

10%

of the UK's total carbon emissions come from fleets, and switching diesel vehicles to electric removes these emissions.

300

councils have declared climate emergencies and waste collection can account for more than one third of a council's total emissions.

8-Week Pilot | 2 eRCVs | 2 Depots

Serco wanted to gather real-world data from daily operations with eRCVs to prove operational feasibility, the carbon emissions savings and the business case.

Key Findings

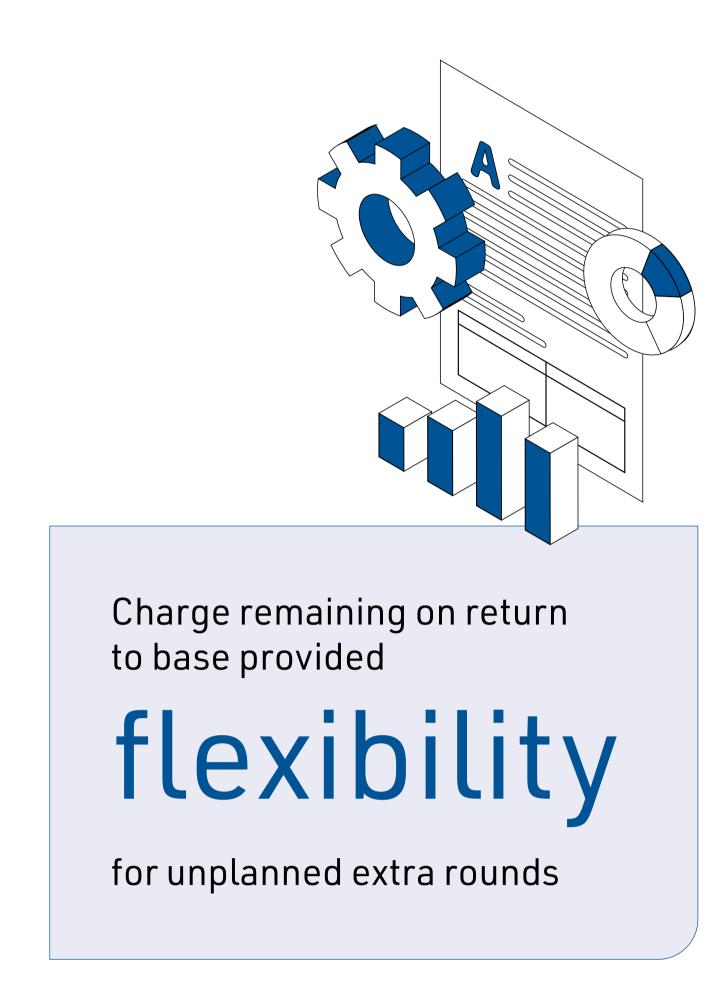
- Collection rounds were completed with charge left on return - no range anxiety.
- Drivers preferred eRCVs over diesel RCVs - smooth & quiet.
- Carbon savings in 8 weeks equivalent to removing two cars from the road for 1 year.
- TCO (total cost of ownership) at parity with diesel - with potential 4-14% savings.



Performance and efficiency

rounds completed

electric miles driven



Sustainability

8,898kg

CO₂ tailpipe emissions removed

Equivalent to 2 cars

for an entire year.

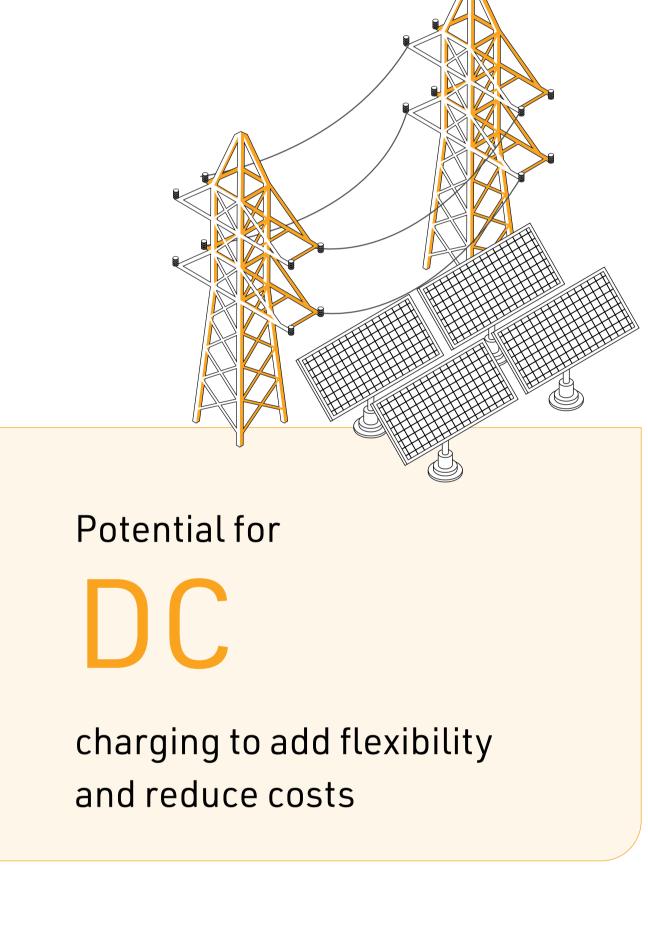


Charging and Power

16 hours charging window was used

At 22kw, half of the

Early afternoon returns to base make solar installation attractive



Driver Feedback

positive

Early scepticism

changed to

comments early on

better than the diesel RCVs

Drivers said the

eRCVs performed



Cost

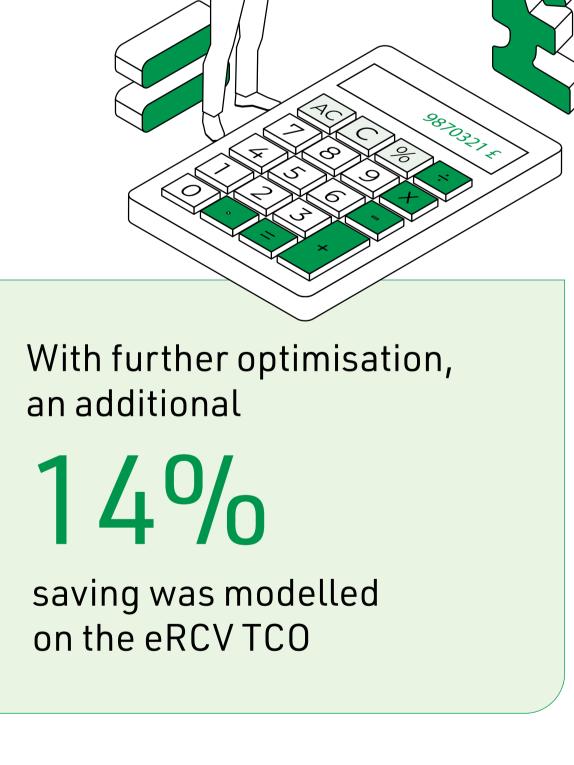
Business Case

parity eRCVs to diesel RCVs

2% lower than ICE vehicle

Optimised TCO (total cost

of ownership) for eRCV



Develop a robust

Lessons Learned

strategy for the increased power consumption

analysis essential to optimise operations

Continuous monitoring

and data

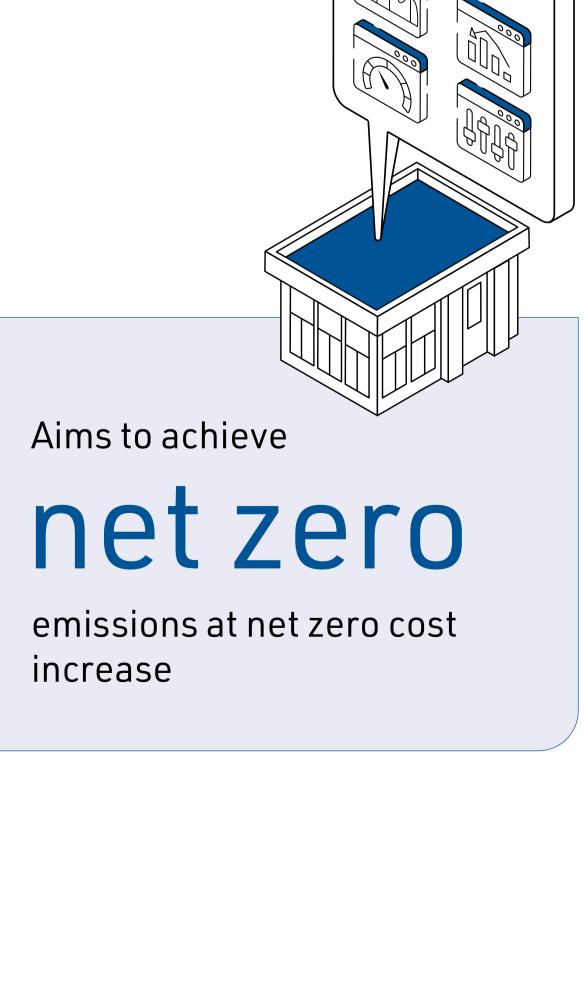


TCO-optimised

rollout plan

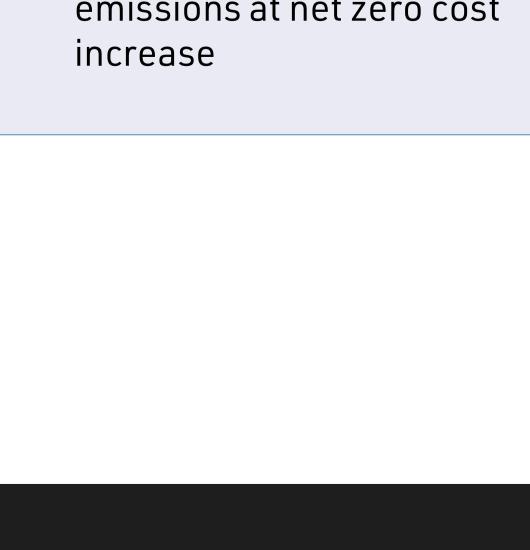
Rollout Proposal

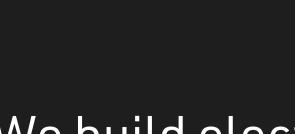
Includes grid upgrade, solar power installation and optimised operations





3-phase





V三V

We build electric fleets as fully integrated solutions with a laser focus on cost optimisation. Fleets are supported during planning,

implementation and operations. VEV is owned by Vitol, a world leader in energy.

