charger
Next step: Vehicle to grid (V2G)
Introducing Powerloop – residential V2G

135 homes with a Nissan LEAF, V2G charger and Octopus Energy tariff

£3m Innovate UK grant

7 Consortium members, including:
The Powerloop V2G Leasing Bundle

A complete V2G solution from just £235 per month*

- A new Nissan LEAF 40kWh
- 100% renewable electricity from Octopus Energy
- A free Wallbox™ charger
- A free smart meter
- An app to control your charging schedule
- £30 cashback every month**