New Car CO2 progress and the future of motoring taxes

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New Car CO_2 Report 2015

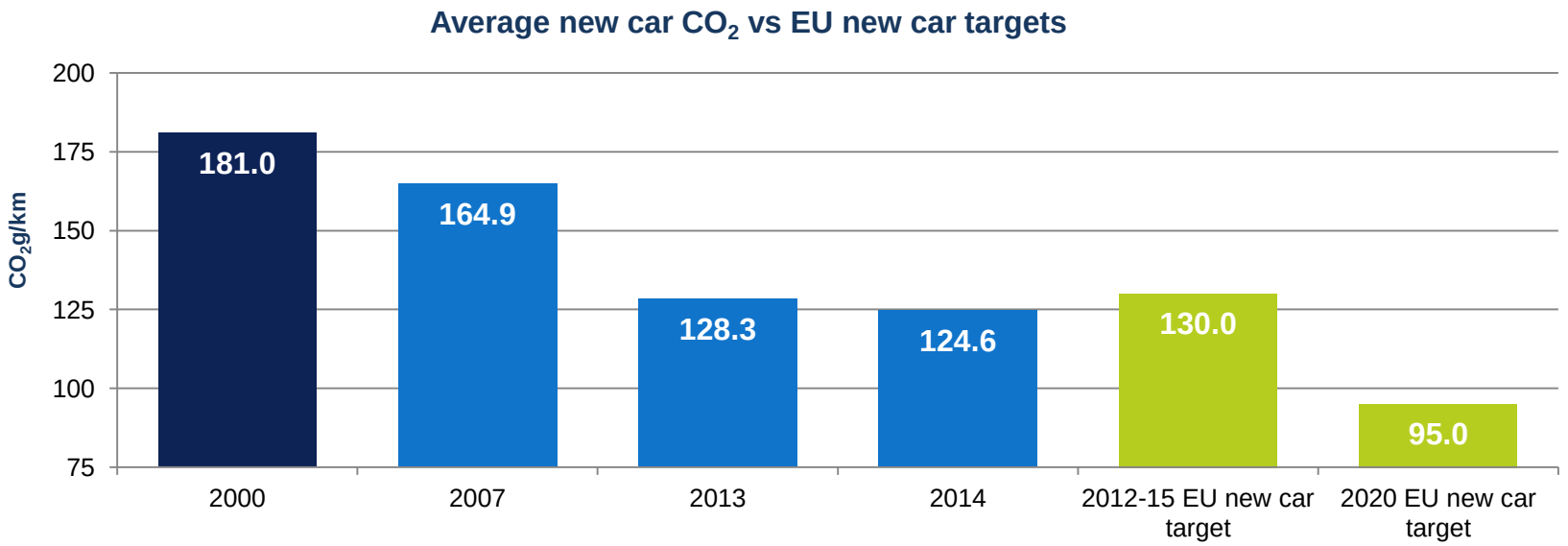
The 14th Edition

Aleksandra Taskovic, Business Economist, SMMT

New Car CO_2 Report 2015

New car CO_2 emissions continue to fall

- In 2014, average new car CO_2 emissions fell to 124.6g/km, 2.9% lower than in 2013.
- CO_2 reductions are noted in all fuel, segment and sale types in 2014, in which all registrations grew year-on-year.
- The new car CO_2 average is 4.2% below the 130g/km 2015 pan-EU target.



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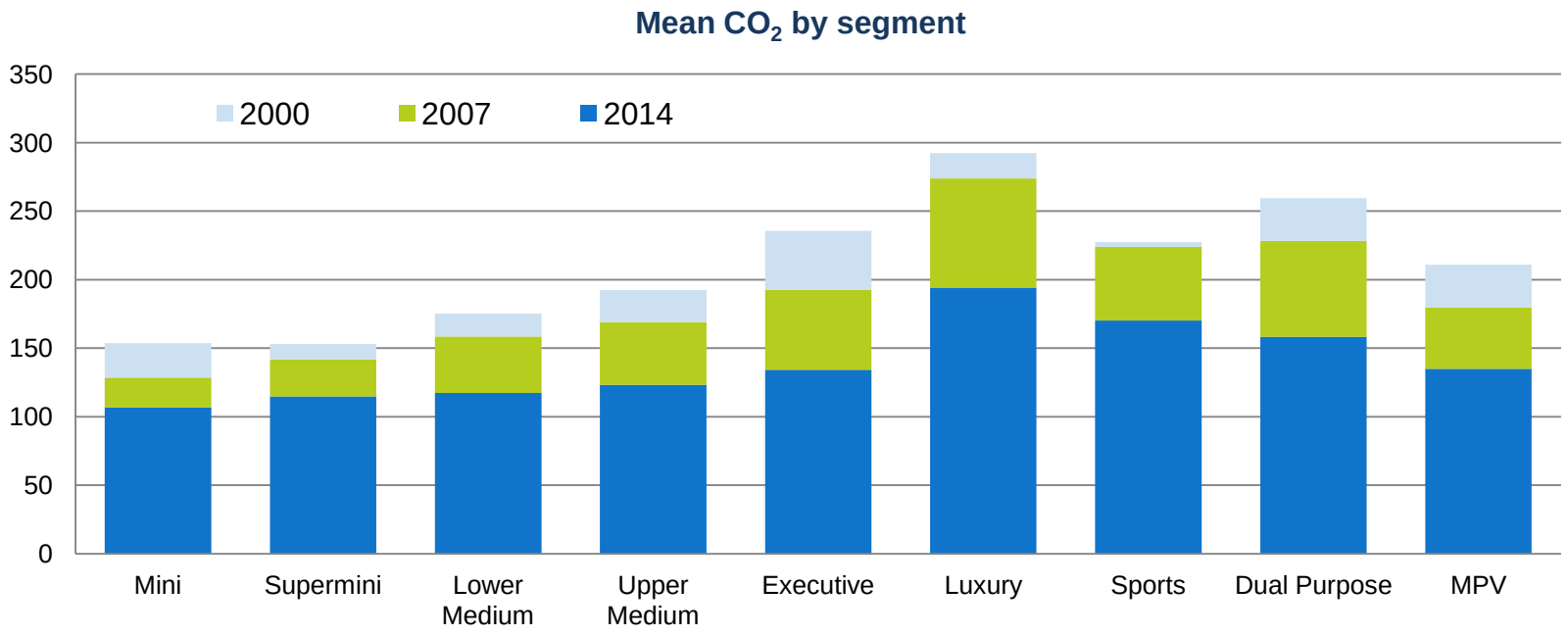
CO_2 emissions decreased in all nine segments in 2014

- The segment range from Mini to Upper Medium vehicles continue to emit the lowest CO_2, but significant improvements in Luxury and Dual Purpose segments since 2000.
- In 2014, ultra-low emission vehicles were available in each of the nine segments.



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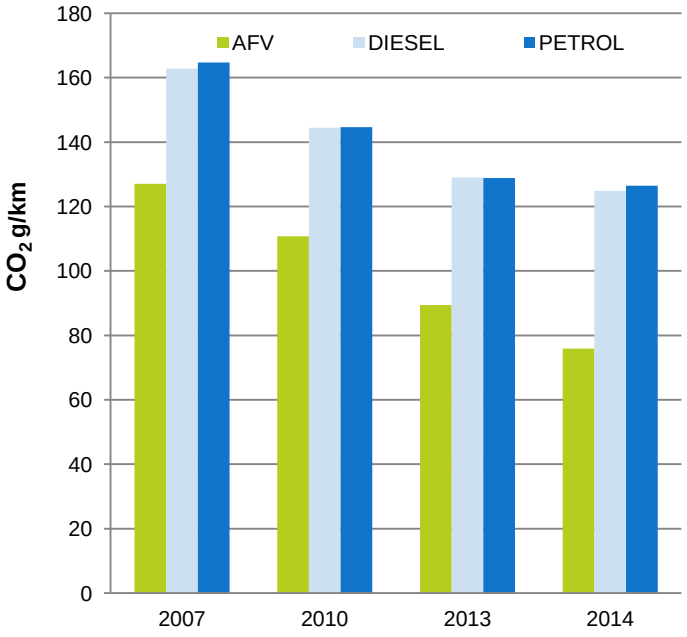
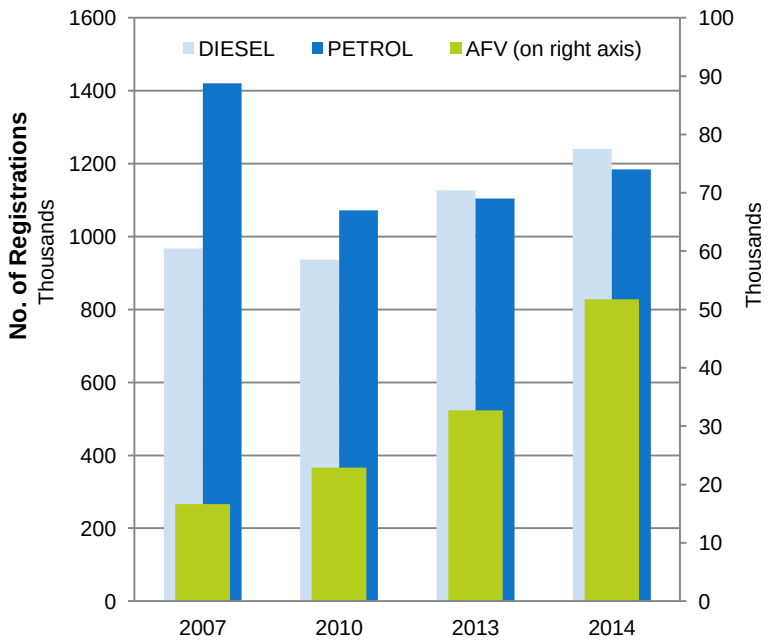
CO_2 reductions were achieved across all fuel types in 2014

- Petrol and diesel engines are becoming less polluting, reductions can be attributed to all fuel types
- The increasing uptake of AFVs was key in 2014, AFV registrations rose by 58.1% since 2013

Mean CO_2 per fuel type



Registrations per fuel type



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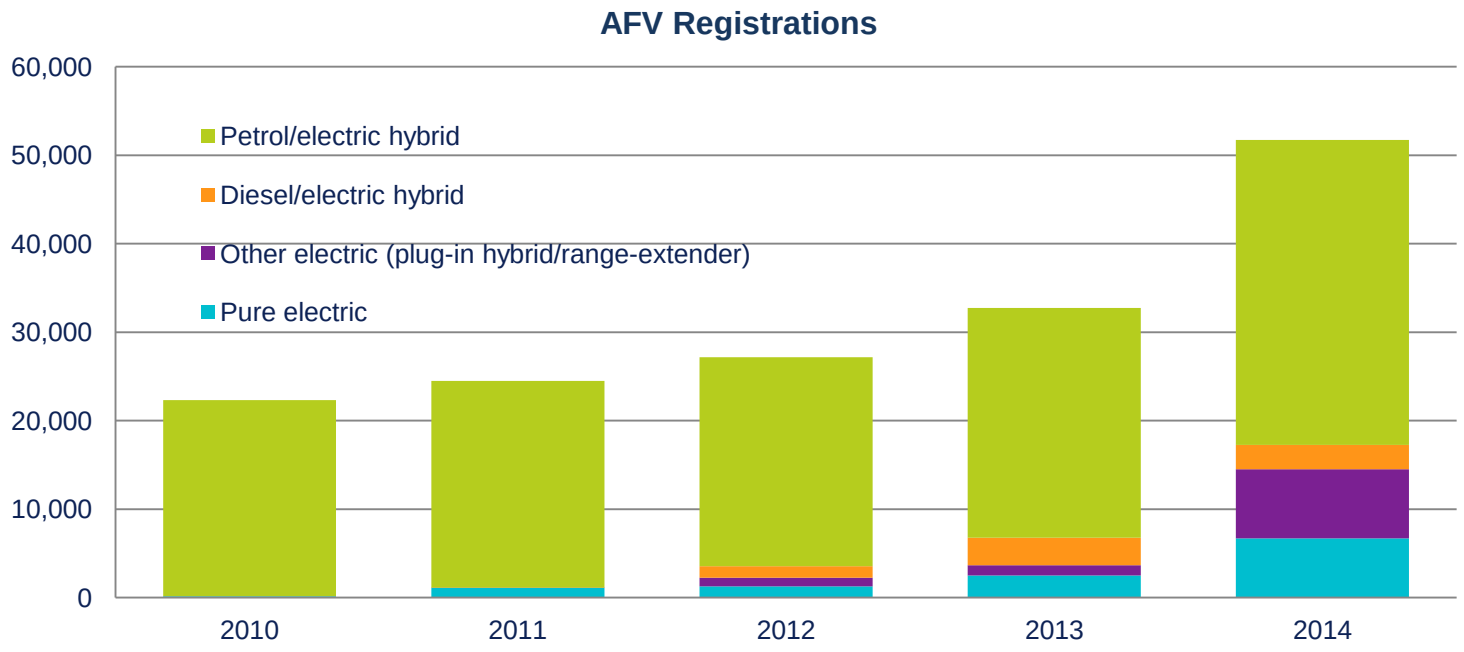
Significant growth of AFVs in 2014 from over 16,000 in 2007 to nearly 52,000 in 2014

- Registration of pure EVs more than doubled, and plug-in hybrids and range extended vehicles quadrupled in 2014. Hybrids remain the most popular AFV.
- 9 new models in 2014 and 10 new models expected in 2015



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Future role of electric vehicles?

- The Committee on Climate Change suggested that it is realistic to assume that by 2030 electric vehicles will constitute 60% of new car sales.
- Electric and hybrid electric vehicles comprised 0.7% of the market share in 2008 and grew to 2.2% at the end of 2014.
- Continued support and push from the government and industry is crucial.
- Key barriers and recommendations? (*Element Energy*)

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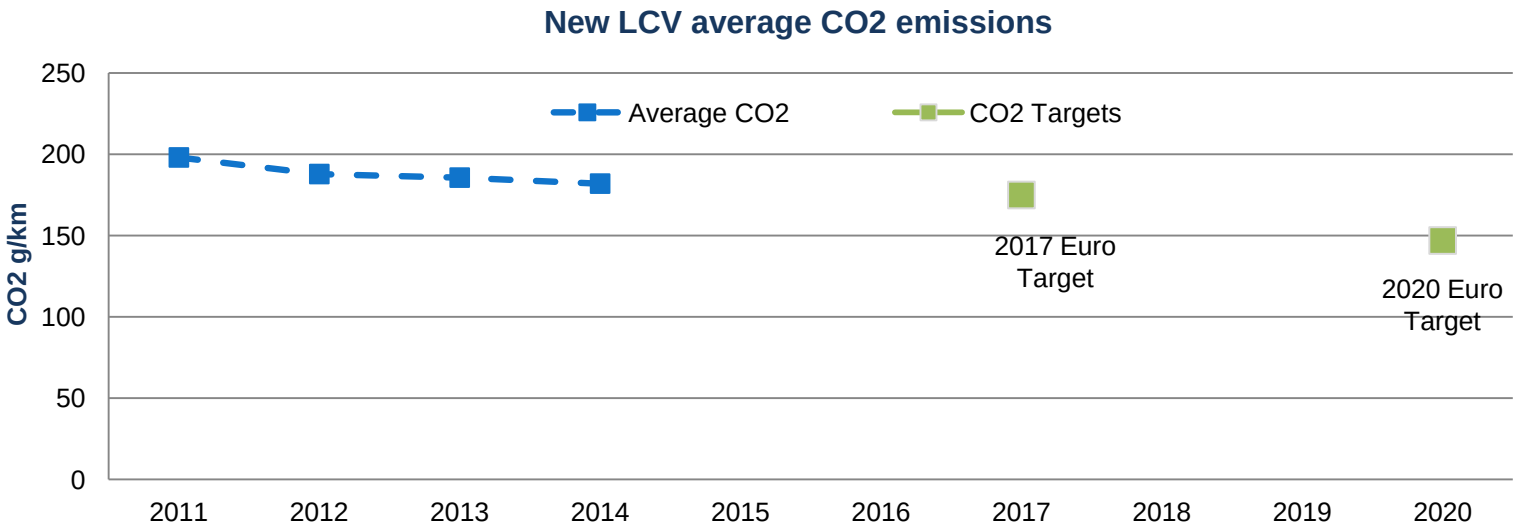
New light commercial vehicles' average CO_2 emissions in decline

- New LCVs CO_2 emissions fell to 182.4g/km in 2014, decreasing by 1.8% since 2013 and by 3% since 2012.
- A shift to lower emitting LCVs supported by government encouraging buyers through financial incentives
- LCV purchases are driven by utility and are not directly comparable to cars - emissions from vans with high payloads may be of set through the requirement for fewer vehicles on the road



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Key drivers of development

Government

- Support for ULEVs
- London's Ultra Low Emission Zone
- Advanced Propulsion Centre

Manufacturer innovation and technology

- Hybrids, Plug-in hybrids and range extenders
- Electric vehicles

Public-Private Partnerships

- Go Ultra Low

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Looking ahead – Key challenges & opportunities

- Connected and autonomous vehicles
- Road and traffic forecasts
- WLTP Procedure, Post-2020 CO_2 Regime
- Future of Plug-In Car Grant & VED

SMMT's 14th Edition New Car CO_2 Report 2015

Full report available at: www.smmt.co.uk/CO2report

The Society of Motor Manufacturers & Traders

SMMT – The future of motoring taxes

Sam Alderson, Economist, CEBR

Cebr

Evolution of Vehicle Excise Duty

- VED is a national tax levied annually on the ownership of road vehicles.
- Historically revenues were hypothecated to help fund road building and maintenance.
- For much of its history, VED was levied as a flat rate.
- Proposals to abolish VED and switch solely to a fuel duty regime were made in the late 70s.
- However, as a relatively stable and predictable source of revenue it survived.
- After taking office in May 1997, the Labour Government overhauled the flat-rate system to a graduated system, to signal and spur people to choose more fuel efficient models.
- Current system graduates cars by g/km of CO_2 emissions across 13 bands, A – M.

		Car Parc Year end 2014		Rate	New cars in 2014		Rate
VED Band	CO_2 (g/km)	All Parc %	All Parc cumulative %	Standard	All new %	All new cumulative %	1st Year
A	Up to 100	3.3	3.3	£0	17.7	17.7	£0
B	101 to 110	4.7	8.0	£20	15.9	33.6	£0
C	111 to 120	8.4	16.4	£30	20.7	54.3	£0
D	121 to 130	7.7	23.8	£110	14.3	68.6	£0
E	131 to 140	12.9	36.7	£130	11.4	80.6	£130
F	141 to 150	12.2	48.9	£145	6.8	86.7	£145
G	151 to 165	16.4	65.3	£180	6.5	93.2	£180
H	166 to 175	7.2	72.5	£205	2.2	95.4	£295
I	176 to 185	5.8	78.3	£225	1.3	96.8	£350
J	186 to 200	5.7	84.0	£265	1.4	98.2	£490
K	201 to 225	5.0	89.1	£290	1.0	99.2	£640
L	226 to 255	3.1	92.1	£490	0.5	99.6	£870
M	Over 255	2.9	95.0	£505	0.4	100	£1,100
unknown		5.0	100				

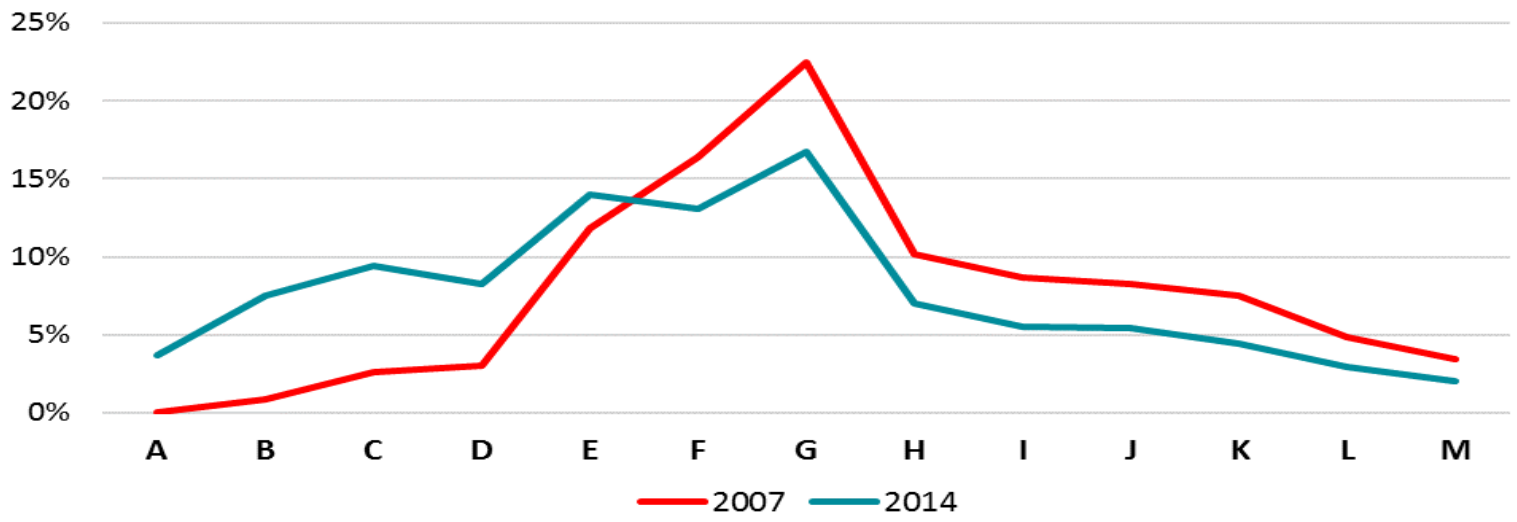
VED part of wider system of measures encouraging shift to more efficient vehicles

- In 1998, the European Automobile Manufacturers Association (ACEA) and the European Commission reached a voluntary agreement to limit the amount of carbon dioxide (CO_2) emitted by passenger cars sold in Europe.
- This ultimately formed a precursor to the European Commission's targets for 2015 and later 2020.
- The European Union followed suit, later introducing regulation that set mandatory CO_2 emissions limits for new passenger cars of 130 g/km for 2015.
- In light of sustained progress, last year saw a further mandatory target for CO_2 emissions of new passenger cars and light-commercial vehicles implemented.
- In addition to VED, the government since 2002 has graded company car tax to cars CO_2 ratings.
- From 2009, government has also referenced capital allowances (a cost relief for business investment against taxable profits) for cars to their CO_2 ratings and status i.e. a new or used car.
- The Plug-in Car Grant programme started on 1 January 2011 and is available across the UK. The programme reduces the up-front cost of eligible cars by providing a 25% grant towards the cost of new plug-in cars capped at £5,000.

VED's stable revenue base masks fiscal issue as emissions fall

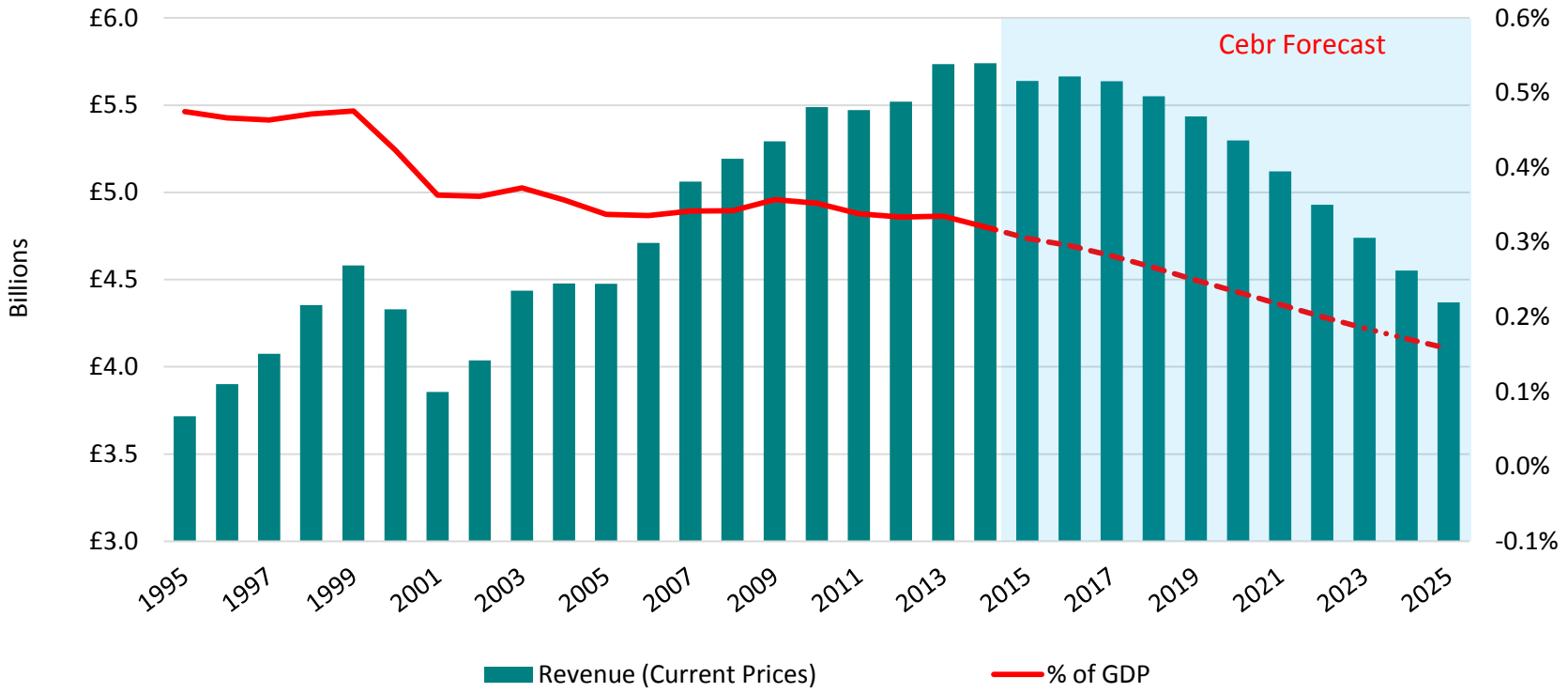
- VED contributed around £6bn of government revenue or 1.2% of the total tax take.
- While VED revenues have risen in monetary terms in recent years, they have declined slightly in real terms. Real revenues peaked in 1999 and have held relatively steady around £6bn (2013 prices) in recent years.
- However, with the total volume of cars growing by 19% between 1999 – 2014, stable revenues implies a notable decline in the average tax take per car.
- The average new car in 2014 paid no VED in its first year. In fact, the £170m in revenue collected from newly registered cars in 2014 was borne by just one in every three vehicles.

Share of cars in UK motorparc (registered post 2001) in each VED band



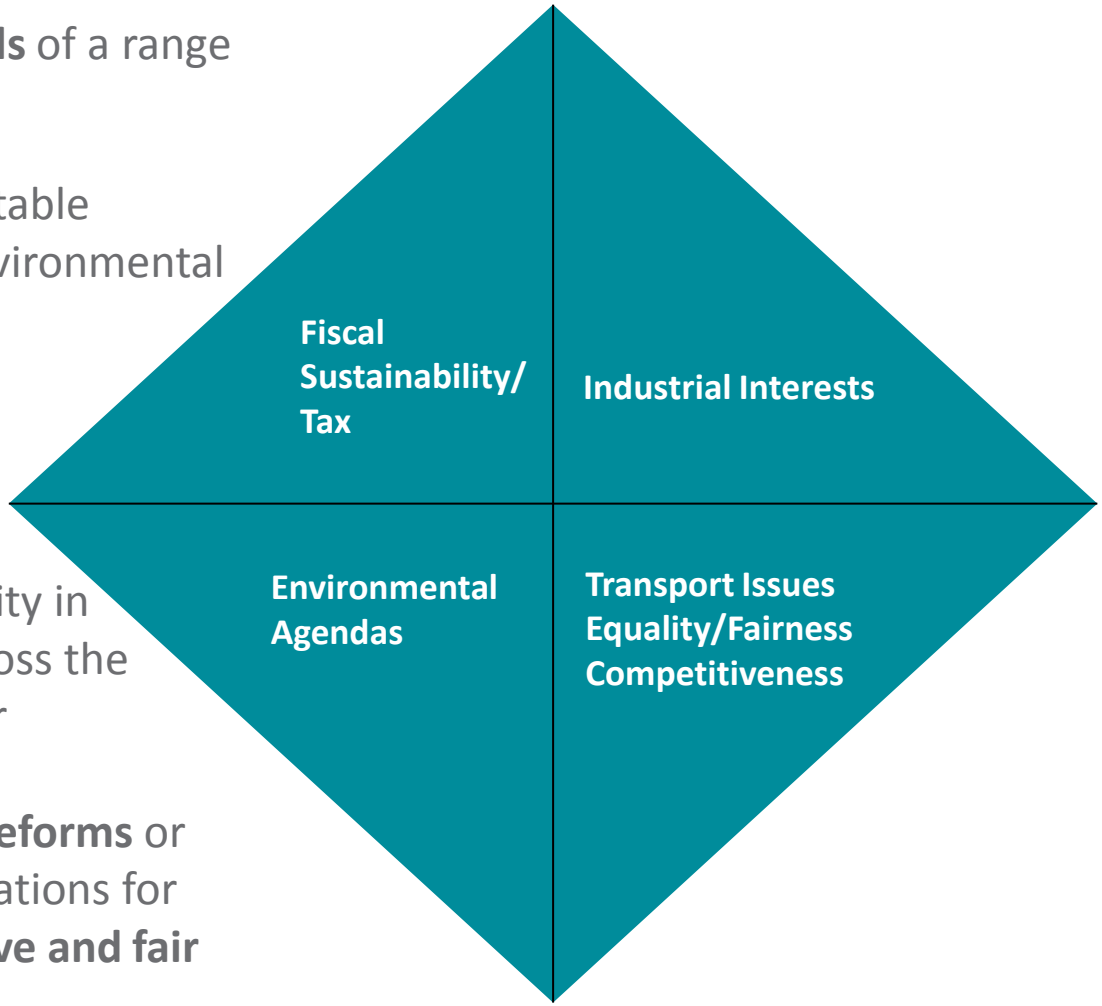
Fiscal unsustainability - VED projection (Cars) to 2025

- Central forecasts based on recent rates of reduction in CO_2 emissions and the UK meeting EU 2020 targets of 95 g/km
- VED revenue expected to fall from over £5.7bn in 2013 to < £4.4bn in 2025
- Receipts projected to decline from 0.33% of GDP in 2013 to just 0.16% of GDP in 2025
- By 2025, based on the current system, almost 80% of new cars would be exempt from VED payments – meaning government policy becomes fiscally unsustainable



Balancing needs of government, manufacturers & transport users

- Difficulties lie in **balancing the needs** of a range of automotive market players:
  - **Governments** wish to secure stable revenue as well as meeting environmental targets
  - **Manufacturers** wish to tailor marketing and production to best meet industrial interests
  - **Transport users** wish for equality in costs and competitiveness across the range of cars and vans on offer
  - Important to ensure that any **reforms** or rate changes & scale differentiations for VED designs remain **competitive and fair** for all

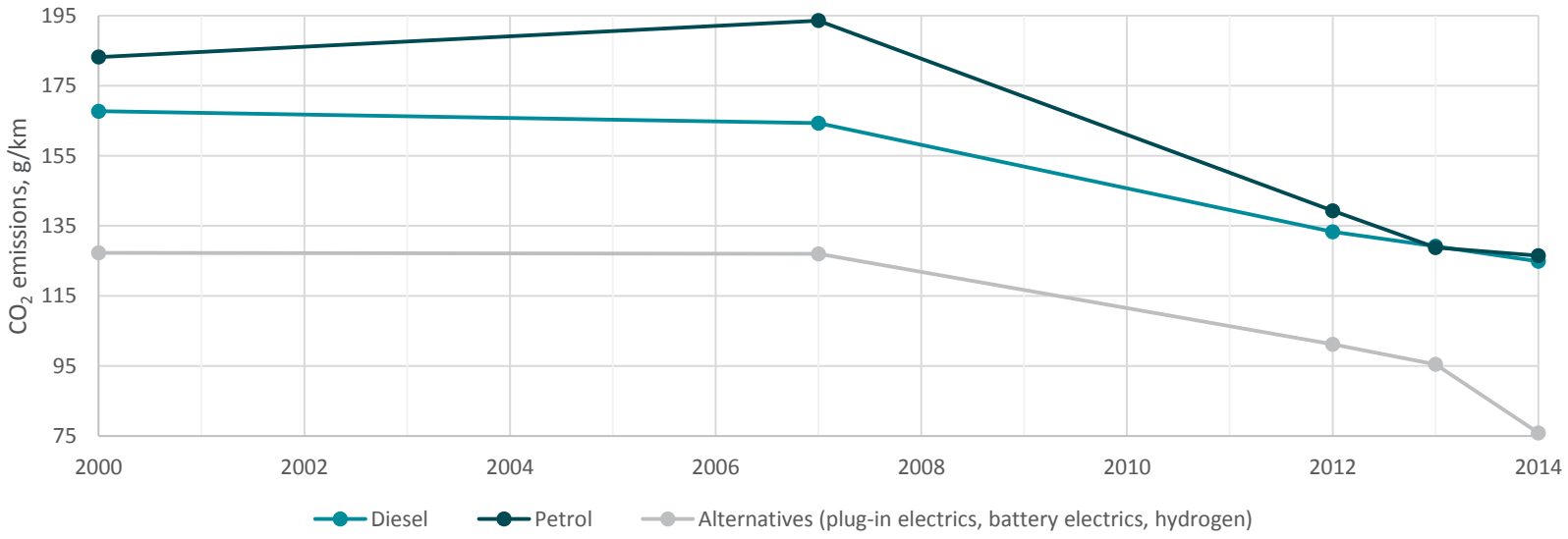


Environmental agenda – climate change & air pollution

- Overall pollution dependent on emissions per car as well as total miles travelled
- UK regulation and fiscal policy been very effective in pursuing environmental agenda
- UK has met 2015 CO_2 target 2 years ahead of schedule (124.6 g/km) but still needs to meet more stringent EU targets of 95 g/km by 2020 – this will be far more challenging

- Main drivers of lower CO_2 emissions are:
  - EU regulation – revealed steady improvement in efficiency of conventional vehicles
  - Shift towards diesel cars
  - Incentives provided by VED regime
  - Better informed consumer choices
- Over longer term, need shift to AFV's

Convergence in fuel economy as petrol CO_2 emissions fall



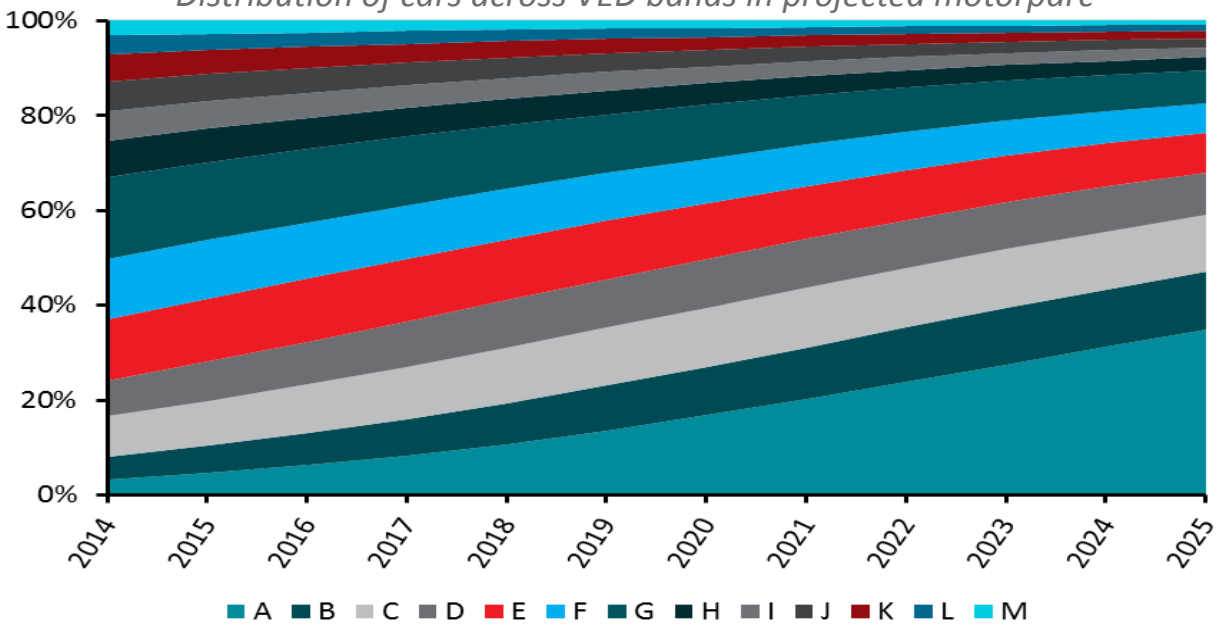
Fairness for all – shouldering the VED burden

- In reforming motoring taxation – measures should aim to be fair towards all groups of society
- The burden of VED is steadily shifting towards older, less efficient cars – impacting poorer groups?

- Air quality issues are localised problems, VED remains a national tax
- ULEZ charge imposed on non-compliant vehicles to reduce air pollution (NOx and PMs) in London
- Differential taxation between motorists but focused on urban areas where air quality/congestion issues are more prevalent

- VED rates for LCV's not graduated so little incentive through VED to minimise CO_2 emissions
- Van purchasers should be incentivised to shift down the supply chain & buy more efficient models
- Economic activity has risen and with structural shifts, distances travelled by vans is increasing

Distribution of cars across VED bands in projected motorparc



Recommendations and additional considerations

Recommendations

- Graduating VED bands for cars – segment top band A into new bands
- Potentially increase rates for next level of bands
- Maintain “showroom tax” & extend to currently uncharged bands
- New system for vans - graduate vehicles by CO2 emissions per tonne of loading capacity

Additional considerations

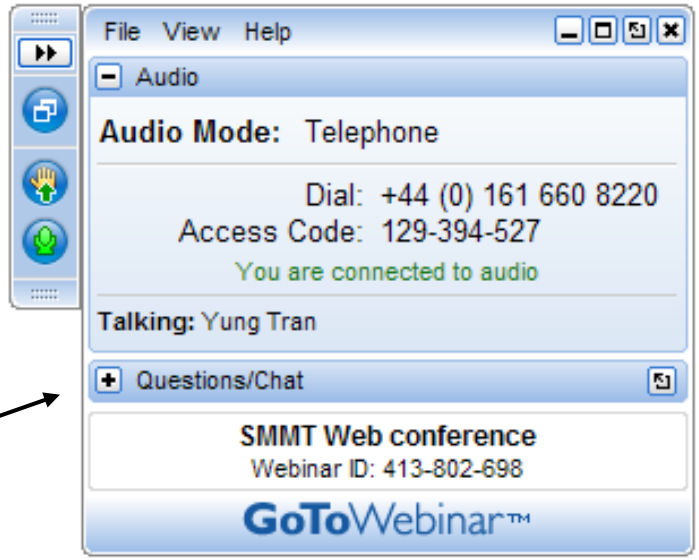
- Alternative tools used in concert with VED (simple, effective, valuable and fair)
- Keep incentive schemes or offer discounts on use/ownership charges
- Regulatory standards – trial congestion & air quality zones
- Localised measures - road user charging with nationally unified guidelines
- Hypothecating revenues to local scrappage schemes/road traffic management
- Commercialisation of new technologies – inform policies for use in conjunction with VED

Questions and Answers

Please click on the hand symbol to raise your hand if you have a question.

Please ensure that you are connected to the audio to ask a question.

Alternatively, you can type your question.



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Slides emailed to participants after this session.

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