Date: 31 July 2020



Response to DFT consultation on ending the sale of new petrol, diesel and hybrid cars and vans

# **Background**

The Local Authority Pension Fund Forum is a voluntary association of 81 local government pension scheme (LGPS) funds and six LGPS pool companies with combined assets of approximately £300 billion. It exists to promote the investment interests of members, and to maximise their influence as shareholders in promoting high standards of corporate governance and corporate responsibility amongst investee companies.

# Response

The Local Authority Pension Fund Forum (hereafter LAPFF or the Forum) welcomes the opportunity to respond to this important consultation. In this section we outline our overall position before addressing the consultation questions in the following section. The Forum's response focuses on the issues from a long-term investor perspective and the need to address climate change.

This has been brought into sharper focus with the 2020 coronavirus pandemic, which could be considered a dress rehearsal for the required transformation in capital markets to address climate change. Indeed what we have learned from how companies have responded to the pandemic is that changes that previously would have been thought to take several years in planning and implementation, could be undertaken within a matter of days, weeks or months.

LAPFF has long recognised the imperative to address climate change as a systemic investment concern for our members. It poses material financial risks across all asset classes with the potential for loss of shareholder value.

The Forum recognised the conclusions of the October 2018 Intergovernmental Panel on Climate Change (IPCC) report<sup>1</sup> that reaching net zero emissions by 2050 gives a 50% chance of staying within 1.5 degrees rise in global average temperature. For a 67% chance of staying within 1.5C, there was by January 2018, a budget of 420 gigatons of CO<sub>2</sub> left to emit globally. Given that around 42

<sup>&</sup>lt;sup>1</sup> https://report.ipcc.ch/sr15/pdf/sr15\_spm\_final.pdf



gigatons of CO<sub>2</sub> are emitted annually, at current rates the budget would be gone by around 2028.

Subsequent to this issuing of this report, LAPFF formally adopted a policy which outlined its main engagement objective for companies to align their business models with a 1.5 degrees scenario and to push for an orderly net-zero carbon transition.

Emissions from road transport are a significant contributor to economic and investment risk. As the Committee on Climate Change has noted, surface transport contributed a quarter of UK emissions in 2019 (more than industry or buildings) and should be a main focus of policy intervention.<sup>2</sup> National Grid's Future Energy Scenarios also outline the scale of change that would be required to achieve a net zero economy, including moving from internal combustion engine (ICE) to electric vehicles (EVs).<sup>3</sup>

The Forum has for the past few years been engaging some of the world's largest carmakers about their emission and fuel efficiency standards and targets. The Forum considers that carmakers not focused on emissions reductions risk being left behind as price of EVs fall, consumer preference changes and as government regulation becomes tighter.

The Forum's view is that the necessary rapid decarbonisation of the economy requires all partners to work together. This includes government setting the clear policy direction and regulatory standards. The Forum therefore supports clearly identified legislative framework on carbon reductions, so that companies will be able to make the necessary decisions and financial commitments to provide the short and long-term solutions to decarbonising the economy that are needed.

Our experience engaging with companies is that, without strong and timely regulation, achieving the UK's ambitions for reducing vehicle emissions will be slower and less effective as some companies tend only to meet minimum regulatory requirements.

In this context, the Forum strongly supports bringing forward the end to the sale of new petrol and diesel cars and vans from well before the date of 2040 to 2025.

The Forum also welcomes the inclusion of hybrids in the phase out but considers that a clear strategy and policies are required for all road vehicles, including heavy goods vehicles.

# **Detailed response**

# The phase out date

<sup>&</sup>lt;sup>2</sup> Committee on Climate Change, Reducing UK emissions: 2020 Progress Report to Parliament (2020)

<sup>&</sup>lt;sup>3</sup> National Grid, Future Energy Scenarios (2019)



The Forum considers that the government should be guided by the best evidence regarding meeting the UK's nationally determined commitments and reducing emissions as soon is feasible. This includes the expert advice from the Committee on Climate Change.

With the average age that cars and vans are scrapped at 14 years,<sup>4</sup> the earliest date possible needs to be set to ensure the fewest possible number of petrol vehicles are on the road as we approach 2030. Clearly the current date of 2040 would mean a considerable number of vehicles would potentially still be carbon emitting past 2050 and thus not in line with the current UK pledge to reach net zero. The Prime Minister, Boris Johnson, has already said the ban on selling new petrol and diesel cars would come even earlier than 2035<sup>5</sup>.

Bringing forward the deadline for ending sales of new petrol and hybrid cars and vans must be economically feasible for consumers and companies.

For consumers, EVs are now cheaper to own than ICE cars. Taking average lifetime running costs into account, over a 14-year period, it is estimated EV owners will save over £100 p.a.<sup>6</sup>

The up-front cost of new electric vehicles has reduced so significantly that Bloomberg New Energy Finance 2020 analysis notes EVs will reach cost parity with light ICE vehicles by 2022<sup>7</sup>. And as the used car market consistently sells a much higher number of vehicles than new cars<sup>8</sup>, the earlier regulatory changes are implemented, the greater the impact on actual EV ownership overall.

The supply of electricity is also rapidly decarbonizing. The National Grid aims to operate a zero-carbon electricity system by 2025 making the opportunity for electric car and van use to be fully carbon neutral feasible in the next few years.

While a number of industry bodies have been retrograde in their reactions to bringing the date forward, the Forum's understanding from engagement with manufacturers is that moving towards EVs is their desired outcome, that they are able to achieve that ambition and that the mix between ICE, hybrid and EVs of their fleets is determined by the interaction between consumer demand and the regulatory/policy environment.

The proposed change in regulations will have an impact on pricing and therefore consumer behaviour. There may remain concerns about the cost of purchasing cars and overall demand. However, as the cost of production between ICE and

<sup>&</sup>lt;sup>4</sup> SMMT, 2019 UK Automotive Sustainability Report

<sup>&</sup>lt;sup>5</sup> https://www.bbc.co.uk/news/science-environment-51366123

<sup>&</sup>lt;sup>6</sup> https://www.thisismoney.co.uk/money/cars/article-8540469/Electric-vehicles-CHEAPER-petrol-cars.html

<sup>&</sup>lt;sup>7</sup> https://cleantechnica.com/2019/04/17/bnef-shocker-electric-cars-price-competitive-in-2020-as-battery-costs-plummet/



electric vehicles converges and there are grants to manufacturers and fiscal incentives for consumers then demand need not necessarily be affected. Indeed, in Germany, subsidies have meant that certain electric cars can be bought for zero monthly lease, and for others, less than a monthly phone contract.<sup>9</sup> In Norway, over half of new car sales are electric vehicles<sup>10</sup> and the Norwegian government intends to end the sale of fossil-fuel vehicles by 2025.<sup>11</sup>

Significant changes in demand are already evident. While the impact of the lockdown has hit overall sales, the sale of electric vehicles in the UK has continued to rise – albeit from a low base. Compared to June 2019, EV sales have increased by over 260%, its market share is rising and it appears that this growth will continue exponentially.<sup>12</sup>

By announcing the rule change now, manufacturers will have enough time to adjust their plans and investment choices. Development time for carmakers has declined<sup>13</sup> and while more investment will be required there is time to rapidly accelerate the shift, not least as some carmakers are already offering the same model with powertrains and some are seeking to build them on the same assembly line.<sup>14</sup>

It is the Forum's understanding from discussions with carmakers that significant investment has and is being made to enable the scaling up of electric vehicle production and there have been prominent announcements about the level of EV sales they expect to deliver – for example, Volkswagen's announcement that it expects to produce 1.5m EVs in 2025. As a partner at Bain & Company has noted: "None of the traditional car manufacturers will have problems scaling up electric vehicle production, that's exactly what they do best."

Given both the urgency of the need to move to EVs and that there is now cost parity, the Forum considers the proposal to bring forward the date a positive step. The Forum notes that the Committee on Climate Change recommends a date of 2032 at the latest<sup>17</sup> citing evidence that this should be feasible.

https://europe.autonews.com/automakers/subsidies-slash-ev-lease-costs-germany-france

<sup>&</sup>lt;sup>10</sup> Norwegian Electric Vehicle Association, Norway reaches historical electric car market share, April 2019)

<sup>&</sup>lt;sup>11</sup> International Council on Clean Transportation, The end of the road? An overview of combustion-engine car phase-out announcements across Europe (2020)

<sup>12</sup> https://www.whichev.net/2020/07/07/uk-car-sales-in-june-see-another-huge-increase-for-evs/; SMMT, Car Registrations, June 2020

<sup>&</sup>lt;sup>13</sup> See for example, Center for Automotive Research, Automotive Product Development Cycles and the Need for Balance with the Regulatory Environment

<sup>&</sup>lt;sup>14</sup> Wilson, A BMW's 'future-proof' EV strategy' Automotive News, 7 August 2017

<sup>&</sup>lt;sup>15</sup> Volkswagen, Volkswagen significantly raises electric car production forecast for 2025, December 2019

<sup>&</sup>lt;sup>16</sup> McGee, P Carmakers take electric fight to the factory floor, Financial Times, 18 March 2018

<sup>&</sup>lt;sup>17</sup> https://www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/



The Forum welcomes the move to bring the date forward and would recommend that the regulation prioritises a 2025 date, which would save the government making future changes which would create uncertainty for manufacturers.

#### The definition of what should be phased out

Achieving net zero carbon emissions as enshrined in current UK law will not be straightforward. Some sectors of the economy, such as aviation and steel production, will be harder to decarbonise. It is therefore essential that those sectors where technology exists to fully decarbonise do so as soon as possible and have zero emissions by 2050. This includes surface transport. It is therefore welcome that the definition includes the phase out of hybrid vehicles which although may play some role in the short term should not be viewed as a way of achieving our long-term commitment to be a net zero economy.

The Forum does, however, consider that there needs to be similar proposals for heavy goods vehicles. The task of decarbonising heavy vehicles will be harder, although advances are being made, and will require specific intervention. Nevertheless, alongside interventions for cars and vans, the Forum would press the government to articulate a clear and ambitious strategy for heavy good vehicles.

#### Barriers to achieving the above proposals

There are both supply and demand concerns that will need to be addressed to ensure that the date set is feasible and does not come at too high a cost.

In relation to supply concerns, as noted companies have concerns about the investment required to ratchet up capacity. They also have voiced concerns about the certainty of subsidies to pay for a smooth transition away from petrol and hybrid production, although given current projections, these would only need to be a short-term measure. With a clear settled date alongside consistent long-term commitment to grants the sector should be able to deliver the carbon emission free vehicles that the economy and country needs. Indeed, within parts of the oil and gas industry, there is a recognition that this should be the direction of travel with a Royal Dutch Shell spokesperson saying 'the right policy and incentives could allow the UK to achieve this as soon as 2030, to ensure the UK meets the 2050 net zero target' 18.

On the demand side, DfT research has found consumer concerns regarding EVs centre on price, recharging/range anxiety and lack of knowledge about electric

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<sup>&</sup>lt;sup>18</sup> https://oilprice.com/Latest-Energy-News/World-News/Shell-UK-Could-Achieve-Goal-To-Ban-Gasoline-Cars-Sales-As-Early-As-2030.html



vehicles.<sup>19</sup> As we note below (in the section 'what other measures are needed'), these barriers can be overcome especially as technology improves and people become accustomed to EVs. However, they will require proactive government support and intervention, particularly on the charging infrastructure. In practice, with the improvement in range of current models, EV owners no longer experience 'range' anxiety. Concerns now are over the reliability and availability of chargers once reached, their ease of use and the time taken to charge<sup>20</sup>.

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

The Forum is committed to a just transition to a net zero economy. This means achieving a net zero carbon emissions should not come at the expense of certain groups or communities. The Forum considers the failure to acknowledge the social costs of transitioning to net zero will ultimately act as an impediment to reducing emissions.

The Forum therefore engages some of the world's largest companies, including carmakers, on a just transition. The impact of moving from ICE to EVs could be significant. Research by ING highlights the fact that production of EVs is less labour intensive whilst demand for raw materials increases, noting the ICE powertrain requires 1,400 components compared with 200 for EVs.<sup>21</sup>

This will have implications for the workforce and supply chains (including human rights implications for sourcing of raw materials<sup>22</sup>). Its impact is also likely to be geographically concentrated, and without care could negatively impact places in the UK where economic and productivity indicators are weaker. Government support for some regions and areas will therefore be required as manufacturing adjusts to a net zero future as part of its levelling up agenda. Ensuring a just transition will, however, require that government, companies (and investors) communities and employees and their representatives work together to mitigate the negative impacts and make the most of new opportunities. This is why the Forum, alongside other investors and investor representatives, is committed to working with companies and stakeholders and also supporting government policies that support a just transition.<sup>23</sup>

The move to EVs is only one of the technological changes the automotive sector is going through. A potentially much larger impact for consumers, workers and communities is the move to autonomous driving. LAPFF engagement with

<sup>&</sup>lt;sup>19</sup> Brook Lyndhurst, Uptake of Ultra Low Emission Vehicles in the UK: A Rapid Evidence Assessment for the Department for Transport (2015)

<sup>&</sup>lt;sup>20</sup> https://autovistagroup.com/news-and-insights/ev-charging-anxiety-new-range-anxiety

<sup>&</sup>lt;sup>21</sup> ING, Breakthrough of electric vehicle threatens European car industry (2017)

<sup>&</sup>lt;sup>22</sup> Sanderson, H Congo, child labour and your electric car, Financial Times, 7 July 2019

<sup>&</sup>lt;sup>23</sup> Statement of Investor Commitment to Support a Just Transition on Climate Change - <a href="https://www.unpri.org/download?ac=10382">https://www.unpri.org/download?ac=10382</a> This statement was signed by 161 investors with over \$10 trillion of assets.



companies has shown that companies are requiring different kinds of skills sets – computer science rather than manufacturing expertise. This will provide new opportunities but will require the workforce, and specifically the local workforce, has the skills to meet this new demand. The switch to more autonomous driving, is also likely to have much larger impact for the wider workforce, for example for taxi and lorry drivers. It is therefore important that considerations about the impact of EVs should be placed within the context of broader technological transformation within the sector (including for congestion and public transport).

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

Leaving aside mandating an earlier date, there appear to be two main policy interventions that are required by government to achieve an earlier phase out date: first the relative cost of vehicles and second around consumer concerns about charging.

The price mechanism is likely to change consumer preferences. This is already helping the switch to EV sales as costs drop but also ensure there is public support for measures to mandate the transition. This will mean that alongside mandating stopping sales of ICE vehicles that fiscal incentives will be required to make electric vehicles more financially attractive for individuals and businesses. Some incentives are already in place but further incentives through different vehicles through of road tax, road user (congestion/toxicity/workplace parking levies and taxes) fuel duty and tax credits for vehicle purchases all have a role in ensuring environmental externalities of ICE vehicles are internalized in the cost of use and ensuring a switch to EVs. Such interventions will not only make buying an electric vehicle more attractive but also reduce the mileage of existing ICE vehicles. Indeed, in Norway where such mechanisms have been used, including reduced parking fees, and no purchase/import taxes, EVs currently make up 75% of new car sales<sup>24</sup>.

Concerns about the charging infrastructure continues to be a significant consumer concern. Part of the solution will be technological improvements and we are already seeing improvements in battery range which are expected to continue over the next decade. There are now more public places to charge vehicles than petrol stations. Nevertheless, far greater investment in the charging infrastructure is required within a short time-frame and now, during the downturn, would be the time to fast track investment (aligned with the Comprehensive Spending Review's objectives) in the necessary infrastructure to ensure there is adequate coverage and availability across all parts of the country. This would also

<sup>&</sup>lt;sup>24</sup> https://cleantechnica.com/2020/04/02/norway-ev-market-share-breaks-all-records-75-of-vehicles-sold-have-plugs/

<sup>&</sup>lt;sup>25</sup> IEA, Global EV Outlook 2020: Entering the decade of electric drive?

<sup>&</sup>lt;sup>26</sup> https://www.edfenergy.com/electric-cars/charging-points



be in line with the Conservative's manifesto pledge to "completing a fast-charging network to ensure that everyone is within 30 miles of a rapid electric vehicle charging station."<sup>27</sup>

The current Secretary of State for Transport has provided a foreword to a report that sets out a number of measures the UK could consider in terms of government measures<sup>28</sup>. These include taking examples of good practice, such as California's zero-emission credits scheme, scrapping schemes to incentivise the purchase of EVs and using the revenue to focus on building charging infrastructure.

<sup>&</sup>lt;sup>27</sup> The Conservative and Unionist Party Manifesto 2019

<sup>&</sup>lt;sup>28</sup> https://policyexchange.org.uk/publication/route-35/