An inevitable transition

• A number of global factors are combining to create momentum in the move to ULEVs:

Drivers of change



• Global sales of electric vehicles doubled between 2011 and 2012.

The UK auto industry

- The UK automotive sector represents 7% of manufacturing output and 5.3% of manufacturing employment.
- The UK is now the fourth largest automotive producer in Europe, £11.2 billion to the UK economy.
- 80% of this production is exported and total production is expected to rise to over 2 million by 2017.
- The move to ULEVs is a huge strategic opportunity for the UK auto sector to position itself at the forefront of technologies that could dominate for decades to come, bringing jobs and economic growth.

Common myths about ULEVs

1 "Electric cars are slow"

Electric motors develop maximum torque from zero revs. In plain english this means they are very quick off the mark. Performance car manufacturers such as McLaren are increasingly using electric motors alongside petrol engines in their cars.

2 "They pollute as much as petrol/diesel cars"

All cars will generate pollution in their manufacture, use and disposal. But electric motors are much, much more energy efficient than internal combustion engines. Even with today's UK grid energy generation mix an electric vehicle is better for the environment than one burning fossil fuels.

3 "They will never be mass market"

Every major car manufacturer has plans to bring an ULEV to market over the next few years. There is a consensus in the UK auto industry that electrification (be it in battery-electric, hybrid, or fuel cell form) will increasingly be the way we power our cars in the future.

4 "There is nowhere to charge ULEVs"

Around 10,000 chargepoints have now been installed across the UK. In London there are more chargepoints than petrol stations. But all the evidence still suggests people will typically charge at home at night or at work. Office for Low Emission Vehicles

Driving the Future Today

A strategy for ultra low emission vehicles in the UK



The Government's strategy for ultra low emission vehicles (ULEVs), published in September 2013, sets out:

- Government's unprecedented long-term commitment to speeding the transition to low emission motoring in the UK;
- The once in a lifetime jobs and growth opportunities that this change could deliver;
- Why the automotive industry acknowledges that the move to new ways of powering vehicles is inevitable;
- Government's goal of seeing every car on the UK's roads effectively zero emission by 2050 to hit our Carbon Plan targets;
- The wider benefits from this change cleaner quieter towns and cities, improved air quality and energy security;
- The scale of our investment in this agenda: £400m to 2015, a further £500m to 2020 + over £1bn joint industry / Government funding for an Advanced Propulsion Centre.

Key commitments

Keeping the existing **plug-in vehicle grants** until at least May 2015.

Launching a **call for evidence** to inform the £500m 2015-2020 package of support.

Jointly developing a **consumer communications campaign** with industry.

Working with the UK Automotive Council to **strengthen the UK ULEV supply chain** and maximise the benefits of the Advanced Propulsion and Energy Storage centres.

Updating Government Buying Standards to deliver higher public sector ULEV uptake.

Continuing to fund the £37m national chargepoint infrastructure package.

Working with industry on an **initial network** of circa 65 hydrogen refuelling stations.

Maintaining a strong, clear and lasting set of tax incentives for the purchase of ULEVs.

Clarifying the tax position for ULEVs with HMRC.

Supporting ambitious but realistic EU new vehicle emissions targets.

Offering a **prize of up to £10m to develop long-life battery technology** for the next generation of ULEVs.

Continuing to require the national rollout of **smart meters into homes by** 2020.

Benefits for ULEV drivers

- Plug-in grants of up to £5,000 and £8,000 for eligible cars and vans;
- ULEVs exempt from Vehicle Excise Duty;
- ULEVs zero rated for company car tax;



Distances approximate, theoretical calculations using best in class vehicles

- Energy costs will depend on the tariff but could be less than 3p per mile for an electric vehicle or 100 miles of motoring for less than £3. Maintenance costs can be lower too.
- Up to £1,000 grant available for **domestic** chargepoint installation.

The UK's strategic approach





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