

The Road Ahead

Towards 2050 ▶▶▶



Introduction of new test cycles like **WLTP** and **Real Driving Emissions** to replace outdated emissions tests and produce more representative and reliable data.



Future of Mobility identified as one of four **'Grand Challenges'** in UK Industrial Strategy.

“
We will maximise the advantages for UK industry from the global shift to clean growth – through leading the world in the development, manufacture and use of low carbon technologies, systems and services that cost less than high carbon alternatives...
”
UK Industrial Strategy White Paper, 2017



2050



Drive for greater vehicle autonomy and more connected vehicles. Impacts on mobility demand and carbon emissions to be determined.



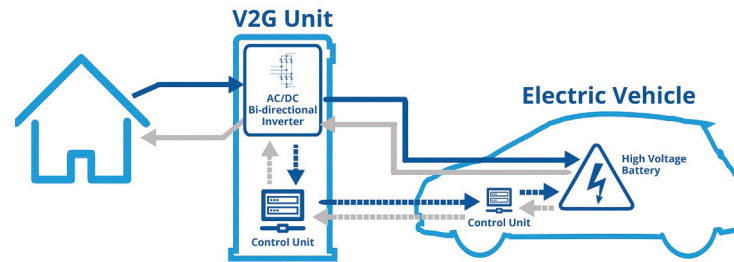
Rapid developments in information and communication technology create huge opportunities for the sharing economy, improving resource efficiency.

Growing vehicle electrification creates power-grid challenges and opportunities for energy storage, vehicle-to-grid and grid balancing.

The LowCVP's EV Network Group is working with stakeholders to make progress in this area.



Automated Vehicles: Automatically Low Carbon?



Courtesy: Cenex

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Place of registration:
England and Wales



The journey to a zero emission future
15 years of working in partnership on the low carbon road



Publication advisors



Policy Developments on the Low Carbon Road

Powering Future Vehicles Strategy sets out Government's commitment to low carbon road transport, paving the way for the establishment of the Low Carbon Vehicle Partnership.



2002

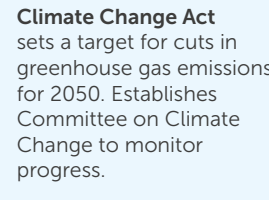


“These commitments make the UK the first country to set itself a target for shifting its mainstream motoring over to low carbon technology helping the environment, improving motoring, and helping build competitive advantage for the UK's auto industries, as the global market demands increasingly cleaner vehicles”
Tony Blair, PM



Stern Review says that climate change is the greatest and widest-ranging market failure ever seen. The benefits of strong, early action outweigh the costs.

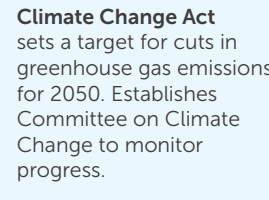
VED (Road Tax) changes provide financial incentives for lower carbon cars.



“You don't realise until you sit in this ministerial chair, what a brilliant piece of legislation the Climate Change Act has proved to be, holding our feet to the fire...”
Rt Hon Claire Perry MP, 2017



2009



European 'Cars and CO₂' target enters into force - European regulation sets binding target for European new car fleet average of 130g CO₂/km by 2015.



2009

Transport one of key areas of challenge for cutting emissions. Committee on Climate Change highlights need for electrification and to tackle emissions from ICEs in short term.
Committee on Climate Change, 2017.



Renewable Energy Directive states that all EU countries must ensure that 10% of their transport fuels come from renewable sources by 2020.

European targets for air quality standards (NO_x and fine particles) enter into force, adding to earlier targets for SO₂, PM10 etc.



2011

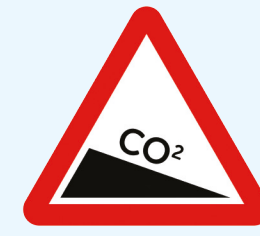


European CO₂ targets for vans enter into force. Modelled on 'Cars and CO₂'.

Advanced Propulsion Centre (APC) formation heralds an unprecedented era of co-operation between industry and government.



2011



EU agrees further target to reduce average new car CO₂ emissions to 95g/km by 2020. 'Super credits' for low-emission vehicles. 2025 target to be required.

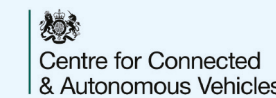
Air quality: Environmental Group Client Earth's win in legal case challenging Government's plans plays part in raising political profile of air quality as issue.

Innovate UK
Knowledge Transfer Network

2011



“Low and zero-emission vehicles are a colossal opportunity for Britain to play a leading part in an industrial revolution”
Rt Hon Oliver Letwin MP, Minister for Government Policy



2015

Clean Growth Strategy sets ambitious blueprint for Britain's low carbon industrial future.



2018

Nissan introduces second-generation Leaf with 235 miles range (NEDC).

Electric vehicles sales reach new record.

National Grid highlights potential for network of 50 350KW motorway charging points with ability to recharge a car in 5 to 12 mins.

“In the next 10 years, the sector will see more change than in the previous hundred. From the engines that power our cars, to the way we control them and our attitudes to owning them, technology is changing what the industry looks like and where money can be made.”
Greg Clark MP, Secretary of State for Business, Energy and Industrial Policy



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2018

Progress on the low carbon road 2003–2018

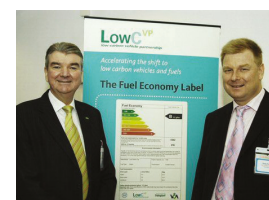
2003

Low Carbon Vehicle Partnership established following recommendation of Automotive Innovation and Growth Team (AIGT) to Government. Prof Jim Skea is launch director. Graham Smith, Toyota GB MD, is appointed as Chair.



“The LowCVP publishes a major study on **well-to-wheel carbon emissions** for bioethanol made from wheat.”

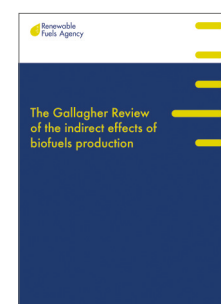
Greg Archer appointed LowCVP Managing Director.



UK's first **colour-coded fuel economy label** for new cars launched at LowCVP's second annual conference by Transport Secretary Alistair Darling.

2008

LowCVP MD co-authors seminal '**Gallagher Review**' on the indirect effects of biofuels.



LowCVP collaborates with DfT in setting up **Green Bus Fund** which leads to £30m orders, mainly for hybrid and pure electric buses.

First LowCVP **Low Carbon Champions Awards** held at Twickenham Stadium.



2011



LowCVP works closely with DfT to deliver **Green Bus Funds 2 to 4**. LowCVP plays key role in work leading to £9.5m **Low Carbon Truck Programme** and Plugged-in Vans grant programme.



Andy Eastlake appointed MD.

LowCVP and stakeholders report on potential pathways to implementation of the Renewable Energy Directive to 2020.



LowCVP publishes a major report on barriers to the adoption of **low carbon HGVs**.



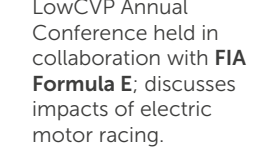
LowCVP publishes work on practical options for cutting air pollution from buses.

2014

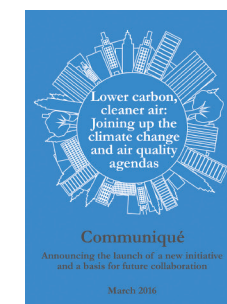
LowCVP's **Investing in the Low Carbon Journey** highlights industrial benefits of the low carbon shift in road transport.



LowCVP publishes **Guide to Local Measures for Encouraging the Uptake of Low Emission Vehicles**.



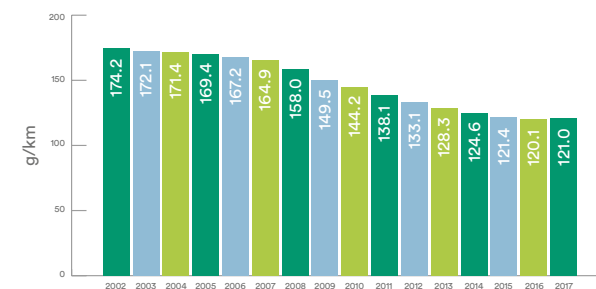
LowCVP Annual Conference held in collaboration with **FIA Formula E**; discusses impacts of electric motor racing.



LowCVP collaborates with Clean Air Alliance to launch new joint initiative, '**Lower Carbon, Cleaner Air**' to highlight links between the CO₂ and air quality agendas.

2017

UK average new car CO₂ emissions g/km (source: SMMT)



LowCVP's **Bus 'trilogy'** highlights rapid progress in greening bus fleets.