



Switched On Scotland: phasing out the need for new petrol and diesel cars by 2032

Government: Scotland, UK

Region: Europe

Sector: Clean transportation

Date of publication: July 2018

Summary

In 2013, the Scottish Government published the [Switched On Scotland Roadmap](#), setting out a comprehensive strategy and priority actions in order to achieve the ambitious objective of **zero petrol and diesel-fueled vehicles by 2050**. The Roadmap was developed through extensive consultations with over 120 experts from 78 different organizations. It focused on both electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs) – collectively called Ultra-Low Emission Vehicles (ULEV) or zero emission vehicles (ZEVs) below – and set out goals and specific actions to take across seven key areas:

- **Policy frameworks** to embed ZEVs in all relevant policy areas such as climate change, air quality, renewable energy and public health;
- **Market development** to make ZEVs more desirable than fossil-fueled alternatives;
- Targeted, convenient and safe **recharging infrastructure**;
- **Sustainable transport systems**;
- **Energy systems** ensuring the electricity grids supports the ZEV market growth;
- **Economic opportunity** creating jobs and making local businesses competitive; and
- **Communication & Education** to increase public awareness and encourage ZEV adoption.

The Switched On Roadmap also highlighted cross-cutting objectives such as public sector leadership, strategic investments and stakeholder mobilization. It succeeded in providing an enabling framework for the design and implementation of **a range of comprehensive programs** targeting public fleets, charging infrastructures, businesses and consumers.



Results

Several programs were implemented as an immediate result of the Roadmap's publication:

- **Switched On Fleets** offered evidence-based analysis of new opportunities for the cost-effective deployment of ZEVs in public fleets, as well as direct funding to transition public fleets. To date, over 500 ZEVs have been introduced across the fleets of 50 public sector organizations.
- The **Low Carbon Transport Loan** for [businesses](#) and consumers, administered by the Energy Saving Trust, provides a 6 year interest free loan. To Spring 2018, the loan has supported the purchase of around 500 ZEVs.
- [ChargePlace Scotland](#) provides grants for local authorities and other organizations to install charge points across the country. In spring 2018, the network consisted of over 800 publicly available charge points. This includes over 175 rapid charge points, making it one of the most comprehensive networks in Europe. This allows ZEVs to travel around the whole country using a single access card.

The Switched On Roadmap entered its [second phase](#) in 2017, identifying ten outcome-focused actions to accelerate the growth of the ZEV market up to 2020. Through this new action plan, the Scottish Government will continue building the infrastructure and support necessary to shift the market, while also improving the cost, convenience and overall experience of driving ZEVs.

Building on the Action Plan and Scotland's Climate Change ambitions (now aiming for net-zero emissions of carbon dioxide by 2050 under current proposals), in September 2017 the Scottish Government announced that they would phase out the need for new petrol and diesel cars and vans by 2032. To meet this ambition, Scotland is taking a whole government approach and drawing together expertise in Infrastructure, Behaviour Change, Energy, Innovation and Skills Development.

Challenges


Sales of ZEVs remain at a relatively low level and support is required to achieve their widespread adoption. The challenges that must be overcome have been categorized into three priority areas:

- **Cost** – reducing the cost of ZEVs will play a major role in encouraging drivers to choose zero emission vehicles over fossil fueled vehicles.
- **Convenience** – it is necessary to make sure that ZEVs are easy to drive and recharge and a convenient fit with the lifestyle of vehicle owners.
- **Culture** – improving the public visibility and recognition of ZEVs is key to make them a preferred alternative to fossil fueled vehicles.

The move to ZEV technologies will change both electricity and transport systems, creating opportunities but also challenges across each. Through its Energy Strategy, Scotland is taking a coordinated approach – involving the existing transport sector and its suppliers, electricity generators, network owners and operators, not to mention consumers – this will help them understand and tackle these opportunities and challenges in the best way possible.

Key lessons learned

- **Partnerships across the Scottish public sector** are key to support the adoption of ZEVs in fleets and to allow the spread of the comprehensive ChargePlace Scotland network across the country.

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- By including these seven action areas, the Roadmap challenged the assumption that government support for ZEVs should focus on financial support and the provision of infrastructure and underlined the importance of **public sector leadership, stakeholder mobilization and outreach and education**. While it recognized the key role of the government in driving market change, it also acknowledged its limitations and the need to involve other stakeholders and resources.

More information

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Documents: [Switched On Scotland](#) | [Switched On Scotland Phase Two](#)

This case study was developed as part of the [Under2 Zero Emission Vehicle \(ZEV\) Project](#), which supports state and regional governments to increase the number of zero emission vehicles on their roads. The Under2 ZEV Project is implemented by The Climate Group, as part of the Under2 Coalition, with the support of the Scottish Government.

