



The Economy, Infrastructure and Skills
Committee Electric Vehicle Charging in Wales
Response from Nissan UK

Introduction

1. Nissan employs 8,000 people in the UK, across its manufacturing, engineering and design facilities. We support a further 32,000 indirectly through dealerships and our supply chain. One in three cars built in the UK is a Nissan, one in five is an Electric Vehicle (EV). More than £3.5bn has been invested in Nissan's world-renowned Sunderland Plant, which started production in 1986 and now exports 80% of production to more than 130 markets. Our other UK operations include Nissan's European Design Centre in Paddington, Nissan's Technical Centre in Cranfield, and Nissan's UK Sales and Marketing headquarters in Rickmansworth.
2. We have a rich heritage in the UK with 30 years of manufacturing and engineering presence, and remain committed to building and engineering cars in the country. In the past year, we produced over half a million vehicles in the UK. The Nissan Sunderland plant is the most productive in Europe, and we pride ourselves as an employer on our training and development programmes, creating a new generation of engineers, through our apprenticeships programme.
3. Nissan is the world leader in electro mobility and leads the world in zero emissions technology. We were the first manufacturer to bring a 100% electric vehicle (EV) to the mass market, the Nissan LEAF, which is the best-selling EV globally. Powered by lithium-ion batteries, it produces no tailpipe emissions. Nissan made a strategic decision to invest in zero emissions technology and continues to develop EV technology in Europe, including extending the battery range, enabling EVs to be fully integrated into the electricity grid and ensuring EV batteries have a second life as energy storage units.

Response

4. We have chosen to respond to those questions in the terms of reference that we believe Nissan is most experience in, focusing on the deployment of infrastructure, incentives, and behaviour change.
5. **How the infrastructure needs to develop to support an increase in EVs on our roads. How the Welsh Government, private sector and third sector can work together to develop EV charging infrastructure;**
6. We believe the deployment and development of charging infrastructure needs to keep pace with the increase in sales of electric vehicles and a visible and accessible charging infrastructure is essential to give confidence to potential purchasers of electric vehicles that the necessary charging facilities are available to them.
7. We recommend that the Welsh Government sets out a clear strategy for the deployment of multi-standard (CHAdeMO, CCS, high power AC) charging infrastructure, developed in consultation with local authorities and industry. The roadmap should include action to ensure that the planning system ensures that new developments take into account future requirements for EV charging and static storage systems.

8. We also want to see the public charging network made more visible, accessible and effectively sign-posted – available 24/7 and close to existing transport nodes to facilitate connections with public transport. Rapid charging infrastructure will become increasingly important not only in the city centres, but in key locations on key roads across the Wales as it has done across the rest of the UK. Increasing the visibility of the charging network will be important in providing reassurance to potential EV purchasers about the availability of chargers, particularly in rural areas where it is likely to be spread further apart. We recommend that the Welsh Government includes the availability of chargers on its motorway and strategic road network signage.
9. At present, the majority of EV charging infrastructure is privately funded, with charge point operators working on a commercial return for their investment. There may be circumstances where there is a current or future need for charging infrastructure that is not currently commercially attractive for private investment. We believe that in such circumstances, public support (either directly through public funding or through indirect support such as tax allowances) is necessary to ensure that there is a comprehensive charging network across the country.
10. **Whether the electricity grid in Wales is able to deal with a significant increase in EV infrastructure, particularly in rural areas;**
11. National Grid has stated in its Future Energy Scenarios report, there is enough capacity on the grid to support the whole of the UK's transition to EVs. However, we do know there are challenges with ensuring the grid is able to support the implementation of charging infrastructure. Particularly rapid chargers (RC) (50KW), and in the future the ultra-charge network (greater than 100KW) is rolled out. This is something that will need to be taken into account in both urban and rural areas, where there are different challenges when ensuring enough energy is available.
12. In London, the Greater London Authority and Transport for London, has an £18m fund which is being invested into the identification of charging infrastructure sites and then the subsequent power upgrades where necessary. The £18m fund will support the implementation of a 300 RC network across the city. A similar fund in Wales would secure investment for the power upgrades where necessary, and provide clear direction that the Welsh Government are keen to build a strong charging infrastructure network, similar to the rest of the UK.
13. In Spain, the Spanish Government is currently studying the most cost effective ways to finance these charge point installations, and are speaking to Distribution Companies as well as the consumer. This is a study that the Welsh Government could do, as part a clear strategy for infrastructure deployment, alongside creating charging infrastructure road map.
14. We would advise the Welsh Government to look at European countries which are also in a similar position to Wales, like Spain. In Spain, Catalonia has created a strong charging infrastructure programme to support the roll out of a RC network. The Regional Government (with some national support) financed the development of this programme, and local authorities were granted land costs for installations.
15. **To explore the potential for electric vehicles to promote behaviour change, for example in terms of vehicle ownership and car sharing initiatives;**
16. We believe there is significant potential for electric vehicles to promote behaviour change. Nissan has engaged with national, regional and local authorities across the UK and Europe to discuss the promotion of Electric Vehicles. This has become increasingly important in recent years as the Air Quality has risen up the agenda.

17. There are multiple incentives that regional and local authorities are able to implement to support the transition to EVs. Public procurement is a key one, and we are pleased that the Welsh Government are starting to transition some of their fleet, however we think they should go further with the ambition and match Central UK Government with 100% by 2030. Other incentives we have seen be successful are free parking, reduced or free parking for short term, long term and residential, free lane access in highways and the city centre (this could be timed, and for use of bus lanes during off peak hours). We welcomed the National Infrastructure Assessment 2018 (National Infrastructure Commissions) recommendation's, which included advising that local authorities free up to 5% of their parking spaces for EVs charge points by 2020 and 25% by 2025. If the Welsh Government adopted this recommendation, it would enable commercial investors to significantly increase the Welsh charge point framework.
18. In regards to car sharing incentives, we have seen some successful initiatives put in place in Spain, by regional, city and local authorities EV targets (not a national one). For example, in the Balearic Islands, they have included EV quotas for car rentals companies to ensure that these fleets are transitioning. Nissan is also looking at different types of car ownership models, but we are unable to comment further at this time. However, for EV car sharing to be successful there will need to be a strong charging network across Wales, and they must be multi-standard.
19. Wales could learn from some of the main beacons within the UK which benefited from Go Ultra Low Cities Funding (GUL) (announced in January 2016) – London received the largest chunk of funding and created Neighbour Hoods of the Future to support local Boroughs, as well as targeting the implementation of charging infrastructure for specific areas – residential and car sharing. The GLA, TfL and London Council has also created one Public Procurement Framework for charging infrastructure in London, to support the Boroughs – easing the pressures that are put on individual offices.
20. One of the other key cities to look at for best practice in the UK is Milton Keynes, who also received GUL funding. Milton Keynes has developed the 'Milton Keynes Promise' where EV demand dictates the role of our residential charging infrastructure. Allowing customers of EVs to request charging infrastructure near their home if there isn't anything within a certain radius – therefore ensuring that the chargers are placed in the areas with most use. Milton Keynes also developed an EV Experience Centre, allowing people to visit and test drives EVs to help public perception and normalise the vehicles.
21. Nissan is keen to see a second round of Go Ultra Low Funding, and has highlighted that Wales would benefit from this (there were no Welsh applications to the first round). We would recommend that the Welsh Government pursues this, as it would enable local authorities to receive national Government funding.