# Green Paper: The UK's New Road Vehicle CO2 Emissions Regulatory Framework

# Nissan representation

## Nissan's Commitment to the Electric Transition

Part of the Renault Nissan Mitsubishi Alliance, Nissan is a major global automotive manufacturer and retailer with world leading operations in the UK that support our UK, European and global markets. Our commitment to electric vehicles (EVs) in our corporate strategy and model line-up is driving the uptake of EVs in the UK and beyond.

For more than a decade Nissan has played a prominent role in pioneering the electrification of vans and cars, leading the EV market with the Nissan LEAF. In 2020, we celebrated the delivery of 500,000 LEAF vehicles across 59 markets around the world since the model's introduction. Nissan estimates that LEAF owners have prevented more than 2.5 billion kilograms of CO2 emissions from entering the atmosphere.[1]

Earlier this year Nissan unveiled EV36Zero, a £1bn Electric Vehicle Hub that will accelerate our journey to carbon neutrality. Nissan's Sunderland manufacturing plant will become the site of a world-first flagship EV Hub, creating a manufacturing ecosystem that will support the production of a new generation all-electric vehicle in the UK. The allocation of the production of Nissan's new EV in the UK is backed by the establishment of the UK's first battery gigafactory and supplied with renewable energy through a ground-breaking micro grid nearby. This commitment to reducing our own carbon footprint and delivering a blueprint that will support EV uptake represents the development of domestic industrial manufacturing capability which will allow other UK manufacturers to build on. EV36Zero will serve as the blueprint for the evolution of our company and our industry as we transition towards full electrification.

Nissan supports the Government's net-zero ambition and its leading role in the transformation to the use of zero emission vehicles in the UK. We welcomed the recent publication of the Transport Decarbonisation Plan and are ready to work with Government towards achieving its ambitions.

## Driving EV take up to support phase out targets

Nissan is committed to using our expertise in manufacturing and marketing EVs to broaden the electrified vehicle options for drivers so that more people can experience the benefits of electrified driving. We welcome the measures the Government has taken to date to incentivise widespread EV uptake in the UK.

However, until we reach a crucial tipping point for EV affordability EVs remain more expensive to buy and own for private consumers than equivalent ICE vehicles; choosing to make the switch has to make economic as well as societal and environmental sense for the consumer. Nissan's investment in the UK should be seen as blueprint for reaching this crossover whereby the cost of investment and manufacturing is outweighed by economies of scale. **Until this tipping point is reached through investments in localised supply chains for EV production, Government should incentivise market uptake by maintaining demand side support. This could be done through extending as the Plug-In Car Grant in some form beyond its current lifespan, and/or introducing a VAT reduction for EVs for all consumers. Doing so in the next half of this decade would avoid a cliff edge in support,**

[1] Distance and $CO_2$ data based on Nissan Global Data Centre calculation (as of October 2020). Calculation: total distance driven (GDC data, based on approximately 50% of global LEAF volume) / number of Carwings-registered vehicles x total global sales number.

**send a clear signal to drivers about their role in the transition and even out the cost differential with ICE vehicles to overcome the cost barrier until industry secures volumes of scale and a localised supply chain for EV manufacture.**

EV uptake is also reliant on consumer confidence in a nationwide charging network, ensuring charging an EV is at least as convenient as refuelling a petrol or diesel engine. The availability and ease of use of charging infrastructure is still cited by many potential EV drivers as a key barrier to uptake. However we know that once EV drivers make the switch to an EV they realise how convenient the car is and over 70% intend to buy another EV for their next car.

**Government should adopt a clear public communications strategy informing drivers of the milestones for the roll out of charging infrastructure, with targeted provision for rural and other locations where infrastructure may be more difficult to integrate or the business case makes private providers less likely to fill the gap.**

We welcome the Government's consultation with industry as it decides how to regulate CO2 emissions to accelerate the uptake of zero emissions vehicles. Nissan has contributed to the SMMT's response to this Green Paper. We fully understand the need for regulation to achieve these ambitions.

**We agree with the SMMT that regulation should be proportionate and simple, with enough flexibility for the consumer and industry to make this seismic transition away from ICE powered vehicles**. We would stress that the industry cannot deliver the change in isolation; overcoming the barriers discussed above to support the emerging EV market will provide the business confidence necessary for UK automotive to make crucial investments into localised EV manufacture and supply chains and support the UK's EV market in the long term.

**Defining significant zero emission capability**

Learning from the EV technology perfected in the LEAF, Nissan has developed e-POWER technology. In contrast to traditional approaches to hybrid vehicles[2], we have designed a system that offers full-electric motor drive, only making use of a traditional engine to charge the battery when necessary. e-POWER eliminates the need for an external charger whilst offering drivers the same EV driving experience as in a LEAF. E-POWER is unlike a conventional hybrid system, and represents an important strategic pillar for Nissan as we prepare to electrify all new models in our major markets by the early 2030s.

We understand industry's view that the continued sale of hybrid technologies allows for low emission vehicles to still be available to consumers who have specific technology or vehicle needs. It is Nissan's view that hybrids, including HEV, PHEV and e-POWER will play an important consumer role in the transition to full zero-emissions mobility and can make significant contributions to reducing emissions. Whilst we encourage consumers who are able to, to make the switch to full EV, offering our leading technologies such as LEAF and the newly launched Ariya, we recognise that a transitionary technology will be the choice for some drivers. The emissions performance of these vehicles should be measured under the same

[2] ePower does not fit the within the technology types set out in Figure 4 of the Green Paper, but bears most similarities to Range extender electric vehicles (REEVs) – the main difference is that it is not a Plug-In model, with all battery charging coming from the engine.

framework using the WLTP test information that regulates all other road vehicles with the emphasis on a clear and easily understood metric for the consumer that enables them to make an informed decision about their vehicle purchase with clear comparability between models.

**Nissan's electrification strategy is dedicated to the evolution of battery technologies and energy management techniques towards full electrification in order to achieve carbon neutrality across our product lifecycle by 2050.**

**Future CO2 framework**

Nissan aligns with SMMT's view that any new regulatory framework should be simple and appropriate, supporting strong market sustainability without negatively distorting the market. It is for Government, not industry to design this regulatory framework, however we would stress the need for simplicity and flexibility given the short period Government has to put this regime in place and given there are less than ten years until 2030, the vehicles that would come under this regulation are likely already on the market or have already been designed and planned for.

As an industry we value consistency in regulatory regimes, particularly across regions. The close links within car markets across Europe mean that, where appropriate, we see value in the UK and EU regimes being aligned.

We acknowledge that the Government favours the implementation of a ZEV mandate alongside the new CO2 framework, with a tradable credit element and fines applicable for failure to meet targets. It is our view that such a mandate is unnecessary and risks regulating the same vehicles twice. We would highlight the fact that ZEV mandates have been implemented elsewhere in the world with only moderate degrees of success.

**Nissan's experience of ZEV mandates in our markets in America tell us they are successful in supporting EV uptake only when coupled with strong incentive schemes and mandated infrastructure uplifts. Consumers must want to buy EVs at higher volumes than they do today for industry to be able to sell them, and so the barriers to EV uptake must be at the heart of Government's decision making.**

**We would welcome further consultation from Government on the specific design of any scheme once an approach has been decided and industry can understand the impact of the scheme more fully.**

**Supporting the EV industry to realise Government ambitions**

Government has committed to ending the sale of new ICE vehicles by 2030 and all vehicles with only 'significant zero emission range' by 2035. To achieve this ambition, it will be critical for Government, industry and consumer to each play their role. Consumers are at the heart of the transition and Nissan is fully committed to further developing our EV technologies and expanding our EV offering, to make buying an EV an easy choice for our customers to make.

Today we're involving consumers in the EV journey and drawing on our EV expertise to de-risk choosing and owning an EV. To achieve mass market uptake in less than a decade, drivers need to see owning an EV as simple and easy as well as making economic sense. Infrastructure and incentives must come together with supply to deliver the ambition, with regulation playing an appropriate role proportionate to the scale of the challenge.

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This transition represents a large-scale shift in the way the country operates, not only in terms of how people travel, but also in terms of how we power these new habits and produce new, green technologies. Government must think holistically about how to create a supportive policy environment for industry to lead on the transition. This cannot simply focus on the provision of charging infrastructure. Government must look more widely at the grid and energy system upgrades necessary, as well as the competitiveness of the business environment to ensure the UK is at the forefront of the green transition.

UK industry now faces the highest energy costs in Europe. Decarbonisation commitments will require investment in sites and machinery and higher electricity demand. Whilst the Government has introduced tax incentives to encourage investment (such as the super deduction), these will expire before the majority of investment projects can come to fruition. Meanwhile, many businesses at the heart of the net zero transition are unable to access Government support schemes for high energy prices. **Whilst this consultation focuses on one aspect of the EV transition, we encourage Government to think more broadly about the policy landscape needed to support the ICE ban ambitions.**

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(Redacted - Regulation 13 of the Environmental Information Regulations 2004)