PARLIAMENTARY BRIEFING

Powering Ahead: Putting Electric Vehicles on Scotland’s roads

December 2011

Summary

- Scotland’s 2009 Climate Change Act requires Scotland to meet ambitious emissions reductions targets, including 42% by 2020. To support this, the Government’s Routemap to 2020 also commits to an ‘almost complete decarbonisation of road transport by 2050’. In the Government’s Report on Proposals and Policies, Ministers have committed to ensuring a mature market for low carbon cars and an electric vehicle charging infrastructure in Scottish cities by 2020.
- Despite this fine intention, transport is the only part of the Scottish economy which has seen its contribution to climate change increase since 1990, and this trend continues.
- WWF believes that alongside demand management and greater levels of active travel Electric Vehicles (EVs) have an important role to play in a decarbonised transport sector. However, much more needs to be done to secure greater numbers on our roads.
- Scotland is well placed to be at the forefront of this EV revolution, given the Government’s ambitious renewables targets and the profile of Scottish companies at the forefront of EV technology.
- WWF’s Powering Ahead, a report based on findings by Atkins Consultants, recommends a number of policy options – for both national and local government - for the most effective ways to increase the uptake of EVs in Scotland. Our recommendations consist of a combination of measures to tackle the barriers of high purchase cost, limited range and the lack of charging points.
- Above all, the immediate priority must be for the Scottish Government to put in place an EV Strategy and Action Plan and an accompanying Infrastructure Strategy to provide confidence in the future of EVs in Scotland.

Background

Rising emissions from the transport sector remain at odds with our need to cut emissions across our economy in order to meet our statutory climate change obligations. In order to halt this increase, an increase in the efficiency of our vehicles is needed, along far greater effort to reduce the total annual distance driven in Scotland. In 2010, WWF Scotland published a report concluding that even if we stabilise traffic levels at those seen in 2001, we still need to replace 300,000 conventional cars with electric cars by 2020 to have confidence of hitting our climate targets. For WWF Scotland, electric vehicles offer an exciting and substantial opportunity to decarbonise road transport in Scotland, reduce dependency on oil, maintain good mobility levels, and grow the Scottish economy.
A necessary kick start

The need for more electric vehicles on Scotland’s roads is not a politically contentious one, with four out of the five main party manifestos for 2011 including a commitment to boosting numbers of electric vehicles in Scotland. The Scottish Government has already consulted on a proposed target of 100% of the public sector fleet being low carbon vehicles (LCV) by 2020 and that 95% of all new vehicles purchased in 2020 to be LCV. However, WWF Scotland believes the pace needs to be dramatically stepped up if we are to get close to these ambitious milestones. In the summer of 2011, only 2500 out of the 28 million cars in the UK were electric vehicles – just 0.008% of the entire fleet. The scale of change required is significant. Powering Ahead identifies three significant barriers to the uptake of EVs in Scotland. These consist of both demand and supply barriers:

- **High purchase cost** – with prices ranging between £18,000 and £25,000
- **Limited range** – with an average range of 100 miles
- **Lack of sufficient charging infrastructure** - WWF estimates that over 200,000 work-place charging points are required by 2020

Priority recommendations to Government

Targeted intervention is required by national and local government to kick start the market in electric vehicles. WWF’s report looks at international examples and other research to produce a series of policy options for local and national Government. For example, strong evidence from Denmark and the US shows that car manufacturers target roll out in places that have taken active steps to support the industry.

1. **Set out an EV Strategy and Action Plan** with a clear vision and targets for 2020, 2015 and 2030. This should be supported by an **EV Infrastructure Strategy** for the roll out of charging infrastructure.
2. **Work with relevant stakeholders to set technical standards**, specifications and regulations for charging infrastructure
3. **Commission a review of market models** for charging infrastructure.
4. **Together with Local Authorities, provide funding for public charging points**.
5. **Encourage manufacturers to offer ‘alternative ownership’ models**, such as car club schemes, battery leasing, vehicle and battery leasing and ‘pay as you go’ contracts.
6. **Provide a £10,000 subsidy** for the first 25,000 EVs sold in Scotland (as recommended by the UK CCC) to kick start the early uptake of EVs, £5,000 for the second 25,000 EVs in Scotland, reducing for subsequent 25,000 EV milestones.
7. **Introduce a scrappage scheme**, with subsidies reducing as EV uptake increases
8. **Provide grants for purchasing second hand EVs** from specified dealers
9. **Work with Local Authorities to incentivise business to install charging points** in employee car parks, with free advice, and match funding for ‘early adopter’ businesses wishing to install charging points in existing parking spaces.

Conclusion

EVs are not a silver bullet, and must be seen as part of a package of measures to encourage people to make the switch to better, more environmentally sensitive forms of transport. The package must therefore also include significantly increased support for public transport, cycling and walking and promotional campaigns targeted at greener transport behaviour. Scotland is well placed to be at the forefront of the EV revolution, given the ambitious renewables targets and the profile of Scottish companies at the forefront of EV technology. However, the transition to electric vehicles must start now. Scotland’s embryonic EV industry needs to be supported and encouraged by effective Government interventions.

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