

The Royal College of Physicians of Edinburgh welcomes the chance to comment on the very thorough document titled 'Phasing out the sale of new petrol and diesel cars from 2030 and Support for the Zero Emission Transition' which is currently out for consultation.

On reading the items to which answers are requested, it seemed to us that many were relevant only to the sellers of cars. However, there are aspects of health we should like taken into account by the committee, and we hope our answers to 4 key questions are of value.

As the committee notes about 1/3rd of all emissions come from transport, Areas of significant transport-linked air pollution exist in and around our city streets(1). Furthermore, harmful effects of air pollution are seen at low levels of air pollution, which has recently led the World Health Organisation (WHO) to recommended far more stringent air quality guidelines(2) which are below the current target levels of the 4 nations. Thus, air pollution is still damaging our health and increasing our risk of dying early.

Poor air quality is a significant public health issue. Children, older people, and people with chronic health problems are among the most susceptible to air pollution(3, 4). Gestation, infancy, and early childhood are vulnerable times because the young body is growing, developing rapidly and has immature immune systems. Also, children spend a higher proportion of their time outdoors and are therefore at greater risk of exposure to air pollutants, which can focus round schools with the current high level of idling(5). Furthermore, children and adults who are the most deprived often live in areas of highest pollution in city centres thus exacerbating pre-existing health inequalities(6). The Committee on the Medical Effects of Air Pollution have shown that air pollution is estimated to cause 29,000 to 43,000 deaths a year in the UK(7).

For these reasons we should like to comment as follows:

Q6 What are your views on establishing a CO₂ requirement for vans from 2030?

We believe this is essential as much city centre air pollution is tracked back to commercial vehicles such as vans and buses.

Q7 What would be the impact to the economy and to UK society of any new or additional non-ZEV CO2 requirements in the van sector from 2030?

Whist this may have a potential deleterious economic effect on van sellers, the economic effects of air pollution would certainly counter this, in terms of fewer hospital admissions on high pollution days(8), less time off work with payment of associated benefits. Air pollution costs health services and businesses an estimated £20 billion per year(9). It is estimated that improving air quality could increase UK earnings by £900 million each year. This is due to fewer premature deaths and illnesses, which could lead to more productive years and working days. Improved air quality could also reduce work absences, which could benefit the UK economy by close to £600 million

Question 8: What are your views on current measures to support demand for zero emission vehicles? What additional measures could further support the transition?

Studies have shown that there are 2 main drivers for EV purchase(10): Firstly, subsidies to ensure the cars match the price of ICE cars. Whilst there is some availability of this for work fleets, this is not available for the general public, and the introduction of the EV car tax at a standard rate is a further disincentive. The second key item is availability of chargers/range anxiety(11). As newer long-range cars come on stream this will be less of a problem, however there is ad inequality issue relating to inner city dwellers in flats where roadside council-provided charging is more expensive than home based mains charging. Council subsidies to equal out this price discrepancy should be considered.

Availability is also a problem and although we are seeing more chargers along motorways sites there are other initiatives we believe should be considered such as obligatory charging sites in car parks, such as is done with disabled parking, based on numbers of spaces. Otherwise, this initiative of 2030 will not succeed. It will just result in more aging, and polluting cars, on the road as people will retain their old cars for longer.

Question 13: Are the time limits on the current flexibilities in the ZEV Mandate for cars and for vans still appropriate? Please explain your answer.

For the health reasons outlined in your document, and those highlighted by us above, we believe it is crucial that the 2030 timeline be followed. There will be significant health and economic benefits if it is retained.

We are grateful for the opportunity to take part in this consultation and hope our comments are of some value.

References.

- 1. DEFRA. Air Pollution in the UK 2023 2024 [cited 2024 9th January]. Available from: https://uk-air.defra.gov.uk/library/annualreport/viewonline?year=2023_issue_1#report_pdf.
- 2. Organisation WH. WHO global air quality guidelines: particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide2021 March 2024:[300 p.]. Available from: https://iris.who.int/bitstream/handle/10665/345329/9789240034228-eng.pdf.
- 3. C W. Chief Medical Officer's Annual Report 2022 Air pollution Executive summary and recommendations. 2022.
- 4. Belch JJF, Elder A, Bartlett S, Fardon T, Flinn K, Hughes RC, et al. Children are especially vulnerable to air pollution: we need data on transport emissions near schools. BMJ. 2023;383:p2675.
- 5. Belch JJF EE, Bartlett S, Flinn K, Hughes RC, Miller MR, Newby D, Quinn T. . Air pollution is the largest environmental risk to public health and children are especially vulnerable. BMJ. 2023;381:1037.
- 6. Fecht D, Fischer P, Fortunato L, Hoek G, De Hoogh K, Marra M, et al. Associations between air pollution and socioeconomic characteristics, ethnicity and age profile of neighbourhoods in England and the Netherlands. Environmental pollution. 2015;198:201-10.
- 7. Pollutants CotMEoA. Associations of long-term average concentrations of nitrogen dioxide with mortality 2018 [cited 2024 9th January]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734799/COMEAP_NO2_Report.pdf.
- 8. Belch JJF, Fitton C, Cox B, Chalmers JD. Associations between ambient air pollutants and hospital admissions: more needs to be done. Environmental Science and Pollution Research. 2021;28(43):61848-52.

- 9. UKRI. Cleaning up our air and cutting the costs of pollution 2024 [cited 2024 9th January]. Available from: https://www.ukri.org/who-we-are/how-we-are-doing/research-outcomes-and-impact/nerc/cleaning-up-our-air-and-cutting-the-costs-of-pollution/.
- 10. Sandman N, Sahari E, Koponen A. But can it drive to Lapland? A comparison of electric vehicle owners with the general population for identification of attitudes, concerns and barriers related to electric vehicle adoption in Finland. PLOS Climate. 2024;3(10):e0000346.
- 11. Le TT, Jabeen F, Santoro G. What drives purchase behavior for electric vehicles among millennials in an emerging market. Journal of Cleaner Production. 2023;428:139213.