

NPT Zero Emissions Fleet Transition Plan

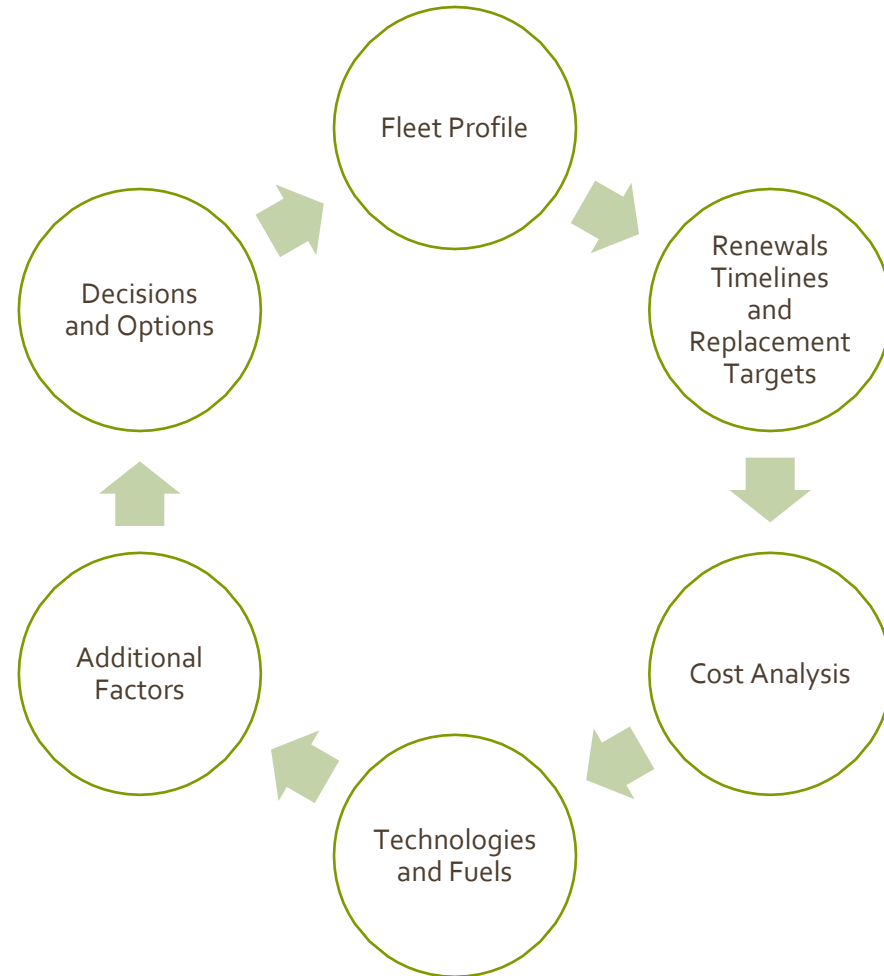


Background

- Welsh Governments 2019 Prosperity for all Document: A low Carbon Wales, sets out how Wales is going to address Climate Change. Proposal 4 - All new cars and light goods vehicles in the Public Sector fleet are ultra low emission by 2025 and where practicably possible, all heavy goods are ultra low emission by 2030
- NPT's 2020 DARE Strategy point 4.2.2.1 States:
The Council currently operates a fleet of approximately 376 vehicles including school minibuses and contract hired vehicles (this figure does not include plant equipment). Whilst the fleet only currently has 4 fully electric vehicles, the Council is actively looking to increase the fleet to include additional vans, pool cars and a bus as part of the 'Annual Renewals Programme'. Figures shown above are subject to change as vehicles are replaced.

Phased Approach

- Look at the complete fleet profile in line with current renewals schedules
- Formulate timelines for transition in line with set targets and assess achievability
- Prepare cost analysis based on option against existing Technology and purchase options on all vehicle types
- Research current technologies against future technologies
- Training, Fueling and charging updating workshops
- Options so clear decisions can be made for transition



Fleet Profile

Total number of vehicles 266 as of June 2021 however the fleet profile will fluctuate. This figure does not include school minibuses, SWTRA or hired vehicles

Below Fleet Transition Timeline table identifies what vehicles and when the replacements are based on current renewals schedule. There is also a RAG color code to identify availability of current vehicle availability in Zero Emission vehicles

Fleet Transition Timeline							
<u>Year</u>	<u>Cars</u>	<u>Light Vans</u>	<u>Medium Panel Vans/4x4</u>	<u>Heavy Vans Tippers</u>	<u>H.G.V/Specialist</u>	<u>MiniBuses</u>	<u>Totals</u>
21/22	7	10	4	0	8	10	39
22/23	2	1	0	1	1	0	5
23/24	3	14	5	4	23	5	54
24/25	2	19	15	21	10	0	67
25/26	1	14	1	7	7	2	32
26/27	0	2	6	2	2	1	13
27/28	0	3	4	2	11	3	23
28/29	0	2	3	11	17	0	33
29/30	N/A	N/A	N/A	N/A	N/A	N/A	266

Cost Analysis

Cost examples for purchase transition

Refuse freighter	ICE	New cost	£220k
Refuse freighter	EV	New cost	£420k
Refuse Freighter	EV	Refurbished & Converted to EV	£320k

Cost examples for purchase vs lease examples

Refuse Freighter	EV	NEW	£420k
Refuse Freighter	EV	Refurbished & Converted to EV	£320k
Refuse Freighter	EV	NEW Leased over 7 years	£620k
Refuse Freighter	EV	Refurbished & Converted to EV Leased over 7 years	500k approx

Technologies and Fuel



Fast.
Reliable.
Sustainable.

- EV Battery electric
- Hydrogen
- HVO Bio Fuel
- HEVS Hybrid electric vehicles

Additional Factors

- Workshop upgrades
- Technician training and future proofing



- Staff training
- Vehicles outside of Fleet (Schools etc)
- Change in driving culture
- Change in working culture



The Road Ahead



- Procurement Challenges
- Short term and long term solutions
- Stay on track with Transition (If Possible)
- Where issues arise report back and communicate
- Amend annual renewals if required to extend or reduce vehicle life cycles in line with plan
- Assess all Zero emission options for the most suitable vehicles available for the operation (selection is key)

