



ChargePlace Scotland
electric vehicle charging



**TRANSPORT
SCOTLAND**
CÒMHDHAIL ALBA

Laurence Kenney
Head of Low Carbon Vehicles
Transport Scotland



24 October 2017

Overview



TRANSPORT
SCOTLAND
CÒMHDHAIL ALBA

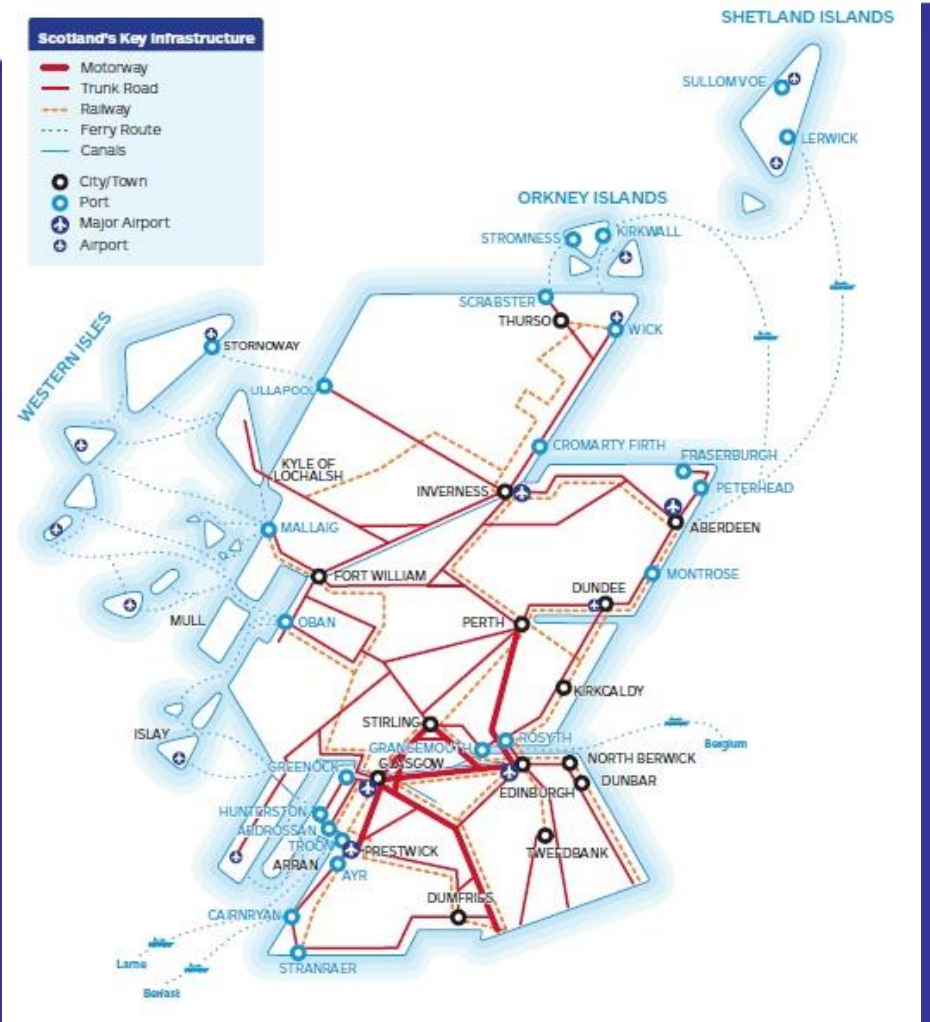
- Who we are?
- Why Electric Vehicles?
- Switched on Scotland Action Plan
- Energy Issues

Who are we

- The national transport agency for Scotland
- We deliver to the Scottish Government's purpose
“To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.”



TRANSPORT
SCOTLAND
CÒMHDHAIL ALBA





https://www.theguardian.com/politics/2017/jul/25/britain-to-ban... diesel ban - Google News Britain to ban sale of all dies...

File Edit View Favorites Tools Help

http--www.journeycheck LCV Transport Scotland Grid Reference Finder

sign in become a supporter subscribe search jobs dating more UK

theguardian

UK politics world sport football opinion culture business lifestyle fashion environment tech travel

home > politics

Transport policy

Britain to ban sale of all diesel and petrol cars and vans from 2040

Plans follow French commitment to take polluting vehicles off the road owing to effect of poor air quality on people's health



http://www.edinburghnews.scotsman.com/our-region/edinburgh/

File Edit View Favorites Tools Help

http--www.journeycheck LCV Transport Scotland Grid Reference Finder

Jobs Cars Homes Directory Announcements

Edinburgh

OUR REGION EDINBURGH LEITH NEW TOWN STOCKBRID

This Page Cannot Be Displayed

Sale of diesel and petrol cars to be banned from 2040



Windows taskbar icons: Start, Internet Explorer, 0, File Explorer, Photoshop, Office, Mail.

URBAN REALM
Danish city puts pedestrians and cyclists first p11

LOCAL TRANSPORT
Wokingham's fresh approach to asset management p14

CONSULTANTS
Small firms demonstrate big strengths p10

PLANNING
Developers urged to do more for sustainable travel p10

Visit CHT's official jobs website: chtjobs.com

Volvo signals end of road for diesel and petrol cars

Maker to switch to electric by 2019



The Economist

Fire and fury over North Korea
The Fed's runners and riders
Was Google right to sack him?
Competitive punning: game of groans

AUGUST 12TH - 18TH 2017

Roadkill

All new Volvo VOLVO

A detailed technical diagram of an internal combustion engine. Various parts are labeled with letters: A (intake manifold), P (piston), U (valve), T (turbocharger), and K (exhaust manifold).

Fig.1 The Internal Combustion Engine

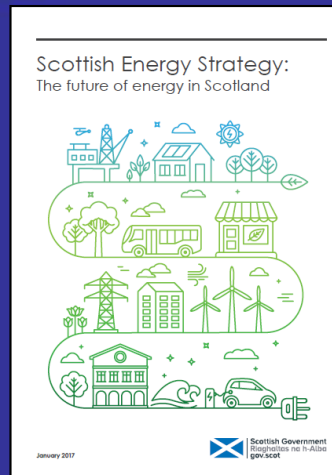
Why electric vehicles?

**SCOTLAND'S
ECONOMIC
STRATEGY**
MARCH 2015



www.gov.scot/economicstrategy

Scottish Energy Strategy:
The future of energy in Scotland



January 2017

Scottish Government
Thrasaid na h-Alba
gov.scot

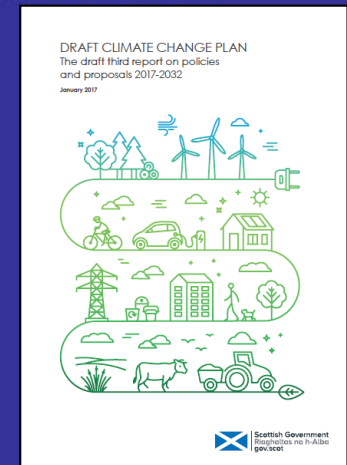
transport

SCOTLAND'S NATIONAL
STRATEGY



smarter
scotland
with us

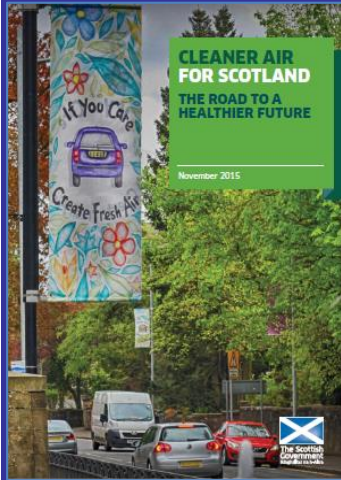
DRAFT CLIMATE CHANGE PLAN
The draft third report on policies
and proposals 2017-2032
January 2017



Scottish Government
Thrasaid na h-Alba
gov.scot

**CLEANER AIR
FOR SCOTLAND**
THE ROAD TO A
HEALTHIER FUTURE

November 2015



www.gov.scot/cleanerair

SCOTTISH SITES BREAKING NO₂ LIMITS
NO₂ annual average, 2014
µg/m³



Source: Friends of the Earth Scotland

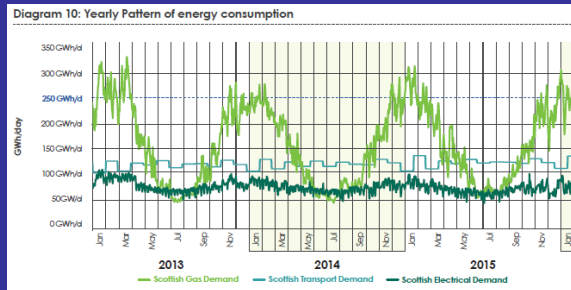
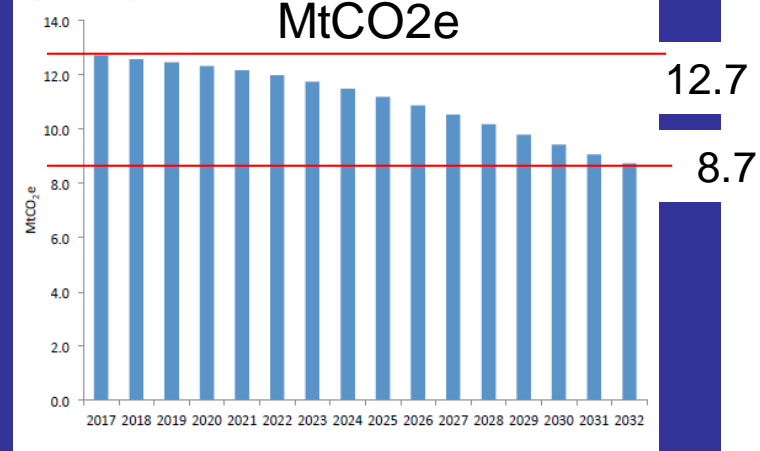
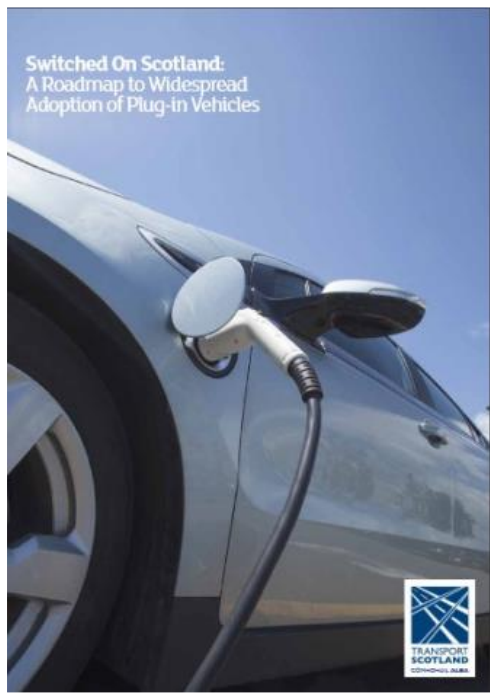


Figure 14: Transport carbon en



Switched on Scotland

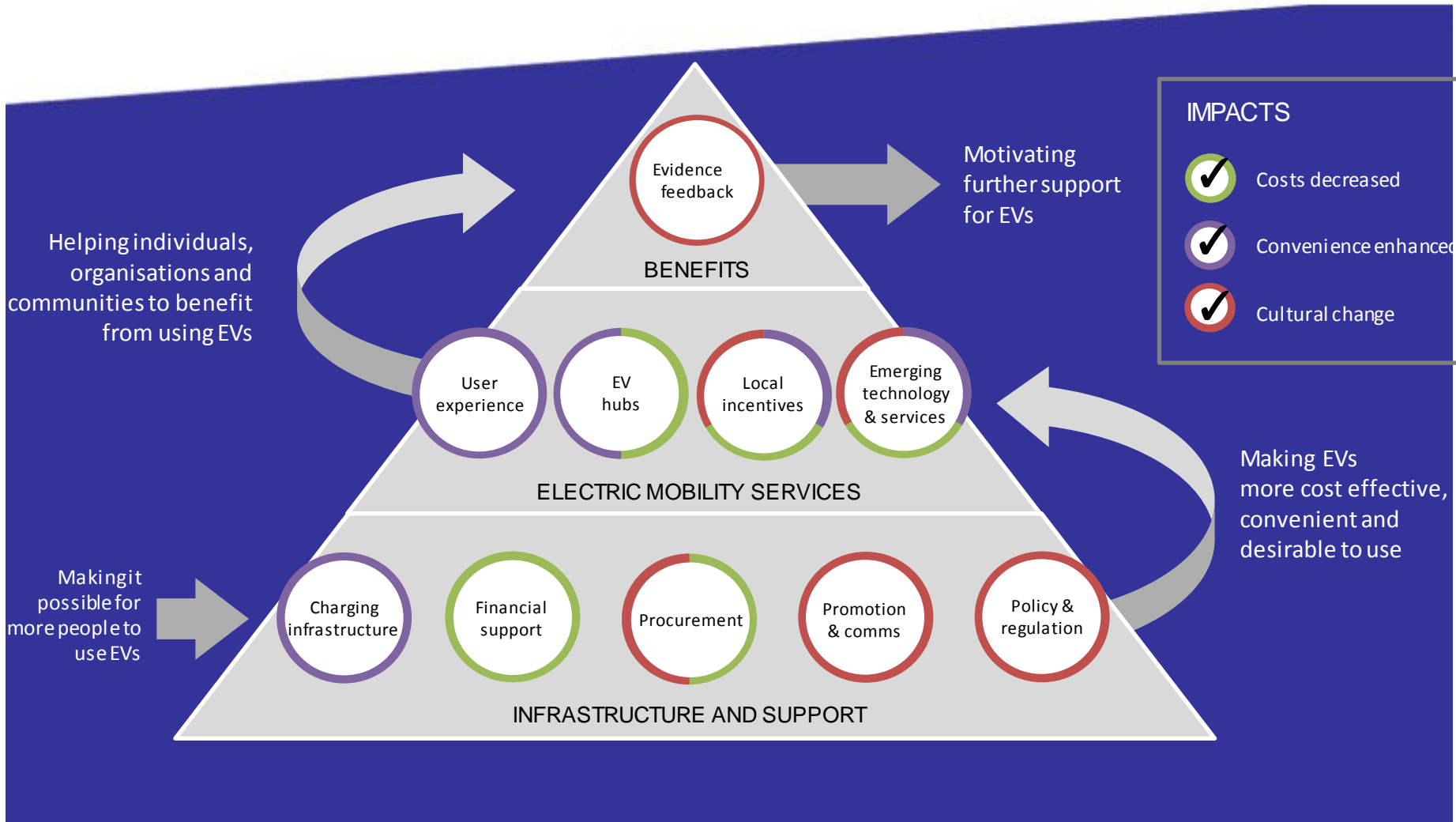
2013



2017



The action pyramid



A NATION WITH AMBITION

THE GOVERNMENT'S PROGRAMME FOR SCOTLAND 2017-18

Scottish Government
Riaghaidas na h-Alba
gov.scot



WE WILL PHASE OUT THE NEED FOR NEW PETROL AND DIESEL CARS AND VANS BY 2032

year of young people
bliadhna na h-òigridh
2018

“..the public sector to lead the way”



ChargePlace Scotland
electric vehicle charging

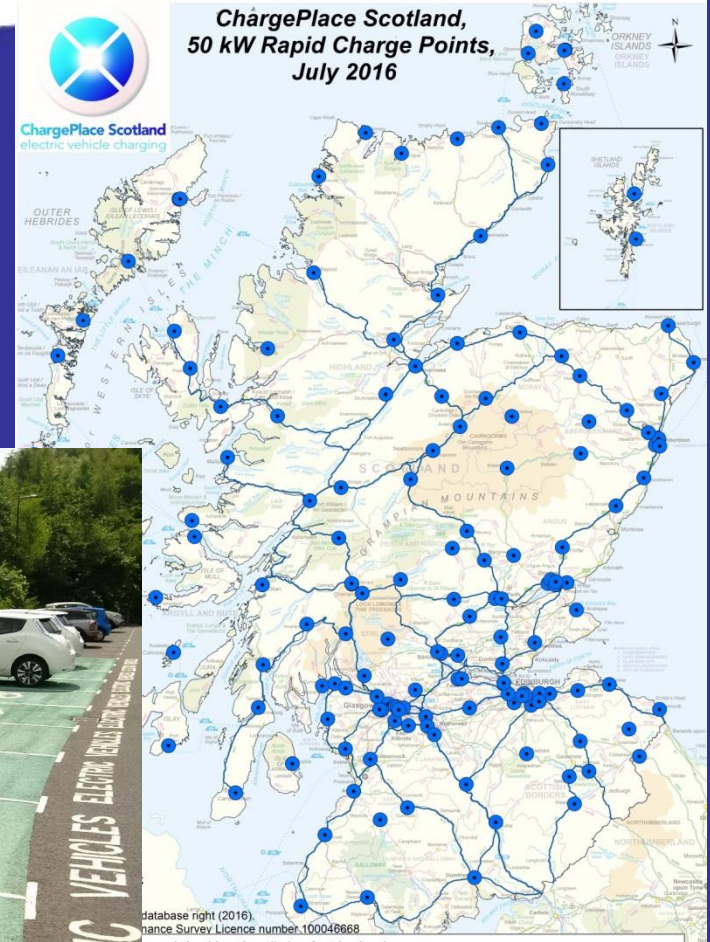
Action 1 – Charging Infrastructure



TRANSPORT
SCOTLAND
CÒMHDAIL ALBA



Local Authority Grants



Notes: Map is indicative and should not be relied on for trip planning.
Please consult map on chargeyourcar.org.uk for current status of charge points and location details.
All rapid charge points shown provide three tethered cables: CHAdeMO 50 kW DC; CCS 50kW DC; and Type 2 43kW AC

Charging Infrastructure

So far:

- Over 326,000 charging sessions
- 2,534,800 kwh power drawn
- Up to 1929 tonnes of CO2 in emissions saved



ChargePlace Scotland
electric vehicle charging

Rapid



TRANSPORT
SCOTLAND
CÒMHDAHAIL ALBA

Siemens QC45



ABB Terra 53



APT/Evolt
Compact
Tri Rapid

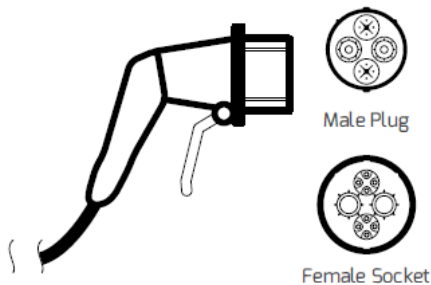


Tri Rapid Compact Charger

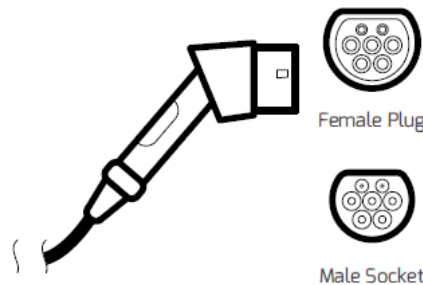
DBT Quick
Charger



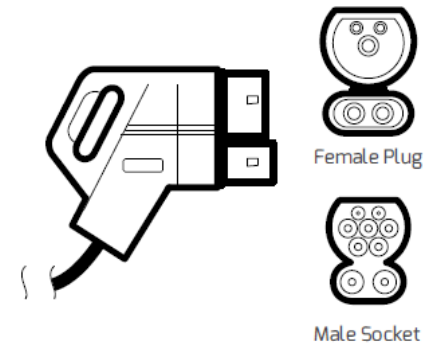
Chargemaster
Ultracharger



CHAdeMO



Type 2



CCS

AC

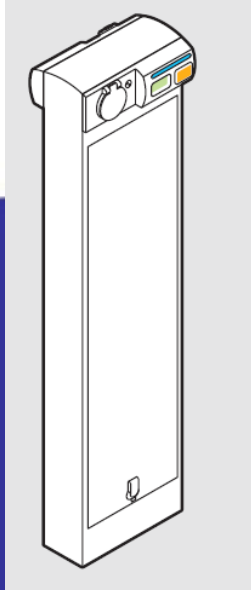


TRANSPORT
SCOTLAND
CÒMHDAIL ALBA

APT



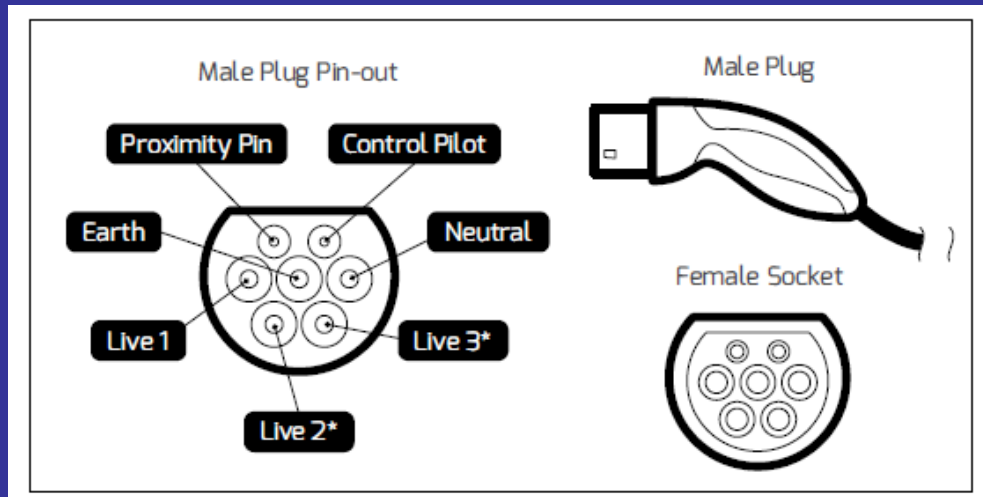
Electrobay



Chargemaster



Siemens



Action 2 – Financial Support

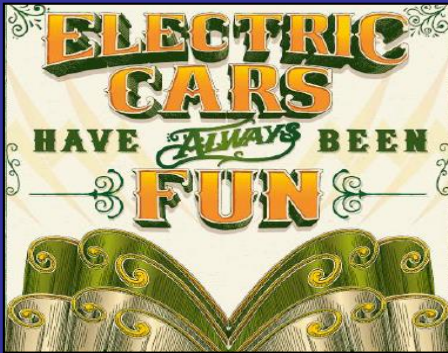
- Switched on Fleets
- 400 vehicles so far



Action 3 – Procurement



Action 4 – Promotion



EVOLUTION
6th May Royal Highland Centre, Edinburgh

THE MOTOR SHOW WHERE YOU GET TO DRIVE

sponsored by
ROUTEMOKEY

in association with
energy saving trust



Action 7 – EV hubs

- Public, community/third sector eligible
- Round 1 awards (May 2017) – Falkirk stadium & Broxden
- Round 2 – launch October 2017
- Eligible projects costs from £250k - £2m
- Projects to bring match funding
- Projects to be delivered by Dec 2019



Action 8 – Local Incentives



Parking



Planning



Road Access & Charging



Taxis & Private Hire

Energy Issues

- Locations for charge points
- DNO upgrades
- Renewables & battery storage
- Smart charging
- V2X (Vehicle to Grid etc), revenue
- Shift in energy, petrol/diesel to electricity

Thank You



TRANSPORT
SCOTLAND
CÒMHDHAIL ALBA

Laurence.Kenney@transport.gov.scot