Ending the sale of new petrol, diesel and hybrid cars and vans: Consultation response

Electromobility UK[1] brings together UK companies and organisations who by their own efforts and joint working are driving the shift to net zero emissions through a transition to battery electric vehicles.

We applaud the UK commitment to net zero greenhouse gas emissions and recognise a shift to battery electric vehicles using renewable electricity will be the key solution for vehicles if we are going to meet these commitments. **We support the government's intention to end the sale of all cars with engines by 2035 and earlier if possible, as well as the decision to restrict sales to zero emission models only.** We note that the Committee on Climate Change's latest advice is that all forms of ICE vehicles should be phased out by 2032 and urge the Government to implement policies to enable this level of ambition to be achieved.

As highlighted in the Committee on Climate Change's latest Progress Report, surface transport is the single biggest contributor to the UK's CO2 emissions. It is also one of the sectors to make the least progress in reducing emissions since 2008. Making rapid progress on decarbonising road transport should therefore be the Government's single biggest objective when developing policies to achieve its net zero ambition.

While progress has been far too slow, the technology now exists to facilitate the rapid decarbonisation of road transport. Hundreds of thousands of drivers are already driving battery electric vehicles in the UK and believe they are benefitting from an enhanced experience relative to their old petrol or diesel cars. From an environmental perspective, battery electric vehicles achieve significant reductions in transport CO2 emissions today. They also present the most viable solution for complete decarbonisation of vehicles. In addition, battery electric vehicles achieve considerable co-benefits in terms of tackling air pollution; supporting increasingly renewable electricity grids; the creation of jobs and wealth; and improving the UK's energy security.

Electromobility UK would emphasise 5 key points in relation to the Government's proposals:

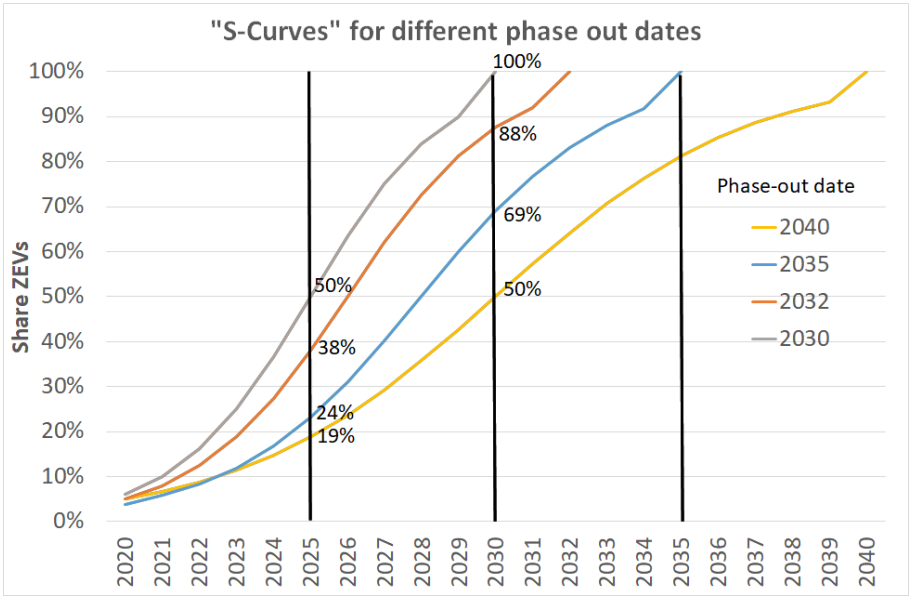
1. A long-term target without complementary short-term actions to accelerate the market for zero emission vehicles would be ineffective. To achieve a phase out of new cars and vans with engines by 2035 and earlier if possible, the government will need to establish a clear trajectory with interim milestones with regulations requiring rapidly rising sales of zero emission vehicles complemented by policies that facilitate meeting these.

[1] Nissan Motor (GB), Renault UK, Tesla, Octpus Electric Vehicles & Energy, Chargepoint, ABB, Transport & Environment, National Grid

2. Electromobility UK supports the proposal to restrict sales of cars and vans to zero emission tailpipe models only. Battery electric vehicles already deliver more than a third lower lifecycle CO2 emissions in the UK compared to an equivalent vehicle with an engine and is the only technology that can currently credibly deliver the net zero objective. The exclusion of hybrid and plug-in hybrid technology should help to accelerate the take-up of battery electric models but is unlikely to undermine seriously the market for other alternative technologies until the latter years of the 2020s.

3. Ending the sale of new cars with engines will transform the UK vehicle market and eventually the vehicle parc. There are no insurmountable problems preventing the goal being reached with the right policy framework but to achieve the target what happens in the next few years will be crucial. Securing a "flying start" will be essential and to do so the government must:
    a. Provide an attractive package of purchase incentives including: reforming 1st year vehicle excise duty to create a clear tax differential for zero emission vehicles; retain (in the short-term) grants for zero emission vehicles and developing a phase out plan that minimises market disruption; maintaining attractive company car benefit in kind rates to drive demand for zero emission vehicles.
    b. Establish a "right to charge" for all users of electric cars including placing a responsibility on local authorities to procure adequate, appropriate, accessible and affordable charging points for residents, businesses and visitors to the area. This should be achieved by: working with existing privately-held sites such as retail locations; facilitating the installation of kerbside chargers; and by government confirming changes to Building Regulations to facilitate charging in multi-occupancy dwelling and at commercial locations through the planning regime. There are over 100 councils with less than 10 chargers per 100,000 residents and only 12% of EV owners have access to on-street residential charging.
    c. Support the connection to and reinforcement of electricity grid infrastructure, both at transmission and distribution level, where there is economic or environmental benefit for EV charging infrastructure to be installed. Where appropriate, support investment in infrastructure ahead of need, to encourage further EV uptake by removing barriers to EV uptake around range anxiety and ensuring level playing field.
    d. Ensure that the UK's post-Brexit CO2 regime reflects and supports the UK's scale of ambition guaranteeing the continuing supply of a range of electric cars into the UK market.
    e. Implement legislation to require public owned fleets to shift to zero emission vehicles by 2030.

4. Electromobility UK would like a phase out of cars with engines at the earliest feasible date. The S-uptake curves below illustrate the implications of a range of phase-out dates on the required EV uptake. The suite of policies needed to achieve an earlier phase-out are the same but would require a much more aggressive implementation. For example; a 2032 phase out date requires nearly 4 in 10 new cars sold in 2025 to be ZEVs compared to 1 in 4 cars for a 2035 phase out; current CO2 regulations require less than 1 in 10 new cars to be zero emission in 2025. An earlier phase out date will only be achieved if the government immediately scales up the support available to enable the transition immediately.



Source: Original analysis by T&E

5. The climate benefits of an earlier phase out date are obvious, but there are also wider benefits:
    a. There are numerous studies highlighting the economic and employment benefits of a shift to battery electric vehicles. By adopting an early phase out of ICE cars the UK will develop the largest market for BEVs in Europe encouraging manufacturing of vehicles and cells in the UK and creating high skilled jobs in the automotive sector. Secondly, the required investment in charging infrastructure and grid upgrades will also create jobs. Thirdly, the reduced running costs and total costs of ownership of BEVs compared to ICE vehicles will boost UK household spending in other economic sectors with more domestic value-added and higher employment intensity.
    b. With a 2035 phase out date (and trajectory as indicated above) there would be 19 million zero emission cars on the UK's roads by 2035 out of a fleet of around 32 million cars today. This is 4 million more low and zero emission cars than would be seen on the roads under the current 2040 phase out. The availability of vehicles for the second and third hand markets therefore improves appreciably. This is important as battery electric vehicles will have much lower maintenance

and running costs benefiting less affluent segments of the population that do not purchase new cars.

c. The transition will occur more quickly and therefore the use of services for zero emission cars (like charging) will increase more rapidly whilst those for legacy cars with engines (like petrol pumps) will decline more quickly. This will have economic benefits in terms of higher utilisation rates more quickly for electric car services and a shorter period to retain uncompetitive legacy services.
d. An early phase out of ICE cars will help to improve the UK's unacceptable air pollution. There are estimated to be up to 36,000 premature deaths from air pollution in the UK and traffic is a major contributor. There is also compelling evidence of increased mortality from Coronavirus in areas of high air pollution. In addition, air pollution is likely to worsen the symptoms of patients recovering from the virus.

While the Coronavirus pandemic continues to cause huge health and economic impacts, it would be easy and understandable for the Government to focus its attention on short-term crisis management. However, this response illustrates that a green recovery involving a rapid shift to battery electric vehicles is one of the most effective ways to achieve both economic growth and a more resilient economy. The ICE phase out is the single most important policy initiative to decarbonise road transport, but will only be delivered if it is complemented by the short term initiatives highlighted in this paper. In the immediate term, there are several steps government could take to create jobs through electric vehicles:

1. Investment in charging infrastructure and grid upgrades.
2. Extending the symbolically important 0% Benefit in Kind rate for company car drivers to 2021/2.
3. Add the potential to install cabling to enable the easy installation of EV home charging points alongside the initiative to insulate homes.
4. Include 1st year VED in BIK payments – this both raises revenue and further incentivises BEV uptake.
5. Extend the Project Rapid, announcing future rapid charging funds beyond Motorway Service Areas and the Strategic Road Network to other distribution network bottlenecks. At present there is insufficient funding to cover the whole country.
6. Taking measures to secure better quality charging experience such as mandating uptime for network operators and supporting or requiring networks to be interoperable.