

Transport Scotland Update

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In this session I will cover updates on:

- Update on policy and progress with public sector fleet decarbonisation
- Review challenges associated with decarbonising the public sector fleet
- Transport Scotland focus for 24/25
- Links to related projects and initiatives



Policies and Progress



Scotland is already halfway to net zero emissions. We continue to decarbonise faster than the United Kingdom average. Scottish Government remains fully committed to meeting our target of net zero emissions by 2045.

Recent developments across Government related to public sector Fleet

- UKG ban to 2035
- Scotland part of the Vehicle Emission Trading Schemes (VETS)
- Climate Change Committee report on Scottish progress towards targets
- Scottish Government recognises a need to review legislation related to climate change targets.
- New First Minister confirms priorities for government as including:
 - Boosting economic growth
 - Improving public services
 - Tacking the climate emergency



Public Sector Fleet Decarbonisation

Data from the 2023 survey shows:

- Local Authority fleet make up around half of the public sector fleet with just under 17,000 reported in 2023.
- **36%** of cars in the 2023 survey are zero emission an increase from **11%** in 2020.
- 14% of LCVs are now zero emission an increase from 4% in 2020.
- 17% of the total public sector fleet is zero emission.
- Important to consider how we can best continue to capture and use this information going forward.

| | Number of Vehicles in Survey | Zero Emission & ULEV | Zero Emission Vehicles |
|---------------------|------------------------------------|----------------------------|------------------------------|
| 2020 Total Fleet | 28,818 | 6 % | 5% |
| Cars | 8,511 | 16% | 11% |
| Vans under 3.5 | 9,664 | 5% | 4% |
| 2022 Total Fleet | 32,113 | 15% | 12% |
| Cars | 10,367 | 33% | 26% |
| Vans under 3.5 | 13,695 | 9% | 8% |
| 2023 Total Fleet | 29,616 | 20% | 17 % |
| Cars | 8,878 | 48% | 36% |
| Vans under 3.5 | 12,114 | 14% | 14% |



Local Authority Fleet Decarbonisation





Local Authority Fleet

- 13% of the total local authority fleet now zero emission (17% all public sector).
- 36% of Cars are zero emission (36% all public sector).
- 13% of Vans are zero emission (14% all public sector).

Progress is varied:

- Zero emission cars in local authorities range from 7% to 86%
- Zero emission LCVs range from 1% 48%





Funding

- Significant investment needed for zero emission vehicles and supporting infrastructure
- Government funding now reduced
- Local authority fleet budgets increasingly squeezed
- Electric vehicles more expensive than petrol/diesel equivalents

Supply chain

Supply chain delays (electric vehicles and charging infrastructure)

<u>Infrastructure</u>

- Limitations to depot power supply
- Slow process for requesting power upgrades from DNOs
- Insurance and health and safety challenges to wallmounted depot charge points

Staff and support

- · Lack of staff resource and skills
- Suboptimal coordination/communication between LA departments
- Lack of strategy from senior council leadership





Funding

- The private sector is well capitalised and already looking at opportunities to invest in EV charging in Scotland.
- Work is being started on looking at how private capital could be levered to support decarbonisation of vehicles, particularly heavier and more expensive niche vehicles.
- The availability of Transport Scotland and Scottish Government funding is significantly reduced funding opportunities limited and targeted.
- Cost gap between ICE and ZE vehicles may now be closing with a need to better understand the true total cost of ownership
- Adding value to and learning from existing funding and projects such as the EV Infrastructure Fund





Supply Chains

- Lead times for vehicles improving
- Range and specification of vehicles continuing to grow
- Technology developing
- Government focus on boosting Scotland's economic growth
- More changes to come following introduction of VETS...





<u>Infrastructure</u>

- Local authorities now have access to specific support for planning public EV charging from DNOs.
- Increasing interest from the private sector to install and operate EV charging for fleets.
- Indications that for larger sites energy supply contracts and inclusion of renewables can make this approach affordable and attractive.
- Increased focus on aggregating charging & energy demand to maximise utilisation of EV charging.
- Linking into other existing initiatives that aim to attract private sector capital and develop scale.





Staff and Support

- Continued issues with resources across the public sector.
- Changes in government priorities and the fiscal environment may continue to impact on resources.
- Some support available through Transport Scotland, EST and others.
- Funding schemes for public EV charging projects will absorb private sector,
 contractor and DNO resources highlighting a need for improved coordination.



Approach for 24/25:

TRANSPORT SCOTLAND

- This year available budget will focus on pilot project that can demonstrate one or more of the following:
 - Attracts private investment or makes use of alternative financing models.
 - Offers shared usage of infrastructure (across public sector, general public, private sector or HDVs)
 - Demand Aggregation.
 - Provides access to / includes trucks or heavy vehicles
- We hope to announce details of successful projects over the coming weeks.
- Developing links into a range of new work being started within the Low Carbon Economy Team





Linking into wider development and opportunities

- Encourage and enable collaboration
- Operating charging networks that are shared with other fleets and the public
- Levering private sector capital
- Engaging with OEMs, finance and industry
- Continued support and guidance



Electric Vehicle Infrastructure Fund

- · Local authorities develop local priorities and outcomes in line with the Vision
- Through <u>EVIF</u> funding, guidance and support available to develop plans and delivery models

Key Priorities:

- Identify the medium & longer term investment required through <u>Strategy & Expansion Plans</u>.
- Develop new delivery models where public and private capital work together.
- Target EVIF funding areas where private investment on its own is unlikely.

Key outcomes:

- A comprehensive, reliable and accessible network across Scotland
- Public funding targeted at areas of need
- Tariffs that are fair, sustainable and enable private sector investment out with and in addition to EVIF

Vision for Public EV Charging





A Network Fit For The Future: Vision for Scotland's Public Electric Vehicle Charging Network People have access to a welldesigned & 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 & drivers benefit from advancements in energy storage, smart tariffs & network design.

People's first choice wherever possible is active & public transport with the location of electric vehicle charging points supporting those choices.



Next Steps – Vision Implementation Plan



- Due to be published in late 2024 in response to UK CCC recommendation.
- Outline route map for continuing to develop the public EV charging network to 2030.
- Developed in partnership with key stakeholders who share collective responsibility for delivering public EV charging across Scotland.
- Identify an agreed set of actions to deliver Vision for public EV charging and meet Scotland's needs, including the needs of rural and island communities.



ScotZEB

Phase 1:

- £62m of funding to nine bus operators and local authorities.
- Supported 276 zero emission busses and associated charging infrastructure.





Phase 2:

- Phase 2 of ScotZEB was open for applications in 2023
- ScotZEB is designed to provide capital funding to forward-thinking companies to disrupt the bus and coach market
- Help make zero-emission vehicles the default choice for all operators
- Can includes operators of public service buses, home-to-school buses, community buses, transport-to-health buses and tourist and private-hire coaches who can all potentially benefit.
- Needs private sector involvement and supports shared access to EV charging.

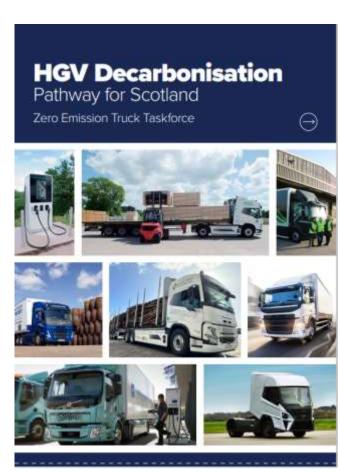
HGV Decarbonisation in Scotland



In March this year – **HGV Decarbonisation Pathway for Scotland** was published.

Role of the **Zero Emission Truck Taskforce**:

- To identify hurdles and opportunities
- Co-design a pathway to a swift and just transition with clear actions.
- Build confidence in partners







Key hurdles



- Confidence and knowledge procuring, energising, financing, operating
- Energy infrastructure depot, en route, destination
 - Depot location, configuration, substations, DNO access
 - Landlords
 - Destination charging factory, warehouse, retail
 - Megawatt charging or not
 - Role of hydrogen

Commercial viability

- Up front costs vs TCO; own vs lease; length of contracts; IRS16; residual value (urban rigid BEV expected to be at TCO parity now/ soon)
- Fuel cost has huge impact on TCO
- Skills for the above areas

Access to energy infrastructure



World we wish to see:

• HGVs can charge and fuel as required across Scotland.





- Infrastructure is shared between road haulage operators and other HDV vehicles.
- Energy networks working in partnership with the haulage sector (networks have already forecast demand for energy use to 2045).
- Obtaining or enhancing a grid connection to be a relatively quick and straightforward process.



Already Happening



- Companies already offering charging services for HGVs, including energy as a service models – monthly fee or per kW
- Manufacturers are offering depot charging services
- Public sector and bus operators exploring shared access to charging.
- En Route HGV charging stations at the development stage
- Herriot Watt University appointed to produce a map indicating where initial enroute charging/Hydrogen refuelling stations for zero emission HDVs are required.



How can we capitalise on interdependencies?

<u>Challenge – limited resources to deliver bigger asks</u> Opportunities:



- Better align work areas to share benefits e.g. DNOs / EVIF / supporting economy and innovation
- EV Vision Implementation Plan private sector skills, resources and capital
- Learning from experience across public sector, and elsewhere
- Collaboration and aggregation
- Support from EST and forums to bring a range of stakeholders together

<u>Challenge - Constrained budgets against increasing costs</u> Opportunities:

- Collaboration to deliver economies of scale
- Levering private capital particularly where the cost of that capital can be spread and shared
- Looking at where investment in infrastructure is planned and aggregating demand so that it can be accessed by a wider range of users
- Short term workstreams as part of a longer-term approach





Thank You

