



Office for Low Emission
Vehicles

The Road to Zero

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Head of OLEV



Overview

- 01 UK Government aims**
- 02 Introduction to OLEV**
- 03 Road to Zero – progress so far**
- 04 Energy system challenges**



Our mission

**“ To put the UK at the forefront of the design and manufacturing of zero emission vehicles...
...and for all new cars and vans to be effectively zero emission by 2040 ”**

Prime Minister, May 2018



Infrastructure



Energy



Hydrogen



Department
for Transport

Office for
Low Emission
Vehicles



Department for
Business, Energy
& Industrial Strategy



Comms

Go Ultra Low



Local delivery



Incentives



R&D

Drivers for change Environment



**Improving air
quality**



**Cleaner, quieter
cities**



**Reducing greenhouse
gas emissions**



Good progress is being made...

Zap-Stats – 17 October 2018

18360

CONNECTORS

10474

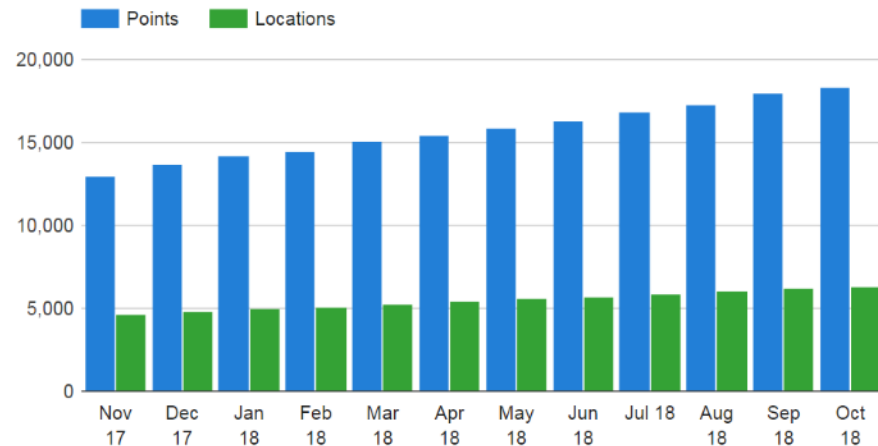
DEVICES

6544

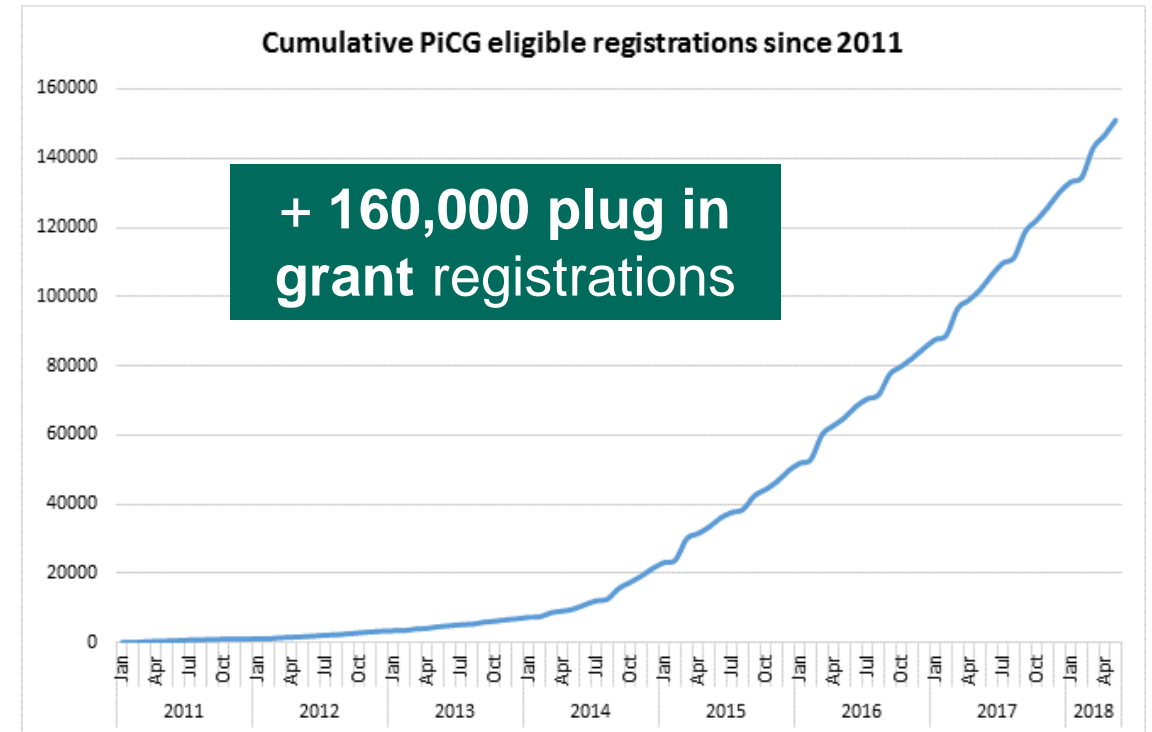
LOCATIONS

840

LAST 30 DAYS



ZAP MAP



...but how to get to 2040?



The Road to Zero

Next steps towards cleaner road transport and delivering our Industrial Strategy

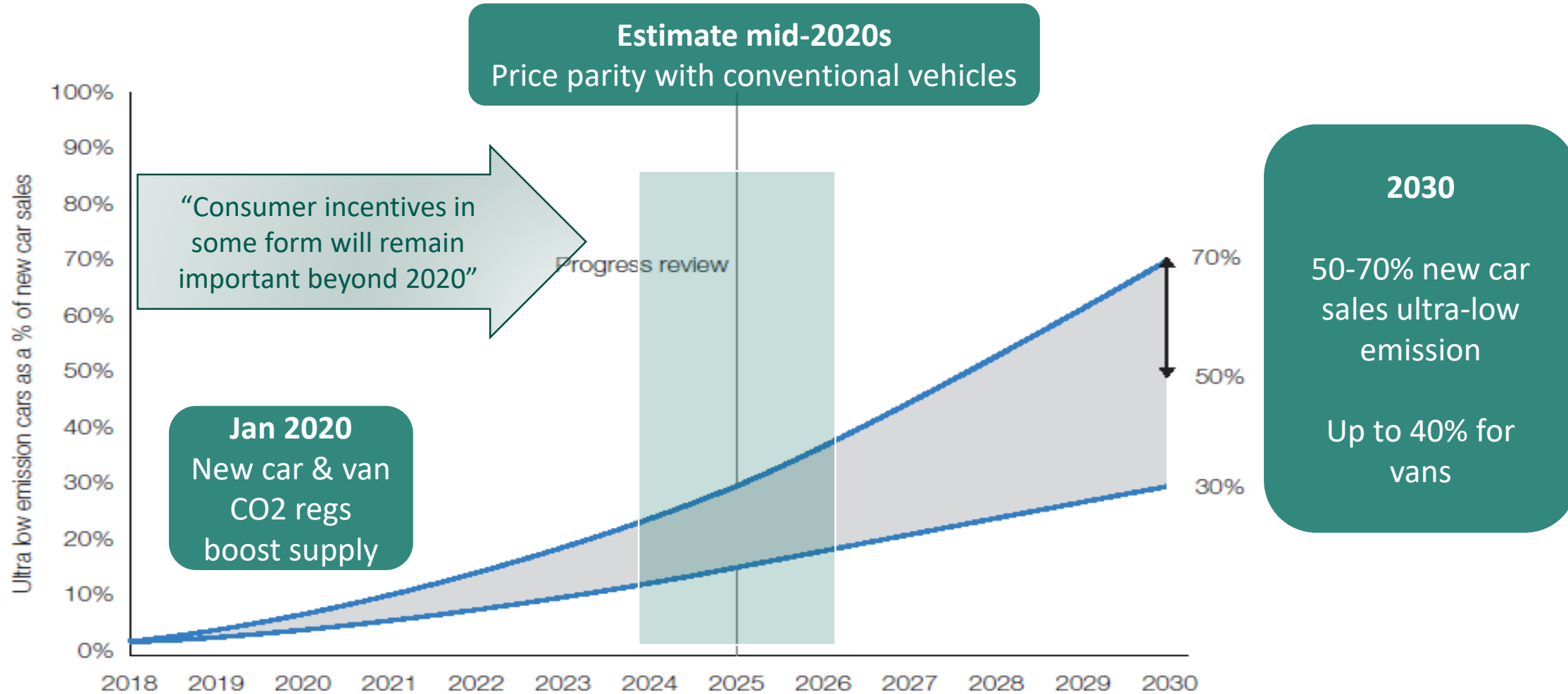


July 2018

Government's July 2018 strategy sets out our long-term ambitions and measures to get there

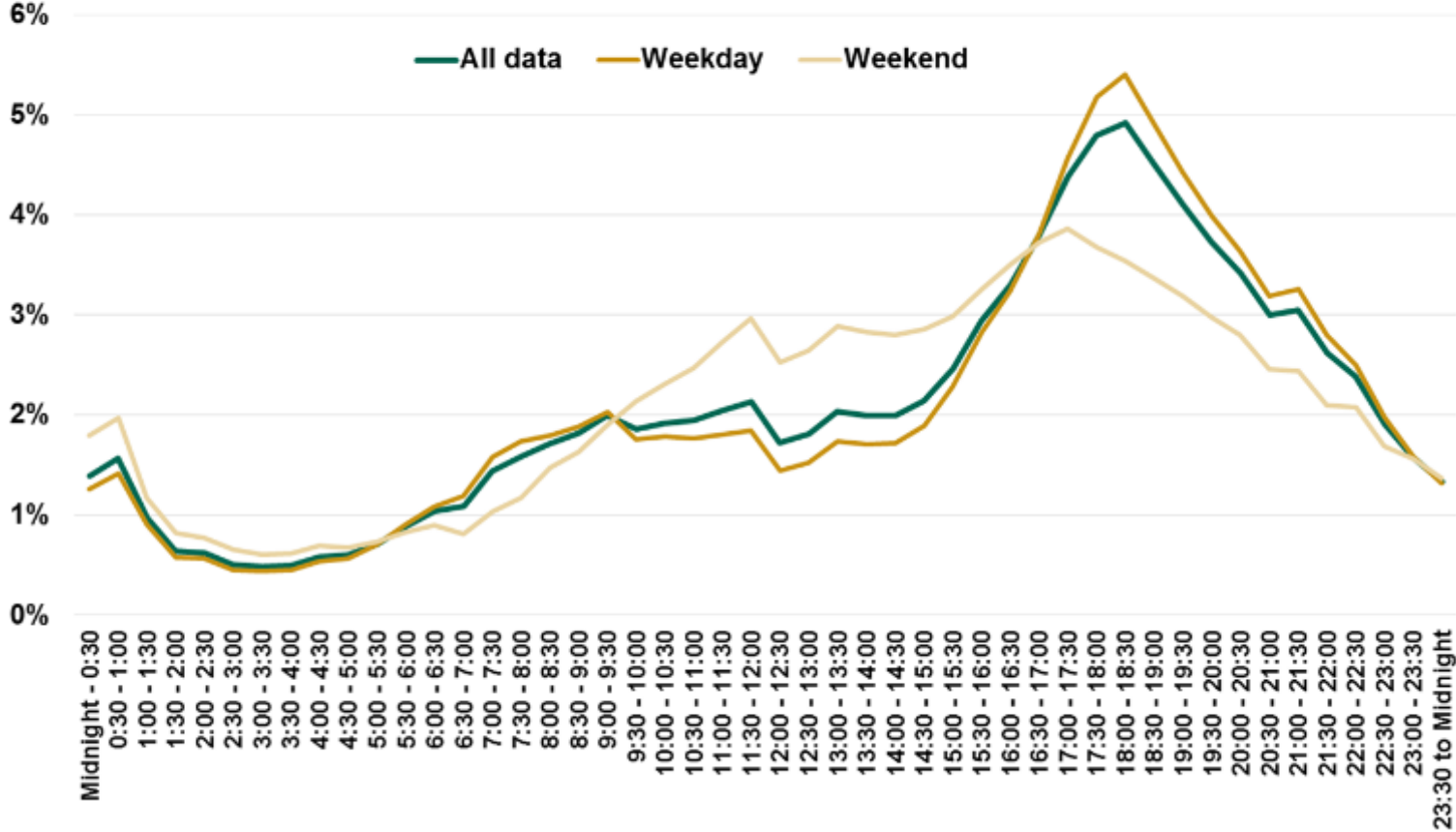
£1.5bn funding over 2015-2021

We have set out a timetable to 2030

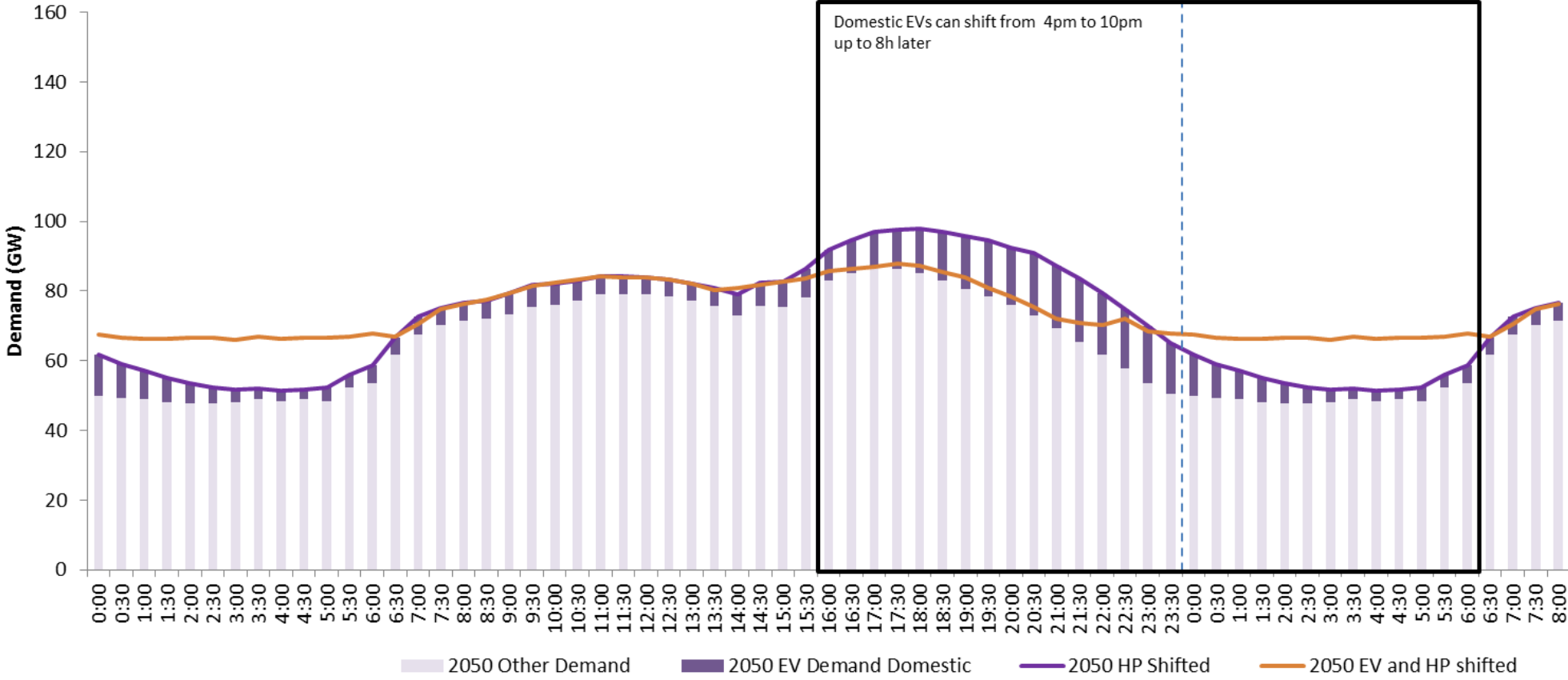


Smart charging

Frequency of charging start times: Oct 14 to Sept 15



Smart charging





Strategic Charging Network

Ultra-rapid electric vehicle charging will be necessary along the motorway network

60%

of the 165 motorway sites in England and Wales are within 5km of the transmission network infrastructure

20%

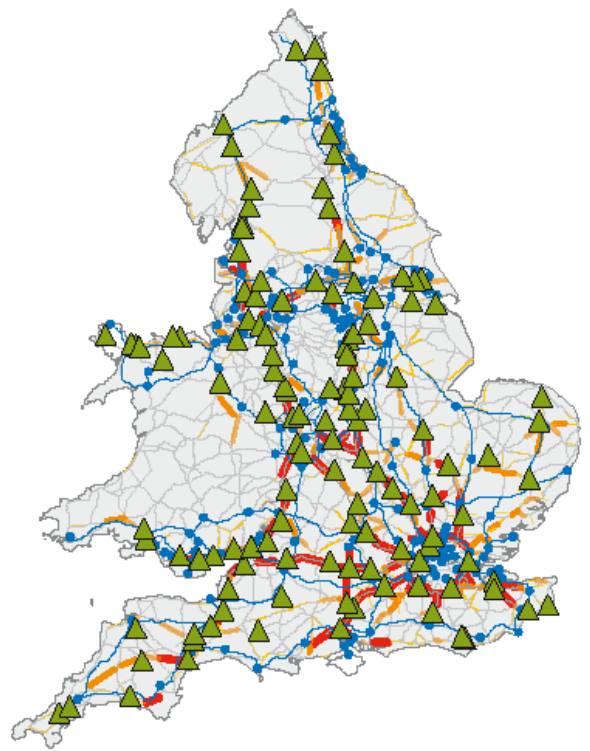
of these motorway sites are within 1km of the transmission network infrastructure

We've been working with motorway service station operators to look at the power capacity to their sites. And we've been assessing the infrastructure needed to support sufficient numbers of ultra-rapid EV chargers in the future, to avoid queues at peak times and to minimise the time-to-charge.

Key

Traffic (miles)²

- Very high (163-336K)
- High (101K-163K)
- Medium-high (71K-101K)
- Medium (49K-71K)
- Low (34K-49K)
- Transmission overhead line
- Transmission substation
- ▲ Existing MSA³ and select petrol station sites⁴



² Traffic is calculated by multiplying the AADF (annual average daily flows: number of vehicles passing a point in the road network each day) by the corresponding length of road and by the number of days in the year; Length of road is one section (episode) of each road between



Smart Charging S.I.

- Consultation expected early 2019
- Laying of Regulations mid 2019
- Implementation potentially mid 2020

Automated and Electric Vehicles Act

- Access & Connection
- Information
- Reliability
- Fuel retailers/MSAs
- Smart capability

Implementing Smart Charging through Regulations





Strategic challenges

Future use behaviour

On-street charging

Emerging technologies

Not one size fits all

Smart charging

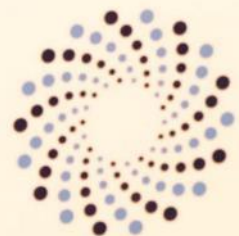
“We are here today because the issues we face are not the preserve of any one country. They belong to all of us – and they require all of us to pull together, to solve the problems that all our countries face.”

PM's speech at the Zero Emission Vehicle Summit: 11 September 2018



Zero Emission Vehicle Summit

Driving the change



Zero Emission
Vehicle Summit
Driving the change

THANK YOU

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