



Electric Vehicle Infrastructure Fund Local Authority Workshop

11th and 18th May 2022



**TRANSPORT
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EV Infrastructure Fund

- Intends to draw in & smooth out commercial investment across Scotland (aligned with draft vision) - half of £60m funding to be leveraged from private sector over 4 years.
- Envisage that it is likely to be last national public EV infrastructure funding programme provided by Scottish Ministers – anything in future would be very focused.
- Supports local authorities to develop & deliver partnerships with private sector in areas where commercial investment on its own would be unviable.
- Neutral on who owns and operates charge points (not about expanding CPS) – can be achieved through a variety of potential owner/operator models.

EV Infrastructure Fund - Key Messages

- Collaboration strongly encouraged
- Tariffs in place for all local authority retained EVCPs
- Project Funding informed by Strategy & Expansion Plans
- Funding to enable investment where private investment on its own is not viable
- Evidence opportunities to mobilise private sector investment
- ChargePlace Scotland back office – No central funding beyond current contract
- No new top-ups to ORCS funding from April 22

EV Infrastructure Fund - Funding Available



£30m Programme Funding over Four Years
Leverage at least £30m from the Private Sector

Funding Stream	Strategic Planning and Project Development	Project Delivery
Amount	£140k per Local Authority over four years	Balancing amount from £30m supporting delivery
Profile	£60k available in 2022/23 for early planning	Profiled over Four Years - £300K de minimis level
Outputs	Strategy, Expansion Plan, Procurement, Surveys, etc.	Outcomes & Priorities and enable a Just Transition
Allocation	Additional in-house costs & External Support	Where private investment on its own not viable

EV Infrastructure Fund – Programme Timetable



Spring to Winter 2022		By Spring 2023	From 2023 to 2026
Local Authority Strategies & Expansion Plans	Confirm Funding	Enabling and Procurement	Delivery
Local Authority Tariffs in place by Spring 2023			
ChargePlace Scotland back office contract – end of funding – Spring 2025			

Electric Vehicle Infrastructure Fund

SFT Support - Strategies & Expansion Plans



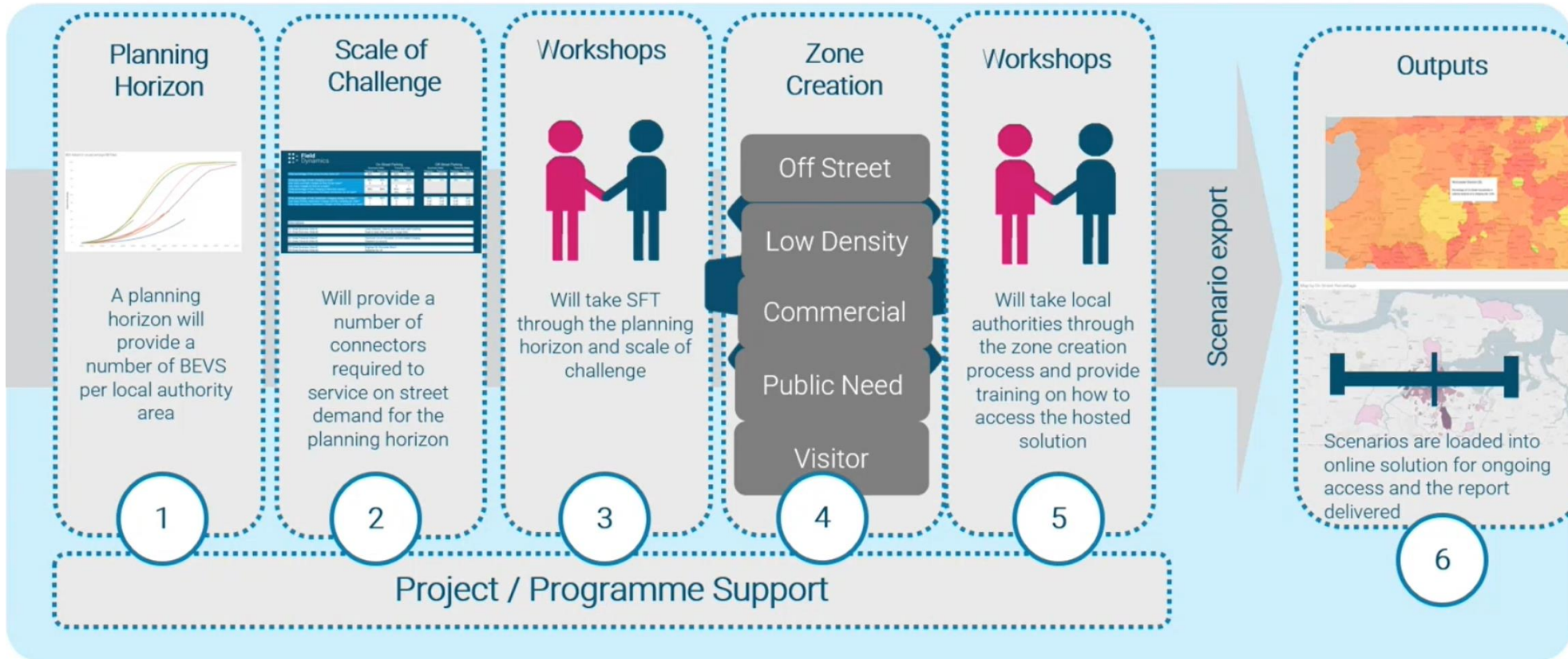
Strategy and Expansion Plan Template					
Part 1 - Strategy		Part 2 – Expansion Plan			
Local Outcomes & Priorities		Economic Case	Commercial Case	Financial Case	Management Case
Accessibility Reliability Affordability Just Transition Community Benefits Active Travel		Preferred Scope Costs and Funding Project Pipeline Delivery Models Routes to Market Implementation			

Electric Vehicle Infrastructure Fund

SFT Support - Data & Analytics



The purpose of this solution is to enable local authorities in Scotland to have access to a set of consistent areas that help to determine the need for public on-street infrastructure, where commercial opportunities to partner exist and to have a consistent dataset to aid future EV strategies. It is not intended to replace a council's own EV Strategies and Policies.



Summary video available: bit.ly/3PbCUV8

Electric Vehicle Infrastructure Fund

SFT Support - Delivery Options



Risk/Responsibility	Traditional Local Authority Owner Operator	Leasing Sites to Charge Point Operators	Multi-Year Concession Type Contract
Scope – Number & Capacity	PUBLIC	PUBLIC	PUBLIC
Existing Assets	INCLUDED	EXCLUDED	INCLUDED or EXCLUDED
Contract Term – Length of Lease or Concession	N/A	PUBLIC	PUBLIC
Sites – Identification & Provision	PUBLIC	PUBLIC	PUBLIC or PRIVATE
Permitting – Planning approvals	PUBLIC	PRIVATE	PRIVATE or SHARED
Grid Connections - Time & Cost	PUBLIC	PRIVATE	PRIVATE or SHARED
Installation – Time, Cost & Quality	PRIVATE	PRIVATE	PRIVATE
Operating – Maintenance & Repairs	PUBLIC	PRIVATE	PRIVATE
Insurance – Costs & Availability	PUBLIC	PRIVATE	PRIVATE
Technology – Standards & Obsolescence	PUBLIC	PRIVATE	PRIVATE
Customer Service – Availability & Helpdesk	PUBLIC	PRIVATE	PRIVATE
Change in Regulations – Compliance & Cost	PUBLIC	PRIVATE	PRIVATE or SHARED
Financing – Cost and Availability	PUBLIC	PRIVATE	PRIVATE (ex-GRANT)
Tariff Setting	PUBLIC	PRIVATE	PRIVATE or SHARED
Income Generation – Uptake & Utilisation	PUBLIC	PRIVATE	PRIVATE or SHARED
Asset Ownership – Below & Above Ground	PUBLIC	PRIVATE or SPLIT	PRIVATE or SPLIT

Electric Vehicle Infrastructure Fund SFT Support - Financial Feasibility Model



e.g., £175k subsidy mobilises £350k private capital. 2:1 Private : Public Ratio

ASSET REGISTER

EVCP No.	Primary Current AC or DC	Max kWh Output (kW)	Concurrent DC kWh Output (kW)	Concurrent DC Sockets	Concurrent AC kWh Output (kW)	Concurrent AC Sockets	EVCP Configuration	Comments	Electricity utilisation (kWh / per)	Transmission Costs (£ / per)	Maint Costs (£ / per)	Forecast Cost (Enabling) (£)	Forecast Cost (EVI + Install) (£)	Forecast Cost (DNO) (£)	Existing Cost (Enabling) (£)	Existing Cost (EVI + Install) (£)	Existing Cost (DNO) (£)	Year Capital cost incurred	Useful life of existing EV charge (Years)	Useful life of EV asset (rounded) (Years)
1	AC	22.0 kW	-	-	22.0 kW	2	ABC 22kW Dual	Standard currently	1,000 kWh	£31	£1,800	£0	£0	£0	£4,500	£12,000	£6,000	-	1	10
1	AC	7.0 kW	-	-	3.5 kW	2	ABC 7kW Dual Outlet	Not commissioning	5,000 kWh	£153	£1,800	£0	£0	£0	£4,500	£12,000	£6,000	-	1	8
1	DC	50.0 kW	50.0 kW	1	43.0 kW	1	ABC Triple Rapid		35,000 kWh	£642	£2,350	£0	£0	£0	£12,000	£40,000	£28,000	-	3	10
1	AC	7.0 kW	-	-	7.0 kW	2	ABC 7kW Dual Outlet		7,500 kWh	£230	£1,850	£0	£0	£0	£4,500	£12,000	£2,500	-	1	9
1	AC	7.0 kW	-	-	3.5 kW	2	ABC 7kW Dual Outlet	Single phase	1,000 kWh	£31	£1,800	£0	£0	£0	£4,500	£12,000	£0	-	2	10
1	AC	22.0 kW	-	-	11.0 kW	2	ABC 22kW Dual		5,000 kWh	£153	£1,800	£0	£0	£0	£4,500	£12,000	£0	-	2	5
1	AC	7.0 kW	-	-	7.0 kW	2	ABC 7kW Dual Outlet		5,000 kWh	£153	£1,800	£0	£0	£0	£4,500	£12,000	£2,500	-	2	10
1	DC	50.0 kW	50.0 kW	1	22.0 kW	1	ABC Triple Rapid		50,000 kWh	£917	£2,350	£0	£0	£0	£25,000	£50,000	£28,000	-	3	10
1	AC	7.0 kW	-	-	7.0 kW	2			0	£0	£0	£0	£0	£0	£12,000	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2			0	£0	£0	£0	£0	£0	£12,000	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2			0	£0	£0	£0	£0	£0	£12,000	£1,500	£0	-	1	10
1	AC	7.0 kW	-	-	7.0 kW	2			0	£0	£0	£0	£0	£0	£0	£0	£0	-	1	10
1	DC	50.0 kW	-	-	50.0 kW	1			0	£0	£0	£0	£0	£0	£0	£0	£0	-	1	10
1	AC	7.0 kW	-	-	7.0 kW	2			0	£0	£0	£0	£0	£0	£0	£0	£0	-	2	10
1	DC	50.0 kW	-	-	50.0 kW	1			0	£0	£0	£0	£0	£0	£0	£0	£0	-	1	10
1	AC	22.0 kW	-	-	11.0 kW	2	22kW PnPPoint	Downrated to 32A	5,000 kWh	£153	£1,850	£5,000	£10,000	£2,500	£0	£0	£0	-	3	10
1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10
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1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10
1	AC	7.0 kW	-	-	7.0 kW	2	7kW PnPPoint		7,500 kWh	£230	£1,850	£5,000	£10,000	£5,000	£0	£0	£0	-	2	10

KEY CAPITAL SCENARIOS & OUTPUTS

	Total	unit
Capital & Financing		
Debt funding (1 = on / 0 = off)	-	switch
Senior debt repayment method	annuity	profile
Asset transfer back to LA (1 - yes, 0 - no)	1	switch
Ongoing replacement cost scaling factor	10 %	%
Capital spend profile	Planned investment Cost - total	
Forecast Cost (Enabling)	104,701	£
Forecast Cost (EVI + Install)	241,402	£
Forecast Cost (DNO)	120,601	£
Planned investment Cost - total	466,704	£
End of concession asset balance	118,098	£
Total upfront Investment requirement	590,631	£
Total private investment	351,052	£
Senior debt requirement		£
Total avoided CO2 emissions	-	tonnes
Abatement cost	-	£ per tonne

Summary

	Set DC Tariff	Set AC Tariff	Set Capital Grant
KEY PROJECT LEVERS			
Grant, Tariff, Concession and return			
All checks ok			OK
No. of existing EV charge points			12 units units
No. of new EV charge points			18 units units
Key financial input scenario			Base scenario
Capital funding (if applicable)			174,885 £
AC Consumer tariff			0.26 £ / kWh
DC Consumer tariff			0.44 £ / kWh
Length of operation			10 years
Total Electricity utilisation			365,500 kWh
Electricity utilisation sensitivity			- %
Projected utilisation growth rate			5.00% %
Total Electricity utilisation			365,500 kWh
Total estimated capacity			4,493,880 kWh
Utilisation as % of capacity			8.13% %
Target WACC			8.50% %
Private sector / TS capital ratio			2.01 ratio
KEY CAPITAL SCENARIOS & OUTPUTS			
			Total unit



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Q&A Session

EVIF Website: bit.ly/3vY4tK0



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