

The International Business of Federated Hermes' response to the UK Government consultation on ending the sale of new petrol, diesel and hybrid cars and vans

About the international business of Federated Hermes

Federated Hermes is a global leader in active, responsible investment. We are guided by the conviction that responsible investing is the best way to create long-term wealth. We provide specialised capabilities across equity, fixed income and private markets, in addition to multi-asset strategies and proven liquidity-management solutions. Through our world-leading stewardship services, we engage companies on strategic and sustainability concerns to promote investors' long-term performance and fiduciary interests. Our goals are to help individuals invest and retire better, to help clients achieve better risk-adjusted returns, and, where possible, to contribute to positive outcomes in the wider world. As of 31 March 2020, Federated Hermes had £488bn assets under management.

Hermes Investment Management and Federated Investors rebranded as Federated Hermes in February 2020. All activities previously carried out by Hermes Investment Management now form the international business of Federated Hermes.

EOS at Federated Hermes ('EOS') is a leading stewardship service provider. Our engagement activities enable long-term institutional investors to be more active owners of their assets, through dialogue with companies on environmental, social and governance issues. We believe this is essential to build a global financial system that delivers improved long-term returns for investors, as well as better, more sustainable outcomes for society. EOS represents £858bn of assets under advice as of 31 March 2020. EOS conducts proactive and reactive engagement with the companies in which its clients invest on a regular basis on environmental, social, governance and strategy, risk & communications concerns. Our team engages in active stewardship on behalf of clients, voting at AGMs and other shareholder gatherings to achieve our clients' responsible ownership aims and fulfil their fiduciary duty to be active owners. EOS is a stewardship services provider and does not carry out regulated activity.

Our response to the consultation on ending the sale of new petrol, diesel and hybrid cars and vans

The phase out date

The UK now has a legally binding target of cutting all greenhouse gas (GHG) emissions to net zero by 2050. Policy must be designed accordingly in order to enable the UK to reach this target with the most orderly transition possible. We therefore support the government's proposal to bring the ban on petrol, diesel and hybrid cars and vans forward, and recommend an even earlier date of 2030.

Road transport is currently one of the highest emitting sectors in the UK, contributing around 25% of the country's total emissions with a drop of just 2% since 1990 levels. The average car sold in 2017

and 2018 was less carbon-efficient than in the previous year due to a consumer shift towards larger vehicles.¹

The Committee on Climate Change advised the UK Government in their most recent progress report² that by 2032 *at the latest* all new cars and vans should be electric (or using a low carbon alternative such as hydrogen).³ In their previous report, they noted that if this could be done earlier, such as by 2030, this would have positive impacts including reducing costs for motorists and improving air quality, as well as allowing the UK to take advantage of shifts in global markets. Improvements in air quality in particular would benefit a significant proportion of UK society. As on average vehicles have a 15 year stock turnover period, ending sales in 2030 would ensure the UK is well on track to meet its net zero by 2050 goal and would have lower cumulative transport emissions.⁴ A later phase out date may require additional measures from the Government to ensure the remaining internal combustion engine (ICE) and hybrid vehicles are removed from circulation, for example with scrappage schemes, which will incur additional costs.

On the basis that there would be significant benefits in ensuring that the UK reaches the target of 100% of new sales of cars and vans being electric in 2030, we believe that the most appropriate next step is to bring forward the ban on sales of new ICE vehicles to 2030. Research has shown that Europe's top automobile manufacturers are all likely to miss the EU's 2021 CO₂ emissions targets, which will incur significant fines.⁵ While consumers initially responded with higher demand for lower emission vehicles, and manufacturers adapted their offerings to meet this demand, it appears manufacturers have not continued to capitalise on this early interest. Despite the fall in emissions per km of new cars in Europe over the past decade and the increase in the market share of electric vehicles (EVs), there has been a lack of progress in reducing overall emissions from cars due to the increasing market share of large Sports Utility Vehicles (SUVs).⁶ As a result, while progress has been made in meeting the 2021 standards, and some vehicles in manufacturers' fleets are compliant, manufacturers continue to market and sell vehicles that breach the standards and as a result are likely to be heavily fined.⁷ This should raise concerns that market-based solutions such as fines are insufficient incentives for automobile manufacturers to adapt at the required pace.

Furthermore, recent research from the 2^o Investing Initiative (2^oii) and the Institutional Investors Group on Climate Change (IIGCC) showed that none of the production plans (covering electric, hybrid and ICE vehicles) of the 14 biggest global auto manufacturers by emissions are aligned with

¹ PRI (2020) *A Net Zero Strategy for the UK*, accessed [online](#)

² Committee on Climate Change (2020), *Reducing UK emissions: Progress Report to Parliament*, accessed [online](#)

³ In this consultation response, whilst we focus on electric vehicles our recommendations also cover other viable low-carbon alternatives such as hydrogen and fuel cell electric vehicles.

⁴ Committee on Climate Change (2019) *Net Zero: The UK's contribution to stopping global warming*, accessed [online](#)

⁵ PA Consulting (2019) *CO₂ emissions are increasing: Car makers must act*, accessed [online](#)

⁶ Committee on Climate Change (2020), *Reducing UK emissions: Progress Report to Parliament*, accessed [online](#)

⁷ Please see the appendix to this document for further detail

the goals of the Paris Agreement. The report found that none aligned with climate scenarios consistent with limiting warming to below 2°C, let alone well below 2°C or 1.5°C.⁸

These trends will exacerbate the difficulty of meeting the UK's net zero targets, as well as agreements in countries around the world. Yet the foundations for transitioning to EVs are there: a far more substantial range of models have been developed over the last decade with improved efficiency, and the UK charging network continues to grow.⁹ We therefore advise that the UK government adopts an earlier ban of the sale of new petrol, diesel and hybrid cars and vans from 2030, or at the very latest 2032. The earlier such a ban is introduced, the fewer of such vehicles will remain in the UK fleet as it nears its 2050 net zero deadline.

The definition of what should be phased out

We agree with the inclusion of all new petrol, diesel and hybrid cars and vans in the ban. Hybrid vehicles have played an important role in the transition to EVs but the UK must eliminate the use of fossil fuels in cars and vans as soon as possible. The technology is available already for electric and low carbon vehicles and will continue to improve in efficiency and range and reduce in cost before the ban is fully implemented.

We advise that motorbikes should also be phased out from 2030 or soon afterwards as part of the UK's transition away from reliance on fossil fuels.

Similar targets relating to Heavy Goods Vehicles (HGVs) should also be set in the near future. Although the timeline for phasing out will be longer, HGVs must also make the transition to low-carbon fuel sources and providing clarity over timelines will enable the industry to adapt appropriately.

Barriers to achieving the above proposals

The key challenge in achieving the transition to low carbon vehicles is the current lack of infrastructure in the UK. It will take time and significant investment to install the required infrastructure to support a fleet of EVs. However, many of these costs will be incurred whether the ban is introduced in 2030 or 2035, and if investment is incentivised appropriately the required infrastructure should be scalable to meet increasing demand. The charging infrastructure has already grown significantly across the UK, particularly in urban areas, in recent years.

⁸ 2°ii and IIGCC (2020) Changing Gear: Alignment of major auto manufacturers with the goals of the Paris Agreement, accessed [online](#)

⁹ Committee on Climate Change (2020), *Reducing UK emissions: Progress Report to Parliament*, accessed [online](#)

Supply chains and automobile companies will need to adapt their production. However, EVs are already available in the market and so the challenge will be more about ramping up production and improving efficiency rather than developing completely new technology, although innovation will be required. Given the long-term regulatory signalling from the EU and elsewhere of the need to phase out ICE vehicles, we would expect auto manufacturers to already have considered how to do this, and indeed the number of EV models available on the market has significantly increased in recent years. There will also be implications for the labour market currently involved in producing ICE vehicles. As EVs generally require fewer parts and have a simpler manufacturing process, there may be fewer jobs available in the industry once the transition to EVs is made. Engineers may also require retraining to adapt their skills to the manufacture of EVs. Ensuring a just transition for those working in the industry will be an important factor in the success of phasing out ICE vehicles.

EVs are often more expensive to purchase than ICE vehicles. However, there have already been significant cost reductions as deployment has increased, which can be expected to continue at least until EVs reach cost parity with ICE and hybrid vehicles. For example, between 2010 and 2019 the average market price of an EV battery – which is a significant factor in the overall cost of electric vehicles – fell by 87% in real terms.¹⁰ The Committee on Climate Change estimates that EVs over their lifetime will be no more expensive than fossil-fuel and hybrid cars by the mid-2020s, well before any such ban would come into force, or even earlier when factoring in the lack of fuel duty.¹¹ Current battery life and the speed of charging are limiting for some long journeys, and so it will be important that automobile companies and infrastructure providers use increasing deployment of such technology as an opportunity to invest in research and development. Such improvements, which should be aided by the increased deployment of the technology, should continue to help change public perceptions so that EVs are seen as a mainstream option.

The impact of these ambitions on different sectors of industry and society

Automobile companies will need to adapt, prioritising research, development and marketing of EVs whilst phasing out ICE models by the date the ban comes into force. However, such technologies and models already exist, and forward-looking automobile companies should already have been moving in this direction given the previous intention to ban such vehicles from 2040 in the UK and emissions targets in the EU. The same applies to related industries, such as auto supply chains, which will need to adapt to help meet these ambitions.

As is discussed further below, the appropriate infrastructure for an expanded UK fleet of EVs and low-carbon vehicles must be put in place, with charging points and expanded capacity on the electricity grid. This work is already underway with a significant expansion of the UK charging

¹⁰ Committee on Climate Change (2020), *Reducing UK emissions: Progress Report to Parliament*, accessed [online](#)

¹¹ Committee on Climate Change (2019) *Net Zero: The UK's contribution to stopping global warming*, accessed [online](#)

infrastructure in recent years, though much more remains to be done. The decarbonisation of power, in which significant progress has already been made in the UK, must continue so that by 2030 the power supply has been largely decarbonised as the market penetration of EVs increases significantly. Given the falling costs of renewable energy, this should not be seen as a barrier to change.

As with all efforts to meet the UK's net zero target, the concept of a just transition is key. Efforts must be made by all parties to ensure consumers, particularly low-income groups, do not bear the brunt of transition costs. The UK Treasury review into how the costs of transition can be shared fairly should provide recommendations in this area. For example, there should be access to charging points for those who do not have off-street parking and scrappage schemes to enable lower-income groups to move away from older, more polluting ICE vehicles. EVs are expected to be the same cost as fossil fuel cars by the mid-2020s and to be significantly cheaper to run, which will bring cost benefits as well as health benefits to all sections of society in the longer term.

What measures are required by government and others to achieve the earlier phase out date

Targets: Once a phase out date has been agreed, relevant interim targets should be set to monitor whether the UK is on track for a smooth transition and signal the need for additional levers for change if it is not. This would also provide clarity to other stakeholders such as investors on the path that automobile companies should be following.

Charging/refuelling infrastructure: Perhaps the most important supporting measure by the Government is to improve the charging (and refuelling, if decarbonisation of HGVs involves a switch to hydrogen) infrastructure for EVs in the UK, which should be part of the National Infrastructure Strategy. This will require over £1bn in investment per year to 2030, most of which will likely be funded by the private sector.¹² The Committee for Climate Change advised in 2019 that if all cars and vans were electric in the UK this would require 3,500 rapid and ultra-rapid chargers near motorways for long journeys and 210,000 public chargers in towns and cities by funding 2050. This was in comparison to only 21,000 public chargers of all speeds in total at the time.¹³ The Government should incentivise private investment in this area and help co-ordinate infrastructure development across the UK, identifying any gaps that may require public funding. Without such infrastructure, the rate of EV uptake will be constrained. It is therefore key that the Government provides the money already pledged to support the development of the charging infrastructure.

Subsidies for EVs: Continued subsidies and incentives, such as in relation to company car tax, fuel duty and Vehicle Excise Duty, may be required in the short term to encourage increased deployment until cost parity with ICE and hybrid vehicles is achieved. The Committee for Climate Change estimates upfront cost parity will be achieved by the mid-2020s, not including the cheaper running

¹² PRI (2020) *A Net Zero Strategy for the UK*, accessed [online](#)

¹³ Committee on Climate Change (2019) *Net Zero: The UK's contribution to stopping global warming*, accessed [online](#)

costs of EVs due to lack of fuel duty. Increased deployment will quicken the pace of cost reductions. As the UK nears its 2050 target, scrappage schemes may be required for lower income households to help consumers replace older, more polluting cars with EVs.

Decarbonisation of power and upgrading electricity networks: As mentioned above, the UK's power supply will need to be predominantly decarbonised by 2030. Not only must the proportion of power generated from low-carbon sources increase, but this will coincide with a rising electricity demand due to its increased use in transport and heat. The UK will need to expand its capacity to generate power from low-carbon sources accordingly. The capacity of the electricity grid will also require expansion to meet such demands. Again, such investments should be incentivised and supplemented as appropriate by the Government.

HGVs: Whilst the most appropriate technology for HGVs in a net zero world – electric, hydrogen or a combination – is not yet clear, the Government should incentivise research and development of such vehicles in preparation for setting similar targets in the mid-2020s for HGVs. Sufficient time will then be needed to prepare the relevant infrastructure, including refuelling infrastructure if hydrogen is part of the solution or significant overnight charging facilities for electric HGVs. The Committee on Climate Change advised that if HGVs use hydrogen as fuel this would require 800 refuelling stations, or 90,000 depot-based charges if they use electric. The needs of HGVs should be factored into plans to expand the charging or refuelling infrastructure from the start. As advised by the Committee, deployment of such vehicles should begin in earnest from the late 2020s, incentivised by appropriate vehicle and fuel taxation, to ensure that there are few ICE HGVs remaining in operation in the UK by 2050.¹⁴

Alternative transport: The Government should also consider measures to reduce reliance on vehicles from the current point in time, which will have health benefits, improve air quality and make it easier to meet emissions reduction targets. This could include improvements to public transport and facilitating increased travel by walking or cycling through provision of safe infrastructure such as cycle paths. This may be aided by locking-in in some of the changes that have occurred during lockdown and periods of social distancing, for example increased road spaces allocated to cycling and walking to reduce the use of cars.

Human rights in supply chain: Transition to EVs must not come at the expense of those working in the supply chains. For example, cobalt, a conflict mineral linked with human rights abuses, is used in the lithium-ion batteries of EVs. Both government and investors should encourage companies to increase the transparency of their supply chains and partner with other organisations to identify any human rights issues.¹⁵ There may also be a need for financial support for labour transition away from ICE vehicles to more sustainable industries such as electric vehicles, in order to facilitate a just transition.

¹⁴ Committee on Climate Change (2019) *Net Zero: The UK's contribution to stopping global warming*, accessed [online](#)

¹⁵ EOS at Federated Hermes (2018) *Modern Slavery: The true cost of cobalt mining*, accessed [online](#)

Private sector collaboration: The Government should work with investors to encourage auto manufacturers and their supply chains to move quickly, and to co-ordinate investment in the required infrastructure. Increased disclosures by companies and investors, including mandatory TCFD reporting, would act as a further incentive to make a positive contribution to the net zero transition.

Appendix

Using EU vehicle registration data, it is possible to analyse the number of cars registered by fuel type in the EU, and to analyse the evolution of average emissions by fuel type.

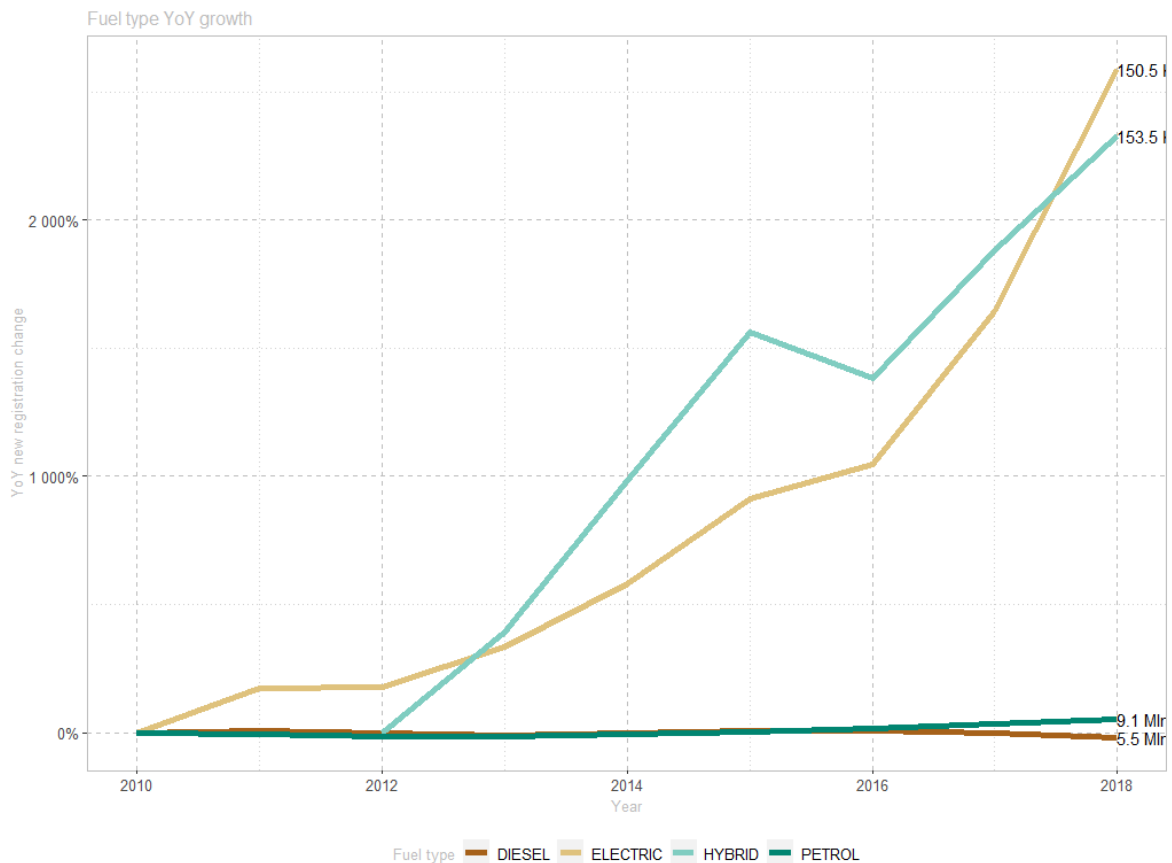


Figure 1: Year on year change of car population by fuel type in the EU. This excludes natural gas, hydrogen, and other fuels types for which population size is small. The number at the end of the line shows the population as at the end of 2018. Source: <https://www.eea.europa.eu/data-and-maps/data/co2-cars-emission-18>, analysis by the international business of Federated Hermes

Since 2010, the population (that is the number of such cars in the fleet) of hybrid and electric cars has increased significantly in the EU, by approximately 25 times, though these vehicles still amount to a small percentage of the total car fleet. There are approximately 300,000 vehicles of hybrid and electric cars in total registered in the EU. Petrol and diesel cars amount to 14.6 million in total, however they have experienced a much slower growth than hybrid and electric in recent years. The number of new diesel vehicles registered has in fact been marginally decreasing year-on-year.

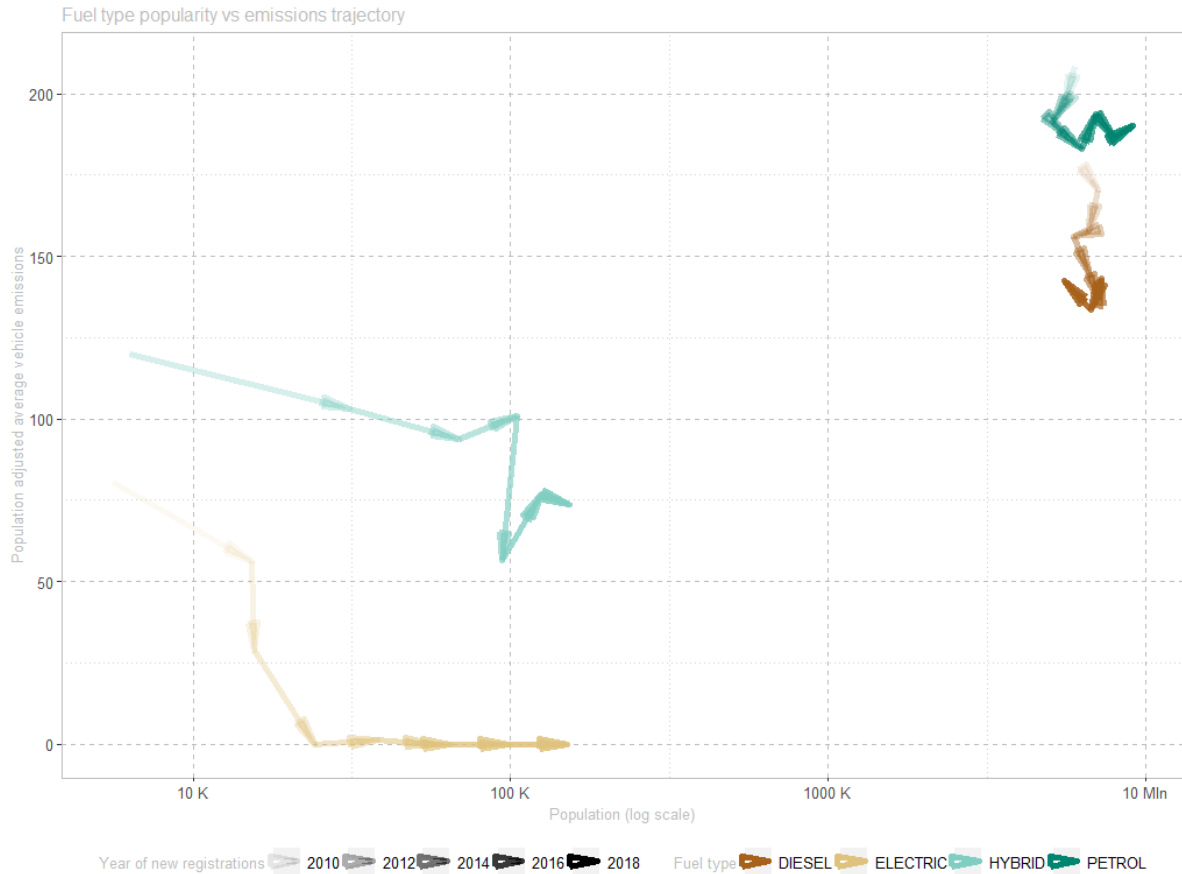


Figure 2: Evolution of average emissions by fuel type (adjusted by population, CO₂ g/km), vs popularity of fuel type in the EU. Source <https://www.eea.europa.eu/data-and-maps/data/co2-cars-emission-18>, analysis by the international business of Federated Hermes

As shown in Figure 2, as hybrid and electric vehicles become more popular choices for the consumer (i.e. as their population increases over time), their average emissions (CO₂ g/km) is decreasing. Since 2010, the average emissions of vehicles in the hybrid fleet has reduced by approx. 39% while at the same time the number of hybrid vehicles has increased 25 times. Vehicles in the diesel fleet have experienced an average reduction of emissions by 17%, and an average reduction of size by 17%. However, the petrol fleet, which is the largest group of vehicles in the fleet, has reduced its average vehicle emissions by only 8% whilst the number of petrol cars in the fleet has increased by 50% since 2010.