

Public Electric Vehicle (EV) Infrastructure in Scotland

APSE

February 2022





An Introduction to Scottish Futures Trust

- Arms-length company wholly owned by Scottish Ministers
- Improves efficiency and effectiveness of infrastructure investment and use in Scotland
- Works in collaborations with public bodies and industry, leading to better value for money, maximising investment in the fabric of Scotland
- Electric Vehicle Infrastructure (EVI) is a significant opportunity for the net zero transition and inward investment

SFT's Role with Transport Scotland

1

Scale up investment in Electric Vehicle charging infrastructure

2

Support public sector fleet decarbonisation

3

Support the decarbonisation of buses



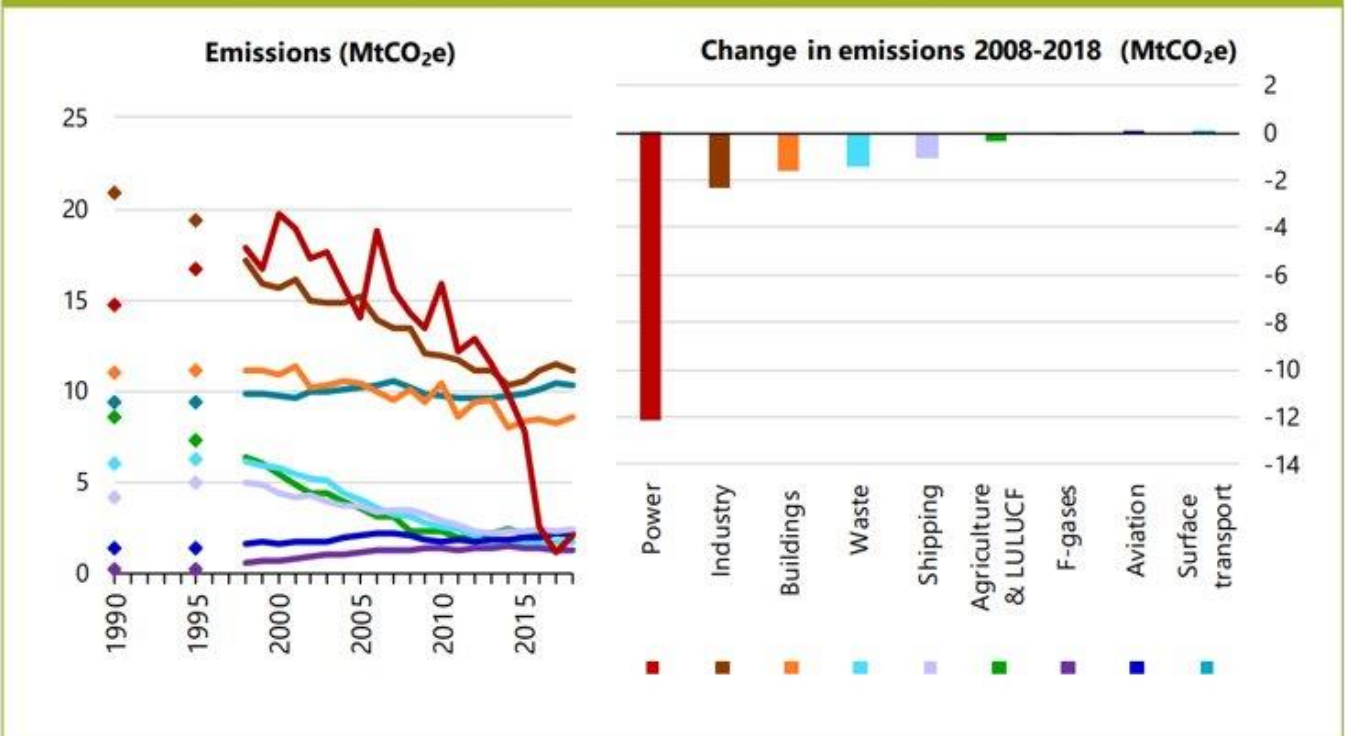
Why are we doing this?

Prior to the pandemic, CO2 emissions from surface transport were **flatlining**

Transport accounts for **just over a third** of Scotland's total greenhouse gas emissions

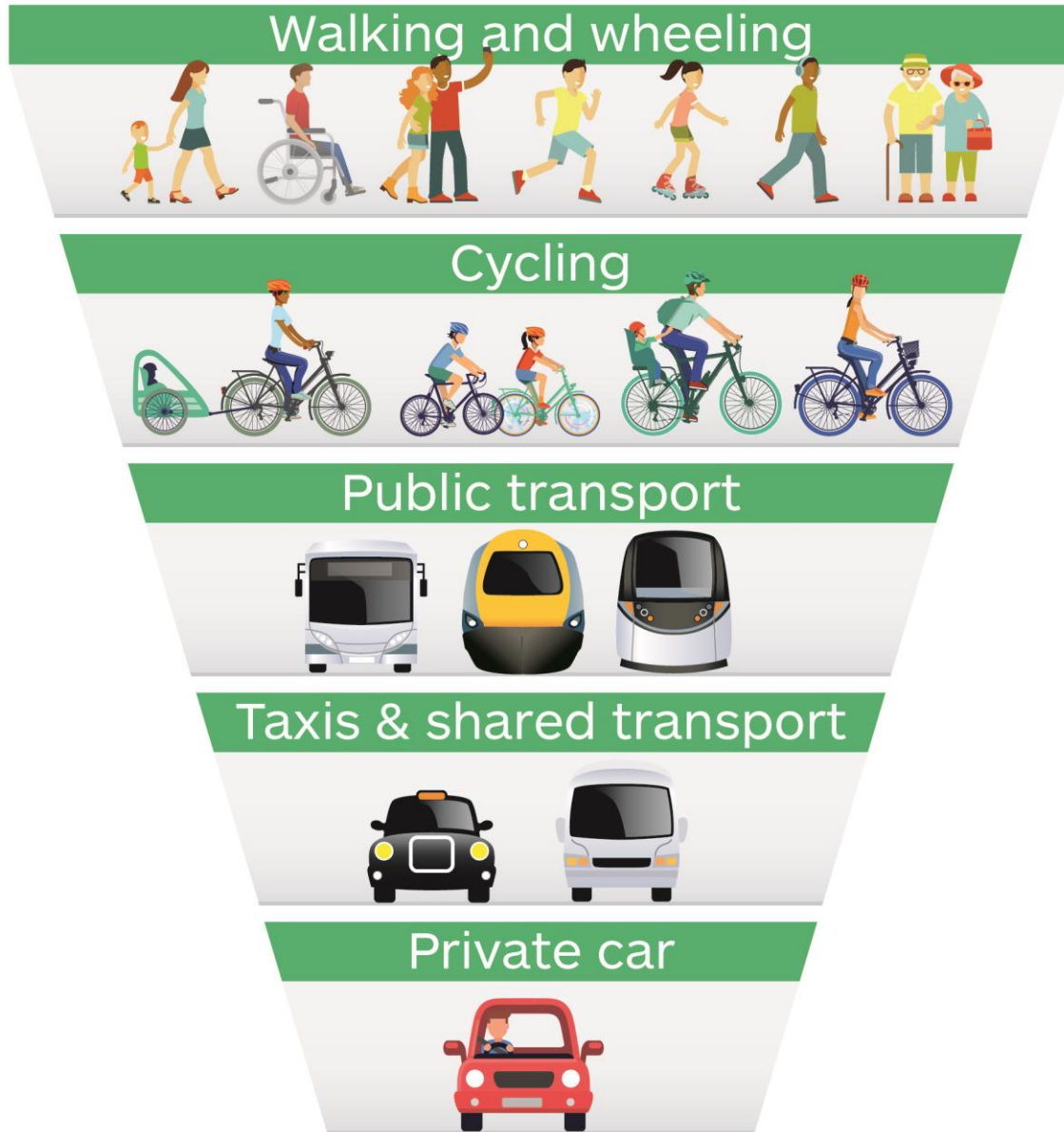
Car is the most emitting transport mode at **39%**, with goods vehicles contributing **25%**

Figure 2.3. Greenhouse gas emissions by sector in Scotland (1990-2018)



Source: NAEI (2020) *Greenhouse Gas Inventories for England, Scotland, Wales & Northern Ireland: 1990-2019*.
Notes: No emissions data are available for Scotland for 1991-1994 or 1996-1997. Does not reflect forthcoming revisions to peatland emissions or global warming potentials (see Box 2.1).

Prioritising Sustainable Transport



What is the Scottish Government's response?

- Reducing private car km by **20% by 2030**
- Phasing out of the need for new petrol and diesel cars and vans by **2030**
- Removing petrol and diesel cars from the public sector fleet by **2025**
- Supporting a full transition to zero emission medium and heavy-duty vehicles by **2040**
- **Accelerating deployment of EV charging infrastructure**

Emerging Challenges and Opportunities

- Leverage Private Investment & Expertise
- Mixed Economy Models
- Access across all of Scotland
- Maintain a consumer-focused approach
- Develop guidance and shared learning
- Review pricing policies and tariffs
- Collaboration with Distribution Network Operators
- Continued engagement with Ofgem



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Electric Vehicle Charging
Infrastructure Report
July 2021

Draft Vision for Scotland's Public EV Charging Network



transport.gov.scot

A Network Fit For The Future: Draft Vision for Scotland's Public Electric Vehicle Charging Network

- People have access to a **well-designed** and **comprehensive** public network of charge points.
- The public electric vehicle network **works for everyone** regardless of age, health, income or other needs.
- Scotland has attracted **private sector investment** to grow the public electric charging network, ensuring it **meets the needs of all people**.
- The public charging network is **powered by clean, renewable energy** and drivers **benefit from advancements in energy storage, smart tariffs and network design**.
- People's first choice wherever possible is **active and public transport with the location of electric vehicle charging points supporting those choices**.

Private Sector & Investment Priorities

Working with investors, charge point network operators and other parties to **provide access to Chargeplace Scotland data**; creating an enabling environment to **support investment in public charge points**

Enabling **new models of public electric vehicle charge point financing and delivery**, focused on **public and private partnerships**, to support and coordinate investment

Ensuring **public funds are targeted** at areas where commercial investment is unable to fully deliver; using public procurement to **deliver an affordable, reliable and well-maintained network** of charge points across Scotland

Working with Scotland's enterprise and skills agencies to **realise supply chain opportunities** from electric vehicles and infrastructure in Scotland

**The ChargePlace
Scotland Network now
provides over 2000
public charge points.**

It supported almost
783,000 charging
events in 2020.



In October 2021 there were 49 public charge points per 100,000 people in Scotland.

There were also 12.5 public rapid charge points per 100,000 people – higher than anywhere else in the UK.



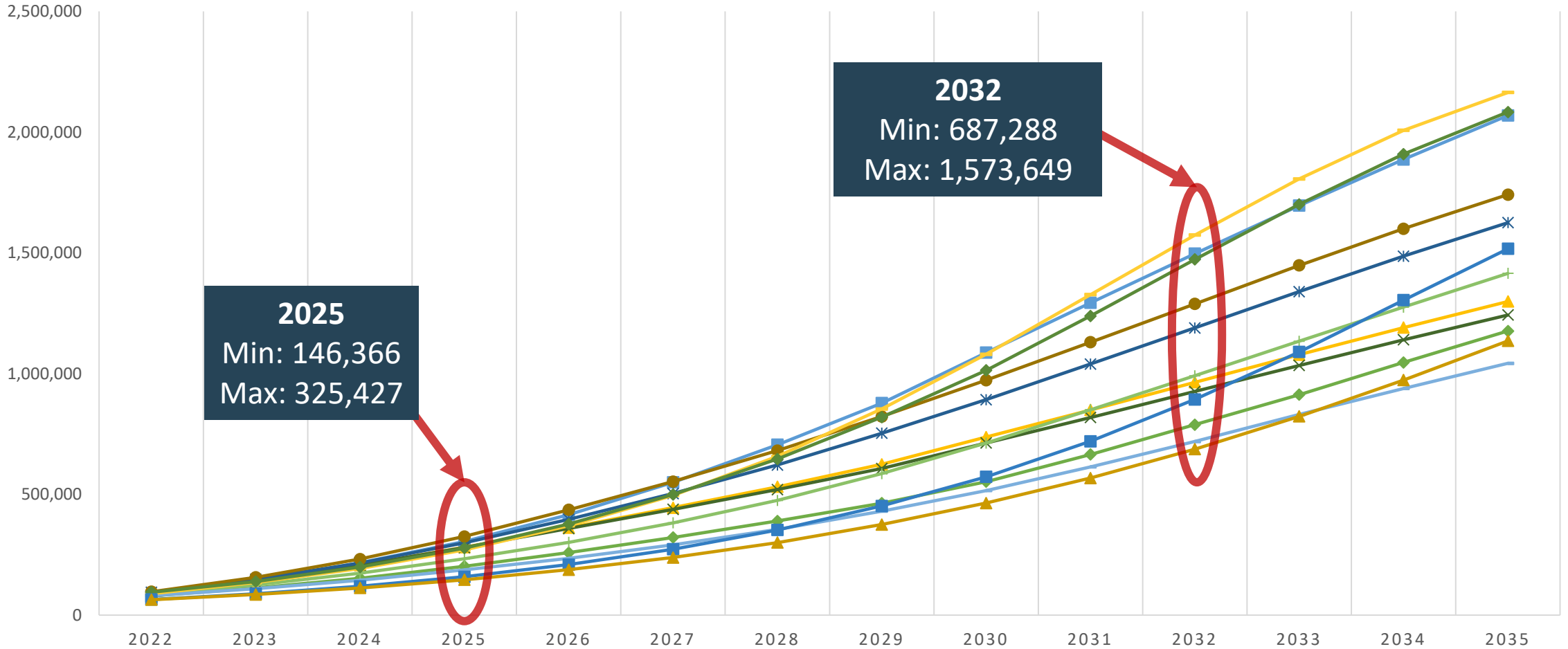
21.4%

of all new car sales in
December 2021 in
Scotland were electric



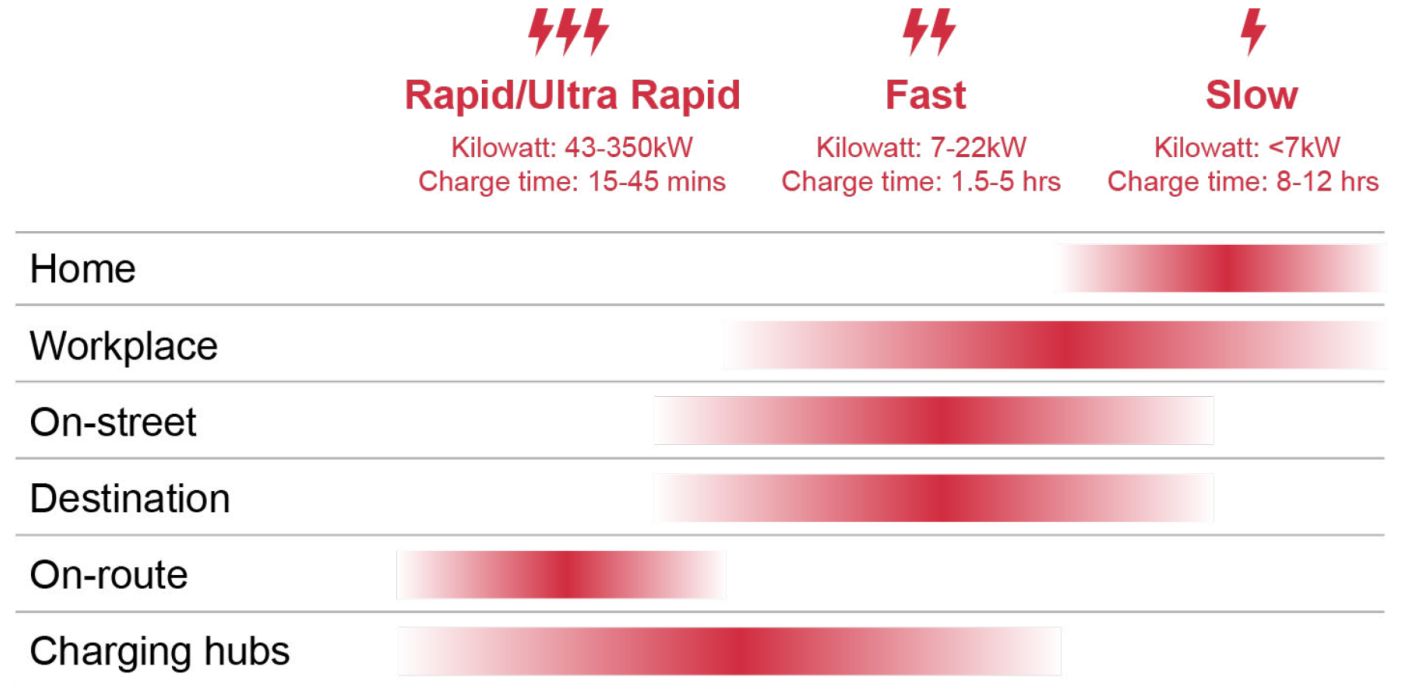
Plug-in Car Forecasts - Scotland

- ◆ EE Policy Scenario 0
- EE Policy Scenario 1
- ▲ EE Policy Scenario 2
- ◆ EE Policy Scenario 3
- * SMMT High Private
- SMMT High
- + SMMT Central
- SMMT Low
- NG FES Leading the Way
- ◆ NG FES Consumer Transformation
- NG FES System Transformation
- ▲ NG FES Steady Progression



Infrastructure
Type

Supply vs
Demand



Source: Electric Vehicle Charging Strategy for Wales

What could the future look like?



Home Charging



Workplace Charging

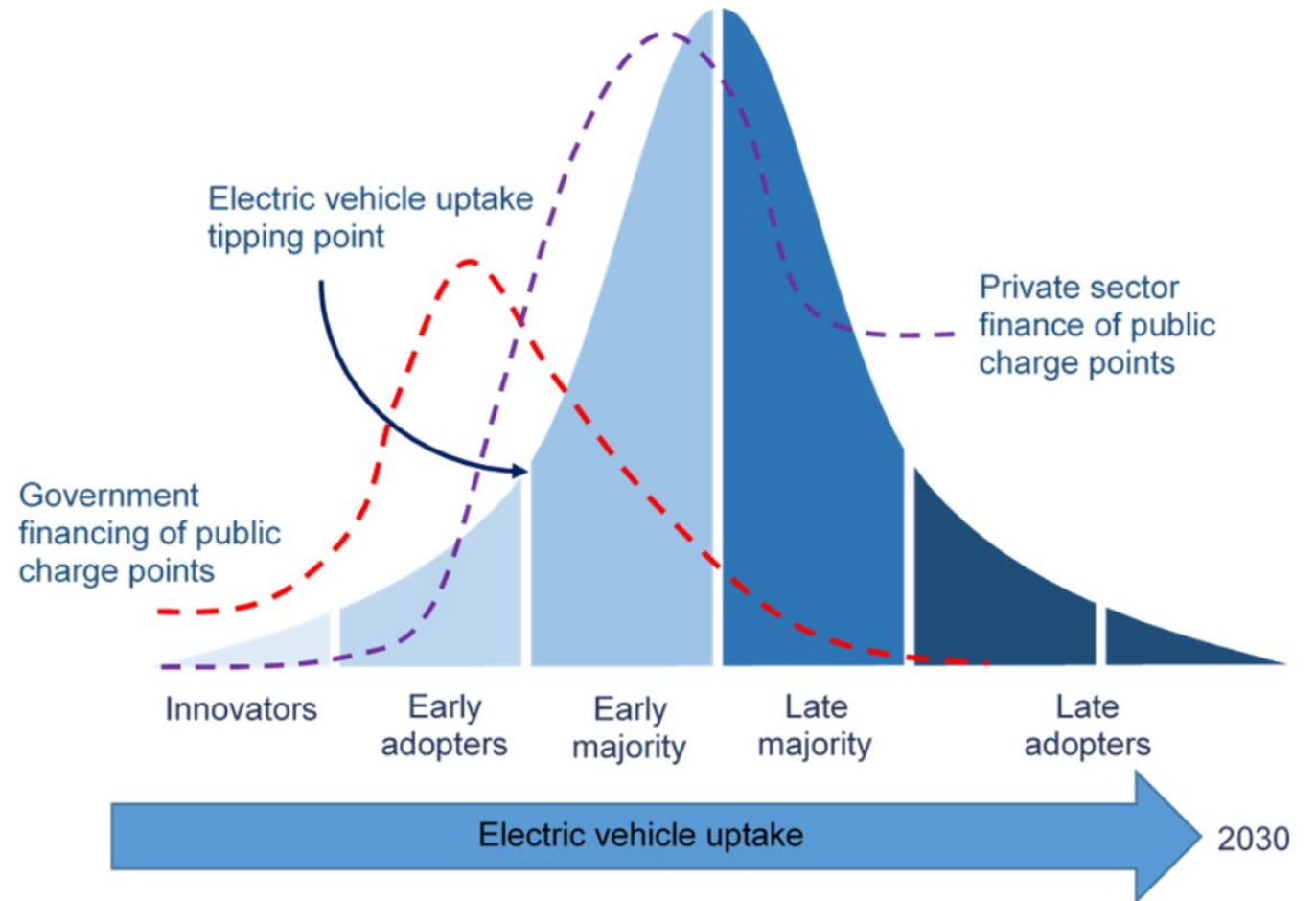


On-street Charging



Destination, On Route & Charging Hubs

Accelerating Commercial Investment



Transition to a new programme

Moving away from 100% public capital grants

Creating the conditions to make Scotland “investable”, commercialising existing and future EVI

Tariffs for local authority owned and operated EVI

Piloting new delivery models

£60M fund announced in January – half provided via private sector

SFT to support local authorities with this transition

Engagement with private sector and thinking commercially will be key to its success

Q&A

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