UK’s Ultra Low Carbon Demonstrator Programme

What have we learnt so far?

Andrew Everett
Head of Transport
Technology Strategy Board
Driving Innovation

- Allied Electric Vehicles
- Scottish Power
- Axeon Batteries
- Strathclyde University
- Glasgow City Council
- Jaguar Land Rover (Tata), Smart, Mitsubishi, Microcab
- Eon Energy
- Arup
- Coventry and Birmingham City Councils
- Aston and Coventry Universities
- Ford
- Scottish and Southern Energy
- Strathclyde University
- BMW Mini-E
- Scottish and Southern Energy
- Oxford Brookes University
- Delta Motorsport, Westfield Sports Cars, Ecotricity Cars, Lightning
- AEA Technology
- Green Motion Eco Car Hire
- Toyota
- EDF Energy
- MET Police, Transport for London, GCDA
- Smart UK
- Nudge Advisory
What has happened so far…

- **340** vehicles
- **198,639** individual journeys
- **1,155,389** miles covered
- **33,729** charging events
- **220 MWh** of electricity use recorded
How easy is it to use an EV compared to a ‘conventional’ car?

Pre Experience

3 Months Experience

As easy
Not as easy
Do you need to plan your journeys more?

- No more planning required
- More planning required

Pre Experience

3 Months Experience
Driving Innovation

..planning...

‘you really do need to think about where you’re going and plan things in advance that you know you’ve got enough charge in the car to be able to use it’

‘the main difference is having to think more’
Does driving an EV influence your driving style?

3 Months Experience

- More economical style
- No change in style
Driving Innovation

...driving behaviour...

‘I would say with an electric car, this is a joint venture, it’s a partnership. You drive me well and I’ll give you more miles.’

‘if you drive carefully you’ll probably do a lot more miles, if you drive badly you do a lot less’
Speed of charging suit the daily routine?

Pre Experience

3 Months Experience

Unsuitable

Suitable
Do you feel the car is as safe as a ‘conventional’ car?

Pre Experience

3 Months Experience

As safe

Not as safe
Do you think the low noise is a danger to others?

Pre Experience

Not dangerous

Dangerous

3 Months Experience
How long before you buy an EV?

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<th>Years to purchase</th>
<th>Men (Pre Trial)</th>
<th>Women (Pre Trial)</th>
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- Blue: Pre Trial
- Red: After 3 months
Conclusions...

- 340 vehicles have travelled over 1 million miles in the trial.
- The typical usage of the trial vehicles aligns to the national data.
- Users learn and adapt to the vehicles and charging routines quickly.
- Charging becomes less frequent as drivers learn about the car’s range.
- The low noise is seen by most not to pose a danger to others.
- There are very few who felt less safe using an EV.

http://www.innovateuk.org/ourstrategy/innovationplatforms/lowcarbonvehicles.ashx
Low Carbon Truck Demonstrator...

- Publically accessible gas refuelling infrastructure
- Enable the trial of alternative fuel, electric and hybrid commercial vehicles
- Help low-carbon vehicle producers
- Generate a body of data

Opens April 24th

https://connect.innovateuk.org/web/low-carbon-truck-%20demonstrator-trial