



PHASING OUT PETROL AND DIESEL CARS
& VANS FROM THE PUBLIC SECTOR FLEET
**MEETING THE ELECTRIC VEHICLE
INFRASTRUCTURE CHALLENGE**

APRIL 2022

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Summary

The Scottish Government made the commitment to

“work with public bodies to phase out petrol and diesel cars from our public sector fleet and phase out the need for any new petrol and diesel light commercial vehicles by 2025”.

Whilst good progress has been made, supply chain pressures, inflation and extended lead times reinforce the need to move at pace on decarbonising public sector cars and vans and procuring charging infrastructure.

As the benefits of zero emission vehicles are expected to increase, Transport Scotland has signalled that future funding is likely to focus on higher cost specialist vehicles and their charging infrastructure. Public bodies will therefore need to consider new ways to finance charging infrastructure to support the decarbonisation of their car and van fleets.

Transitioning to zero emission vehicles presents an opportunity to assess the role of cars and vans in the public sector fleet, to rationalise fleets and contribute to the target of reducing car kms travelled by 20%.

Collaboration between public bodies and with the private sector on charging infrastructure, can help make best use of resources, optimise investments, reduce costs, maximise benefits and reduce the requirement for funding.

Shared learning, providing greater visibility of future infrastructure plans and joint working could help aggregate demand and accelerate delivery.

It is important to assess what investment is required. Shared chargepoints and extending homebased chargepoint installations can reduce costs and increase productivity.

Public bodies should consider if a centralised public chargepoint management system will deliver the best results for their fleet. Chargepoint interoperability to enable future shared access to chargepoints will be an important consideration going forward.

Many of the Region and City growth deals identified low carbon initiatives as a priority. There may be synergies with these initiatives and expanding fleet charging infrastructure.

Future bids to the UK Government's Levelling Up fund may also present opportunities to secure funding for fleet infrastructure.

For some local authorities, the most practical financing option may be the Public Works Loan Board.

There is potential for local authorities to partner with other public bodies who do not have borrowing powers and for local authorities to procure charging infrastructure services on their behalf.

For EV infrastructure initiatives at scale, the UK Infrastructure Bank is another potential source of finance for local authorities.

Community Municipal Investments is an alternative option which has been adopted by a small number of local authorities in England Wales for local carbon reduction initiatives.

Lease finance is widely available for both vehicles and infrastructure. Other supplier finance models such as “Charging-as-a-Service” are beginning to emerge.

Where the preference is to adopt private finance, creating the conditions to attract private capital to this sector will be important such as being clear on the income stream to be generated. If there is short term uncertainty around this, a minimum level of utilisation guarantee could be considered.

There are many routes to market through which private finance could be mobilised. In a developing market, pre-procurement planning, and early supplier engagement are essential to help deliver successful outcomes.

1.

SFT and Net Zero Transport

SFT was established by Scottish Government as a centre of infrastructure expertise. We provide additional skills, resource and knowledge to public sector organisations, supporting them plan, fund, deliver and manage their infrastructure projects and programmes.

SFT is working closely with Transport Scotland and public bodies across Scotland to help accelerate the delivery of an expanded public EV charging network and the delivery of public sector fleet charging infrastructure. SFT is also supporting Transport Scotland on the delivery of their Zero Emission Bus Challenge Fund (ScotZEB).

2. Policy Background

Scottish Ministers have set ambitious climate targets, with a statutory requirement to achieve a 75% reduction in greenhouse gas emissions by 2030 and net zero by 2045. The transport sector is currently the largest contributor to carbon emissions, with road transport responsible for the greatest share.

In the Programme for Government of 2019, as part of a “Mission Zero” for transport, the Scottish Government made the commitment to:

“creating the conditions to phase out the need for all new petrol and diesel vehicles in Scotland’s public sector fleet by 2030, and phasing out the need for all petrol and diesel cars from the public sector fleet by 2025”.

The Scottish Government’s commitment to public sector fleet decarbonisation was underlined by its signature of the Climate Group ZEV Pledge for Public Fleets at COP26.

Over time it is expected that the total cost of ownership of ZEVs will move closer to parity to that of internal combustion vehicles and evidence suggests that benefits increase with higher vehicle utilisation. Considering this, Transport Scotland has signalled that future financial support is likely to focus on higher cost and specialist vehicles and infrastructure. Consequently, public bodies will need to consider how they finance the on-going decarbonisation of their cars and vans and associated charging infrastructure.

3. Purpose of this Report

This report focuses on options available for public bodies to deliver and finance the charging infrastructure required to support the phasing out of petrol and diesel cars and vans from the public sector fleet.

The decarbonisation of the public sector fleet will require a mix of alternative technologies. Hydrogen fuelled vehicles may also form part of the longer-term delivery plan where heavier vehicles with more challenging duty cycles are involved. Whilst the focus of this report is on the likely need for EV charging infrastructure, many of the principles outlined are applicable when considering the need to decarbonise heavier duty vehicles and invest in the necessary re-fuelling infrastructure.

This report summarises:

- > Progress made in phasing out cars and vans from the public sector fleet.
- > Barriers and opportunities in meeting the investment challenge.
- > Options to optimise the infrastructure expansion.
- > Options to finance the infrastructure expansion.
- > Partnership models that could be adopted.
- > The current procurement frameworks that could be adopted for future delivery.

It concludes by suggesting the establishment of a pathfinder initiative to test the viability and benefits of a collaborative approach to assessing future charging needs as well as identifying alternative funding options to help accelerate the delivery of EV charging infrastructure for public sector cars and vans.



4.

Progress in Phasing Out Cars & Vans from Public Sector Fleet

Many public bodies have made significant progress towards decarbonising their fleet. Transport Scotland has supported the transition to electric car and van fleets through its Switched-on-Fleets programme, administered by the Energy Savings Trust (EST). Through their funding programmes, Transport Scotland has invested over £60 million since 2014 delivering around 3,500 zero emission vehicles as well as over 800 EV chargepoints for fleet users.

In 2020 Transport Scotland commissioned Jacobs to analyse the Scottish public sector fleet. The research covered over 95% of the public sector and showed that the total number of vehicles in the fleet at that time was around 28,800, spread over 60 public bodies.

By far the largest categories were cars and Light Goods Vehicles (LGVs) totalling around 22,000 vehicles. Around 57% of the public sector fleet was within local authorities and around 17% in health boards.

For cars and LGVs the analysis showed that ZEVs comprised 946 cars (10.6%) and 435 LGVs (3.4%).

The graph below illustrates the annual mileage bands for public sector cars and LGVs.

Since then, there has been significant additional investment in fleet decarbonisation across Scotland and it is expected that figure will have increased.

Whilst good progress has been made it is evident that issues such as supply chain pressures and price inflation are extending the lead times for vehicles and infrastructure. This reinforces the need to move at pace on establishing and implementing fleet rationalisation and decarbonisation strategies and delivery plans for charging infrastructure.

Figure 1.
Public Sector Fleet
Cars and LGVs

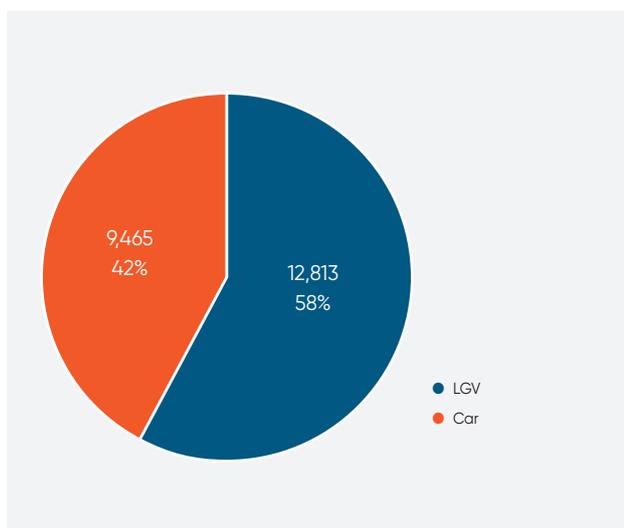
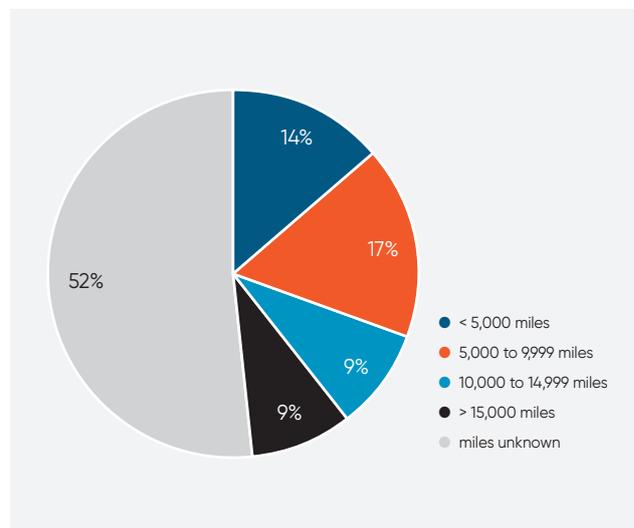


Figure 2.
Public Sector Fleet
Cars and LGVs Miles / Year



5. Barriers in Meeting the Investment Challenge

EST host regular public sector fleet decarbonisation forums. These forums are open to all public sector fleet managers. It provides a valuable platform to share lessons learned and hear from industry experts on emerging opportunities and new ways of working. At a recent forum EST facilitated a workshop to take stock of the current delivery landscape and draw out the key barriers to an effective transition to ZEVs.

SFT also engages with local authority personnel in the public EV charging sector, many of whom are also responsible for the transition of their fleet to ZEVs.

Below is a summary of the key messages from recent engagement with public sector fleet managers.

Upfront Costs – The higher upfront cost of purchasing ZEVs and the additional cost of installing charging infrastructure and the lack of certainty of future capital funding is of concern.

Vehicle Options – Particularly for vans, there is concern that there is not yet a range of vehicles available to meet all operational requirements.

Lead times – Given the well published global shortage in semi-conductors and the on-going impact of the pandemic, fleet managers are now being quoted long lead times for ZEVs.

Skills and Resources – For many public bodies the availability of personnel with the relevant experience to take forward this transition is a key barrier. This is likely to be more acute in smaller organisations that may not have large fleet management teams.

Long Term Strategy – Many public bodies are still developing their long-term fleet strategy. Issues such as the number and functionality of vehicles, electric vs hydrogen, home vs depot charging, interfacing with estate management and finance colleagues as well as sharing vehicles and charging infrastructure with other organisation is taking time to resolve.

Power Supply – Whilst many depots are likely to have sufficient installed electrical capacity to accommodate standard and fast chargers which are suitable for most cars and vans, larger capacity chargers for more rapid charging or for larger vehicles may need a new substations and grid upgrades which will take time and add substantial costs.

Staff Engagement – The feedback was that many operational staff within the public sector still have a perception that ZEVs have a limited range and that limited access to charging infrastructure could constrain their normal work patterns.



6. Opportunities for Delivery



6.1. Overview

As highlighted above, transitioning all of Scotland's public sector cars and vans to ZEVs is a significant challenge but it also represents a major opportunity to critically assess the role of cars and vans in the public sector fleet, how they can support the way in which the delivery of public services will evolve in the years to come as well as supporting Scotland's transition to a low carbon economy.

Across Scotland there are many good examples of public bodies working together to deliver complex change and transformation programmes. Sharing resources and experiences to help identify the scale of investment required and to plan and implement delivery will be a key factor to the success of this programme of change.

At the heart of the suggestions below is collaboration and the investment hierarchy set out the Scottish Government's Infrastructure Investment Plan. By working collaboratively opportunities will arise to optimise the investment required, maximise the utilisation of existing and new assets, co-locate and share facilities and minimise the need to access alternative sources of funding for new infrastructure.

The concept of collaboration should not only be viewed as a public-to-public initiative. Through collaborating with industry there is an opportunity to create investment opportunities which can help secure economies of scale, improve service delivery, and leverage additional sources of finance.

6.2 Shared Learning Forums & Knowledge Hubs

This is already happening through the bi-monthly EST fleet forum. Additional forums for shared learning also exist via the [*Society of Chief Officers of Transportation in Scotland*](#) (SCOTS), the [*Association for Public Service Excellence*](#) (APSE) as well as each of the seven Regional Transport Partnerships and initiatives such as the emergency services' Blue Light Working Group.

Building on these forums for shared learning there is merit in public bodies developing a shared fleet charging Knowledge Hub that could capture shared learning, be a repository for best practice, standard documents, links to reference material, case studies as well as offering a virtual discussion platform for public sector personnel to openly exchange challenges, queries, and opportunities.

Post-Covid it is likely that use of public sector fleets will evolve to reflect new ways of working and in some cases this may mean the overall size of fleets can reduce. In addition, finding alternatives to travelling or using more sustainable transport options can reduce the overall demand on the public sector fleets and contribute to the target of reducing car kms travelled by 20%.

Collaboration and shared learning between public bodies will help identify new opportunities for more affordable and sustainable fleet management within the public sector.

6.3 Shared Resources & Joint Working

Taking shared learning to the next level could include public bodies sharing resources and budgets to increase the efficiency and effectiveness of planning and delivering the required infrastructure.

Through pooling resources and budgets, several collaborative short-life groupings could be mobilised by public bodies to plan and procure the required transition in a manner that is aligned with other policy priorities such as the Place Principle.

This will help provide greater visibility of the investment required, reduce the risk of duplication of effort and help present more attractive investment propositions to the private sector.

It can also aggregate the demand for EV chargepoints to help secure economies of scale and, through bundling of low and high utilisation sites, help secure commercially viable propositions.

This is already happening in many parts of Scotland and the partnerships between Aberdeen City, Aberdeenshire, and Highland Council, the eight authorities in the Glasgow City Region as well as North, South and East Ayrshires on their respective public EV charging expansion plans are good examples of collaboration.

As these joint working initiatives evolve this could see a range of delivery models begin to emerge.

As mentioned above, the concept of joint working should not be seen as purely a public-to-public initiative. Through openly communicating investment plans, opportunities may arise to secure even greater economies of scale through partnerships with the private sector.

Private fleet operators will be facing similar resource and financial constraints as they seek to decarbonise their fleets. Through public/private collaborations infrastructure investments which may not have been viable as a standalone public sector initiative, could become more deliverable as a result of sharing fixed costs and increasing the utilisation of charging infrastructure. This may also generate additional income for public bodies.

To provide better visibility as to who is planning to do what in different parts of Scotland, commissioning an accessible data base similar to *SFT's Construction Pipeline Forecast Tool* could be of assistance. This

builds on concept of an interactive knowledge hub to help connect potential chargepoint hosts and service providers looking for investment opportunities. This concept was identified as one of the portfolio of Demonstrator Solutions proposed by the Green Finance Institute in their publication *Road to Zero – Unlocking public and private capital to decarbonise road transport*.

6.4 Optimising the Infrastructure Costs

Given the scale of the challenge and the costs involved it is important to critically assess what infrastructure is necessary to meet operational needs and how the utilisation of charging infrastructure could be optimised.

ZEVs and the associated infrastructure are necessary to support the delivery of high-quality public services. But as new ways of working are developed and technology enables more flexibility working patterns, the transition to ZEVs presents an excellent opportunity to assess how many cars and vans the public sector fleet needs.

Where the need to access a vehicle is incidental, shared mobility options such as pool cars and car clubs are well established alternatives to individual car ownership.

For most cars and small vans, where overnight charging is available either at the depot or at the operator's home, 3.7kW or 7.4kW chargepoints are likely to be sufficient. The range of most electric cars and vans could mean that access to overnight charging two or three times a week may be sufficient. Where this can be planned and complemented by access to the public charging network, the need for more expensive depot based rapid and ultra-rapid charging for public sector cars and vans could be reduced.

With most cars and vans only needing to be charged overnight two or three times a week, the introduction of chargepoint booking or scheduling systems can help reduce the number of chargepoints required and increase the utilisation of the chargepoints installed.

Historically fleet and public charging infrastructure has been considered separately. Whilst recognising that in many circumstances operational constraints will limit to opportunity for the public to access fleet charging infrastructure, where shared access is possible it will help increase the utilisation of charging infrastructure and potentially generate additional income.

Scottish Ambulance Service



Home start initiatives are actively being considered by several public bodies. Installing a 7kW charger at an employee's home is a relatively affordable option and there are solutions emerging that can capture work related charging hours. Supporting staff to access off-peak tariffs overnight can both help staff and their employers reduce their charging costs. Some suppliers are claiming over an 80% reduction in equivalent fuel costs. This option can also generate other benefits through increased productivity by reducing the time to travel to and from depots as well as helping contribute to the target of reducing car kms travelled by 20%.

Whilst some depots may not have the necessary electrical capacity to accommodate rapid charges, one option is to consider installing restricted or load managed chargers which can operate at a lower capacity until such time as the local grid capacity is enhanced.

As a final point, where possible, avoiding unnecessary civil engineering works can help reduce the overall install cost. Wall mounted units can avoid the need for expensive earthwork and resurfacing activities.

6.5 Operating Networks

Public bodies currently adopt the ChargePlace Scotland (CPS) operating network which provides the necessary back-office management function. At present the costs of running CPS are paid by Scottish

Ministers. Transport Scotland has signalled the need to build on the lessons learned in developing the CPS Scotland network. However, the intention is to not extend the current subsidy arrangement beyond the expiry of the current back-office contract meaning public sector fleet owners will need to begin developing options for procuring a back-office service.

CPS was established to provide the EV car driver with a unified national brand, ensuring that public chargepoints across the country could be easily accessed. Chargepoints with restricted, or no, public access does not add to this public network.

From a fleet management perspective, public bodies should consider whether a centralised chargepoint management system can deliver the best results for their organisation. Real time information on chargepoint availability, reliability, utilisation and maintenance may be better obtained from a management system dedicated to the organisations own network of fleet chargepoints. Taking direct responsibility for chargepoint management may assist in improving operational performance as it allows public bodies to set their own Key Performance Indicators.

To help facilitate this approach, Transport Scotland has pledged to support the Blue Light Services Working Group in the development of a common back-office system which could be a useful template for other public sector fleet operators.

7.

Funding & Financing Options

7.1 Background

Public bodies have traditionally funded fleet decarbonisation activities through capital budgets, either through their own or via grant funding from Transport Scotland. To date, the total costs have been proportionately low, but as the number of electric vehicles in the public sector fleet increase in line with the commitment to phase out the need for all petrol or diesel cars, so will the associated spend on infrastructure. It is therefore likely that public bodies will need to consider alternative funding and financing mechanisms.

Many of the Region and City Growth Deals identified low carbon initiatives as a priority. There may be synergies with outcomes and priorities of low carbon in these growth deals with the need to expand fleet charging infrastructure.

Future bids to the UK Government's Levelling Up fund may also present opportunities to secure funding for fleet infrastructure.

For some local authorities the most practical financing option may be to approach the Public Works Loan Board.

Where the preference is to adopt private finance, creating the conditions to attract private capital to this sector will be important.

Any borrowing should be supported by a strong business case and an assessment against each organisation's respective borrowing rules.

7.2 Leveraging Local Authorities' Borrowing Capacity

There is the potential for local authorities to work with other public bodies who do not have access to borrowing powers and procure charging infrastructure capacity which could be accessed by multiple public bodies.

Local authorities could increase the utilisation of their assets by charging partner organisations an agreed tariff for shared access to charging infrastructure they procure.

7.3 UK Infrastructure Bank

The UK Infrastructure Bank (UKIB) was set up by the UK Government in June 2021 as a government-owned policy bank, focused on increasing infrastructure investment across the UK.

UKIB can however finance initiatives across both the private and public sector. UKIB can lend up to £4bn to local and mayoral authorities for strategic and high value projects of at least £5 million.

Where Scottish local authorities collaborate and identify EV charging initiatives at scale, the UKIB may be an alternative or complementary source of finance.

The Scottish National Investment Bank (The Bank) provides patient (long term) capital to businesses and projects throughout Scotland that are aligned with its Missions. The Bank's sole source of funding is Financial Transactions from Scottish Government which can only be used to lend to private sector entities and is therefore not a potential source of finance for public bodies.

7.4 Community Municipal Investments

This is part of the portfolio of demonstrator solutions proposed by the Green Finance Institute in their publication "Road to Zero – Unlocking public and private capital to decarbonise road transport".

Community Municipal Investments (CMI) are bonds (or loans) issued by local authorities and administered by a regulated crowdfunding platform. They offer a way for the public to participate in the financing of local low carbon initiatives.

Climate bonds were launched by West Berkshire Council and Warrington Borough Council in the Summer of 2020. Each met their £1m target. In 2021 the London Borough of Islington issued CMI to support Islington-based projects that tackle climate change. Last year Blaenau Gwent County Borough Council approved a £2m CMI and became the fourth authority in the UK to approve a community bond to finance carbon reduction projects.



7.5 Leasing

Lease finance is widely available for both vehicles and charging infrastructure, either on an operating or finance lease basis. Operating leases tend to have shorter terms and finance leases may have an option to purchase or allow for asset transfer at the end of the lease.

A lease finance model can reduce or eliminate the need for upfront capital funding from the public sector. The required capital investment is converted into an operational charge paid for either per mile, per kW or as fixed monthly fee. In addition, some vehicle leasing companies are offering charging miles/hours as part of the monthly lease charge.

There are operators who can offer a fully financed turnkey solution of EV charging infrastructure. As well as the cost of the charging infrastructure this can include the cost of grid connections, vehicle-battery management as well as software packages to enable effective fleet management.

Lease costs can also include training and maintenance services as well as options to upgrade the scope of services during the lease.

In accounting terms, finance leases have historically been classified as equivalent to a borrowing and shown on-balance sheet; operating leases are not shown on the balance sheet. The adoption of IFRS 16 by the public sector for the accounting period starting April 2022 will change this, such that any operating lease with a duration of greater than 12 months will, broadly, be capitalised on-balance sheet as well.

For central government bodies, budgetary treatment tends to follow accounting treatment. Therefore, capital budget cover is expected to be required from 1st April 2022 for new operating leases and therefore lease finance may not be a viable option for such organisations. Where capital budget is available, there may be a preference to purchase vehicles or infrastructure outright.

For local authorities the consolidation of liabilities on balance sheet (in this case from operating lease liabilities) does not generally have a budgetary implication unless there are directly associated revenue grant payments from Scottish Government (i.e., supported borrowing). Therefore, lease finance may be a viable alternative for local authorities.

7.6 Supplier Finance

Historically supplier finance meant the supplier offering funding through a third party or in-house credit provider – essentially leasing or hire purchase deals. Increasingly, however suppliers are looking to offer other forms of financing, particularly where it can support a longer-term relationship with a public sector partner (typically at least 10 years). “Charging-as-a-service” is one example, which would involve the private sector partner/supplier offering a range of products and services bundled together in exchange for a regular payment. This tends to be more applicable to infrastructure than fleets, although “vehicles-as-a service” is also a developing market.

The principal objective may be characterised as the sale/purchase of an electric vehicle charging and management service, rather than purely a purchase of charging infrastructure or electricity. This potentially could include some, or all, of a range of services:

- > Energy solution assessment and design
- > EV fleet migration planning
- > Ongoing EV fleet management
- > Back-office system management
- > Supply of smart energy systems
- > Fleet management information
- > Electricity/Fuel supply
- > Remote charge point monitoring and maintenance
- > Renewable energy supply – electricity or hydrogen
- > Battery finance (for larger vehicles)
- > Hardware supply, installation, and commissioning
- > Long term maintenance
- > Assessment of external revenue opportunities

The public sector partner pays for the provision of the service over time, usually against an agreed set of performance criteria. The cost can be expressed as p/kWh charge, or as a fixed amount or linked to utilisation – much will depend upon the partner’s perception of the risks involved and its willingness to accept such risks and/or mitigate them. While some products remain in an early stage of development, such “service type” offerings can deliver private sector capital and expertise to supplement resources within the public sector and help decarbonise public sector fleets.



7.7 Reducing the Cost of Finance

For fleet infrastructure investment the utilisation of the asset is very much within the control of the public sector, unlike public charging where asset utilisation is much harder to predict. Therefore, where the preference is to adopt privately financed options, the public sector could consider offering tenderers some form of minimum utilisation guarantee based on the public body’s forecast utilisation of the required assets. Offering such an availability payment will reduce the overall demand risk being taken by the private sector and should lower the overall cost of finance.

8. Other Partnership Models

The supplier finance model can be expanded into a formal partnership with public bodies by a concession type arrangement or a joint venture agreement. The intent of such structures is to introduce private capital and expertise and to share the benefits and risks between the public and private partners.

There are four broad partnering models, described in summary form below. There is likely to be more potential where fleet usage is integrated with public usage, as a route to diversifying revenue streams and delivering higher and more predictable utilisation.

Not all options below will be suitable for all public bodies. Where fleet sizes are small and/or widely dispersed, such partnership models may not be applicable.

Joint venture model: the public authority and private partner share control of the infrastructure through the joint venture that they create. Instead of being allocated to either party, the risks are shared by the parties based on their stake in the joint venture. The model is flexible when it comes to financing arrangements, whether this comes from one or both parties, or a separate third party.

Concession model: the public authority retains some control over the specification, installation, operation, and use of the infrastructure. The risks associated with construction/installation through to utilisation are typically transferred to the private partner, although the risk allocation in the concession contract can be tailored to the specific circumstances. The private partner finances the capital and maintenance expenditure and collects and retains revenues from the user(s).

Availability-based model: the public authority retains some control over the infrastructure, as with the concession model. The risks associated with construction/installation through to exploitation are mainly transferred to the private partner, with the notable exception of utilisation risk. The private partner finances the expenditure (with or without financial support from the public authority) but, instead of relying on user revenues for a return on that investment, is paid by the public authority over the duration of the contract only if the infrastructure is continually available for its intended use.

Licence model: the private partner controls the infrastructure and retains most of the project risks from construction/installation through to exploitation. It finances the capital and maintenance expenditure and collects and retains revenues from users. A licence might include conditions and limitations over the private partner's actions, but generally tends to be more permissive in nature than other partnering models, i.e. stating what the private partner may do rather than what it must do. This model is less likely to be of relevance to the provision of public body fleet infrastructure, other than where shared public utilisation could deliver significant revenue streams.

9.

Procuring Charging Infrastructure

There are three main approaches to the procurement of electric vehicle charging infrastructure: standalone procurements, procurement frameworks and dynamic purchasing systems (DPS).

For standalone procurements the approach (e.g. quick quote, OJEU compliant etc) will depend upon the scope, the contract sum, and the public body's internal governance and approval arrangements. It is likely that this approach will take more resource than utilising an established framework or DPS, but the public body can retain control over the scope of services and the bidding process.

Procurement frameworks are generally set up with pre-defined scopes by procuring bodies or third-party organisations. These can often be quite broad and spread across several lots. They will have a defined list of pre-selected suppliers who have committed to both the terms of the framework and delivering projects as required by public bodies wishing to 'call off' from the framework. The list of suppliers rarely changes over the life of the framework, which is usually 2-4 years. Bidders for 'call off' projects are therefore restricted to this list of suppliers. Specifications, contract terms and supporting documentation can be pre-established, providing template solutions, although this is not always the case.

Examples of existing frameworks that are relevant to this sector include:

ESPO Vehicle Charging Infrastructure 2 (VCI 2)

TPPL EV Charging-Infrastructure

In addition Scotland Excel is also in the process of establishing an *Electric Vehicle Charging Points framework*.

A DPS is a framework type agreement which allows suppliers to be added to it over its life. The emphasis is on flexibility, which may lead to fewer pre-defined terms and specifications and, accordingly, more input being required from the purchaser up front.

Examples of DPS arrangements include:

CCS Vehicle Charging Infrastructure Solutions

TPPL Electric Vehicle Charging Infrastructure

Public bodies should, however, be aware that the Scottish Government have advised caution when using "speculative framework agreements" as public bodies are required to satisfy themselves as to the legal compliance of, and value for money achieved by, any procurement process – particularly if the framework is managed by a private sector body (SPPN 03/2017).

In considering the preferred approach to procurement, collaboration between public bodies can secure cost and resource benefits and help secure economies of scale.

In an emerging and expanding market, building in pre-procurement market engagement to the overall procurement strategy and investing time to develop project specifications, contract terms as well as providing all bidders with supporting data on sites, grid connections and likely charge point utilisation will help deliver a successful outcome.

10. Potential Next Steps

This report sets out a range of options that could be taken forward by the public sector to accelerate the delivery of fleet EV charging infrastructure as well as ways in which alternative sources of funding could be mobilised.

To help provide an evidence base as to how these options could be taken forward and inform future delivery models, there is merit in establishing a small number of pathfinder initiatives that test the viability and benefits of collaboration to assess future charging needs as well as identifying alternative sources of funding.

11.

Acknowledgements

The following publications have helped inform the observations in this report and are useful reference points for further information.

- > [Energy Savings Trust - EV Guide for Fleet Managers](#)
- > Energy Savings Trust - TCO Report (copy available on request)
- > [EV-Energy Taskforce - Commercial EV Fleet Charging Requirements](#)
- > [Green Finance Institute - Road to Zero - Unlocking public and private capital to decarbonise road transport](#)
- > [Green Finance Institute - Local Climate Bonds](#)
- > [Green Finance Institute - Local climate bonds a cost-effective way to raise billions for councils green plans says new campaign](#)
- > [Sustainable transport forum report - recommendations for public authorities on recharging infrastructure.pdf](#)

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