Growing the UK ULEV market
Understanding people’s motivations and barriers
Policy challenge

Our aim is for almost every car and van to be a zero emission vehicle by 2050 ... and we will invest £500m over the next five years to achieve it.

Conservative party manifesto
Highlights from the OLEV programme of market support

- Plug-in Car Grant
- Go Ultra Low comms campaign
- Chargepoint infrastructure
- Go Ultra Low City Scheme
UK car market

2.6 million new car registrations in 2015

1.3 million of these were for fleets

28,188 electric vehicle registrations in 2015

- 59% park overnight on private property but not garaged
- 25% park on the street overnight
- 14% park in a garage

- 94% under 25 miles
- 96% under 50 miles
- 99% under 100 miles

76% of households own at least one car
Progress

Plug-in Car Grant Eligible Registrations since 2011

- PICG eligible registrations per month
- PICG eligible registrations as % of total registrations

Growing the UK ULEV market
What are the key barriers to ownership?

Factors deterring people from buying an electric car or van, driving licence holders, 2014 and 2015 results

- Battery: distance travelled on charge: 36% (2014), 39% (2015)
- Cost: 27% (2014), 33% (2015)
- Technology: doesn't work/not proven: 8% (2014), 9% (2015)
- Limited choice (not many vehicles to choose from): 6% (2014), 11% (2015)
- Resale/residual value: 2% (2014), 3% (2015)
- Nothing: 4% (2014), 4% (2015)
- (Other): 9% (2014), 8% (2015)
- Don't know: 7% (2014), 6% (2015)

Sources: ONS Omnibus Survey February 2014 & 2015. Unweighted base: 664 and 735 respectively (full licence holders only) Up to 3 responses coded from each respondent hence total will add up to more than 100%.
For people to change their behaviour, the new behaviour needs to seem to them to be…

- more advantageous
- more ‘me’
- more prevalent
- more doable

Or the old behaviour needs to seem to be less of any of the above
Range anxiety and cost barriers
Range anxiety: the challenge – people’s perceptions…

There are **not enough chargepoints**

- Q1 2014: 69%
- Q3 2015: 56%

Takes **too long to charge**

- Q1 2014: 43%
- Q3 2015: 44%

**Can’t go very far / far enough** without recharging

- Q1 2014: 68%
- Q3 2015: 63%
Range anxiety: the good news

- ULEVs are the **main car in 9 in 10** households

- While range remains a key issue for owners, there are **high levels of satisfaction with EV ownership**

- EV owners **adapt** to their new cars, e.g. charging habits, daily range

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**Mileage of EVs and all vehicles**

- **Electric**
- **All vehicles**

**Annual mileage**

- Mileage of EVs and all vehicles
Range anxiety: the not-so-good news

Range and recharging are major issues, both of perception and reality

- When making decisions, people tend to give greater prominence to unusual or extreme experiences than more constant experiences
- While the ‘drive to Scotland’ is rarely undertaken, it can’t be factored out of decision making
- Even if it’s rare – people still want to know they’ll be able to do it
- Government and industry will have to work with, not against, these behavioural insights
It’s important to work *with* the way people tend to think and behave.
People **want a greener car – two thirds** said it was important

But people are **motivated more by saving money** than by saving the environment

Despite lower running cost, the upfront cost of an EV is higher than the conventional equivalent

<table>
<thead>
<tr>
<th>EV purchase price</th>
<th>Conventional car price</th>
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</thead>
<tbody>
<tr>
<td>Mitsubishi Outlander Plug-in - £31,749</td>
<td>Mitsubishi Outlander - £24,799</td>
</tr>
<tr>
<td>Nissan Leaf - £21,290</td>
<td>Ford Focus - £15,995</td>
</tr>
</tbody>
</table>
93% of new buyers said the Plug in Car Grant was important in their decision to buy an EV.

EV purchasing seems to be becoming more mainstream: 20% less likely to be male than in 2013.

Discounts and the PiCG move 34% of vehicles down into the <£30,000 price bracket.
Cost: the not-so-good news

- Consumers are not very effective at conducting cost-benefit analyses
- They give **greater weight to savings over the short-term than the long-term**
- While enthusiastic about the environment in the abstract, **consumers care more about price than environmental impact when it comes to purchase**

- We need to make it easier for people to make **accurate cost comparisons**
Summary
Key messages

- People’s attitudes and behaviour are critical to the success of this policy area. We need to work with, rather than against, people’s preferences.

- Current interventions appear to be making a difference.

- Behavioural insights can help us to achieve more to change behaviour – by making owning an EV feel more attractive and more ‘doable’.
Key research and our contacts


**Assessing the role of the Plug-in Car Grant and Plugged-in Places scheme in electric vehicle take-up** (2013)

- Jo Bacon – [jo.bacon@dft.gsi.gov.uk](mailto:jo.bacon@dft.gsi.gov.uk)
- Andrew Scott – [andrew.scott@dft.gsi.gov.uk](mailto:andrew.scott@dft.gsi.gov.uk)

Thank you