

Chris Gould
Energy Transition Lead

Department for Transport
ZEV Regulations
3rd Floor
Great Minster House
33 Horseferry Road
London
SW1P 4DR

Fuels Industry UK

1 Castle Lane
London
SW1E 6DR

Direct telephone: 020 7269 7611

Switchboard: 020 7269 7600

Email: chris.gould@fuelsindustryuk.org

18th February 2025

By email to zevmandate@dft.gov.uk

Phasing out the sale of new petrol and diesel cars from 2030 and Support for the Zero Emission Transition

Dear Sir or Madam

Fuels Industry UK represents the eight main oil refining and marketing companies operating in the UK. The Fuels Industry UK member companies – bp, Essar, Esso Petroleum, Petrolneos, Phillips 66, Prax Refining, Shell, and Valero – are together responsible for the sourcing and supply of product meeting over 85% of UK inland demand, accounting for a third of total primary UK energy (based on the Department of Energy Security and Net Zero Digest of UK Energy Statistics 2022).

The refining and downstream oil sector is vital in supporting UK economic activity. It provides a secure supply of affordable energy for road and rail transport, aviation, and marine applications, as well as for commercial and domestic heating. It also supplies base fluids for use in lubricants, bitumen for use in road surfacing, and graphite for use in electric vehicle batteries and as electrodes in steel and aluminium manufacture.

Fuels Industry UK welcomes the opportunity to respond to the consultation “Phasing out the sale of new petrol and diesel cars from 2030 and Support for the Zero Emission Transition”.

Our responses to the consultation questions are given in Attachment 1.

We would also like to take this opportunity to discuss the Government's goals and opportunities as detailed in the consultation, and the hurdles to scaling up the adoption of EVs. Below are specific sections regarding how technology-neutral, integrated vehicle and fuel policies can be implemented to achieve them.

Cut carbon emissions quickly.

The Concawe CO₂ comparator tools ^{1,2} developed by IFPEN show that some biofuels and synthetic fuels (sometimes called power to liquid fuels) in internal combustion and hybrid engines can deliver life-cycle emissions comparable to those of electric vehicles supported by the ZEV mandate. In these fuels, the carbon dioxide (CO₂) emitted during their production and use is offset by an equivalent amount of CO₂ removed from the atmosphere during the creation of their feedstocks and source molecules. Biological feedstocks absorb CO₂ through photosynthesis during their growth, while synthetic fuels are made by combining captured atmospheric CO₂ using CCUS/DAC with hydrogen.

These fuels can be used in the current vehicle fleet to cut carbon emissions immediately, utilising the current fuel infrastructure and provide an alternative to electric vehicles where price, cost of ownership, charging time, and range anxiety remain barriers to consumer adoption.

Increase energy security

One of the stated benefits in the ZEV mandate consultation is the reduced reliance on imported foreign oil. However, the ZEV mandate increases the reliance on a single technology which may result in a non-resilient transport sector that is vulnerable to unexpected disruptions as EV battery supply chains are controlled by few countries ³.

Critical minerals and battery components materials and precursors are geographically concentrated in a few countries today, which requires careful consideration of geopolitical, environmental, and human rights issues. In addition, the raw material extraction sector needs to grow exponentially to meet demand. The Global Investor Commission on Mining 2030 report ⁴ highlighted that a strong focus on environmental and ethical best practices in this sector is needed to safeguard natural lands,

¹ <https://www.carsco2comparator.eu/>

² <https://hdvco2comparator.eu/>

³ <https://www.iea.org/reports/ev-battery-supply-chain-sustainability>

⁴ <https://www.lpf.org.uk/publications/news/2024/october/global-investor-commission-on-mining-2030-landscape-report/>

biodiversity, sustainable water use, indigenous peoples' rights, and child labour protections.

The Concawe study ⁵ by Strat Anticipation "*Risk assessment and success factors for mobility electrification – Why developing a robust, competitive, resilient, sustainable, and sovereign battery industry is critical to succeed in the green energy transition*", forecasts that China is the only region that will be able to meet its battery demand to 2035.

Capture opportunity for the UK to lead the world in the industries and technologies of the future.

With the right complimentary policies the UK could become a leader in lower carbon fuels development, electric vehicle technologies and manufacture, and maintain its leading role in aviation as a hub for sustainable aviation fuels. However, this will only be possible when policies look at these as linked systems, not siloed transport modes. Ending the sale of new vehicles utilising a specific powertrain technology may have the intention of creating certainty, but may achieve quite the opposite, and dissuade investors from the UK.

As detailed in our RTFO response ⁶, Fuels Industry UK believes that well-designed, holistic policy frameworks, that set clear direction and targets, build up a clear and sustainable business case are required to mobilise private investments which can leverage market mechanisms and flexibility to enable the most economical solutions.

The ZEV mandate focuses on tailpipe emissions, while the RTFO and SAF mandate policies are based on life cycle emissions. This discrepancy causes these policies to work against each other rather than synergistically, hindering the establishment of a clear and durable business case for investments in renewable and lower carbon fuel technologies and their large-scale deployment.

Retain value of the UK car industry.

A redesign of the ZEV mandate to adopt a technology-neutral, life cycle emissions approach that incorporates CO₂-neutral fuels should not negatively impact the UK car industry if executed effectively. Instead, such technology-neutral policies can foster innovation and competition across all vehicle technologies as well as fuel technologies and could ultimately help encourage more effective and lower cost solutions for consumers and businesses

⁵ <https://www.concawe.eu/publication/risk-assessment-and-success-factors-for-mobility-electrification-why-developing-a-robust-competitive-resilient-sustainable-and-sovereign-battery-industry-is-critical-to-succeed/>

⁶ <https://www.fuelsindustryuk.org/media/ibug5mbm/rtfo-statutory-review-and-future-of-the-scheme.pdf>

Hurdles to scaling up the adoption of EVs.

A redesign of the ZEV mandate to link fuel and vehicles policies (RTFO ⁷, SAF Mandate ⁸ and ZEV mandate ⁹) could establish a clear and durable business case, supporting investments in renewable and lower carbon fuel technologies and their large-scale deployment. These lower carbon fuels, compatible with current and future internal combustion and hybrid engines, can address the following challenges and complement the adoption of EVs:

- **Charging Infrastructure:** The Government has implemented various measures to support the adoption of electric vehicles. However, challenges with the rollout of charging infrastructure, particularly on-street charging and facilities in remote areas, remain a barrier for some consumers ¹⁰.
- **Power Grid Challenges:** Typical EV charging behaviour increases pressure on the power grid, especially during peak hours and emergencies. This may necessitate additional investment in power generation capacity and electricity infrastructure upgrades. For instance, on January 7th this year, the UK's National Energy System Operator (NESO) control room issued an Electricity Margin Notice (EMN)¹¹. Some mitigation of this may be provided by EVs supplying electricity back to the grid at times of peak demand, and careful consideration needs to be given to how this may be accepted and utilised in practice.
- **Socioeconomic issues:** Lower carbon fuels can be utilized in the current fleet to immediately reduce carbon emissions, leveraging existing vehicles and fuel infrastructure.

Yours sincerely



Chris Gould

Energy Transition Lead, Fuels Industry UK

⁷ <https://www.gov.uk/government/collections/renewable-transport-fuels-obligation-rtfo-orders>

⁸ <https://www.gov.uk/government/collections/sustainable-aviation-fuel-saf-mandate>

⁹ <https://www.gov.uk/government/news/pathway-for-zero-emission-vehicle-transition-by-2035-becomes-law>

¹⁰ <https://evmagazine.com/charging-and-infrastructure/versinetic-report-reveals-uks-public-ev-charging-challenges>

¹¹ <https://www.current-news.co.uk/neso-electricity-margin-notice-issued-amidst-limited-options/>

Appendix 1: Fuels Industry UK Response

Part 1

Question 1: Do you agree with the Government's view that full hybrid and plug-in hybrid technologies only should be considered? Please explain your answer.

Fuels Industry **UK does not** agree that full hybrid and plug-in hybrid technologies only should be considered.

This applies for both the periods 2030–2035 and post 2035.

While Fuels Industry UK believes electric vehicles (EV) are a part of a multi-technology transportation future to reduce greenhouse gas (GHG) transportation sector emissions, other options are available to achieve similar decarbonisation objectives.

We support technology neutral transportation policies in which GHG emissions are evaluated on a life-cycle basis, accounting for emissions associated with production, transport, use, and final disposition. The UK ZEV mandate considers tailpipe emissions only, and as such, does not consider the carbon emissions that occur throughout the supply chain¹². This approach closes the door to other options to decarbonise the road sector and meet the government's missions¹³ of economic growth and making Britain a clean energy superpower.

Technology neutral policies that foster innovation and competition across all technologies could ultimately help encourage more effective and lower cost solutions for consumers and businesses mitigating risks for supply disruption. The use of some biofuels and synthetic fuels (sometimes called Power to Liquid fuels) in internal combustion and hybrid engines can deliver life-cycle emissions comparable to those of electric vehicles supported by the ZEV mandate¹⁴.

We believe that a mix of vehicle technologies will be needed to meet consumers' needs and societal ambitions today, and in the future, and therefore support a diversity of technology pathways that allow for consumers to choose between vehicle types.

As discussed in our response to the recent RTFO consultation, one of the factors affecting the supply of these advanced biofuels and synthetic fuels needed for the decarbonisation of all transport modes is the declining demand and finite life of liquid fuels for road transport which impacts the investment and development of new fuel technologies. Adjusting the ZEV mandate to a life-cycle emissions basis vehicle

¹² <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-race-to-decarbonize-electric-vehicle-batteries>

¹³ <https://labour.org.uk/missions/>

¹⁴ <https://www.zemo.org.uk/assets/reports/Vehicle%20life%20cycle%20GHG%20emissions%20study%202024.pdf>

standard could lead to increased demand for lower carbon fuels and help alleviate this investment barrier.

A holistic approach to policies across government is required to provide the required signals to encourage investment in the UK in both lower carbon fuels and vehicle manufacture.

We note that the EU is considering the inclusion of CO₂-neutral fuels to meet its zero-emission vehicle (ZEV) targets ¹⁵.

We strongly encourage the UK government to reevaluate its ZEV mandate design to incorporate this approach. Integrating lower carbon fuels into the ZEV policy can complement the use of electric vehicles and significantly mitigate the energy security risks associated with dependence on a single technology and its raw materials.

Question 2: Do you prefer a technological definition that permits both HEVs and PHEVs, or a technological definition that permits PHEVs only? Please explain your answer.

Fuels Industry UK has no response to this question

Question 3: Do you support no further CO₂ requirements, a vehicle level CO₂ cap, or a fleetwide CO₂ requirement? Please explain your answer.

Fuels Industry UK has no response to this question

Question 4: Should a minimum range be required for new PHEVs and, if so, at what level should it be set? Please explain your answer.

Fuels Industry UK has no response to this question

Question 5: Do you agree with the Government's intention not to establish a technological definition for the specification of new non-ZE vans that may be sold from 2030? Please explain your answer.

Fuels Industry UK has no response to this question

¹⁵ <https://www.euronews.com/my-europe/2023/03/28/in-win-for-germany-eu-agrees-to-exempt-e-fuels-from-2035-ban-on-new-sales-of-combustion-en>

Question 6: What are your views on establishing a CO2 requirement for vans from 2030? What is your preferred measure, if any, and at what level should the target be set? Please explain your answer.

Fuels Industry UK has no response to this question

Question 7: 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? Please explain your answer and provide evidence where possible.

Fuels Industry UK has no response to this question

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

Fuels Industry UK has no response to this question

Question 9: What are your views on whether small volume manufacturers (between 1,000 and 2,499 registrations) should be subject to the 2030 requirements for cars and/or vans?

Fuels Industry UK has no response to this question

Question 10: What are your views on whether micro-volume manufacturers (fewer than 1,000 annual registrations) should be subject to the 2030 requirements for cars and/or vans?

Fuels Industry UK has no response to this question

Question 11: What is your opinion on exemptions for Special Purpose Vehicles from the 2030 requirements for cars and vans?

Fuels Industry UK has no response to this question

Question 12: What is your opinion on exemptions for kit cars from the 2030 requirements for cars and vans?

Fuels Industry UK has no response to this question

Part 2

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.

Fuels Industry UK has no response to this question

Question 14: What are your views on the proposal to implement a van-car transfer in VETS? Please explain your answer.

Fuels Industry UK has no response to this question

Question 15: Are there other flexibilities that should be considered within VETS for cars and vans?

Fuels Industry UK has no response to this question

Question 16: Do you agree that VETS should be amended to account for the UF change? If so, do you agree with the proposal set out? Please explain your answer.

Fuels Industry UK has no response to this question

Question 17: Do you agree with the proposal to allow UK derived or EU derived WLTP specific emission reference targets to apply from 2021-2023 in the United Kingdom, and in 2024 in Northern Ireland? If not, why?

Fuels Industry UK has no response to this question
