

Is EV the Answer? Zero Carbon Depot

Ben Burfoot



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Local Authority
Carbon Management
Programme

The Nottingham Declaration on Climate Change

We acknowledge that

- Evidence shows that climate change is occurring.
- Climate change will continue to have far reaching effects on the UK's people and places, economy, society and environment.

We welcome the

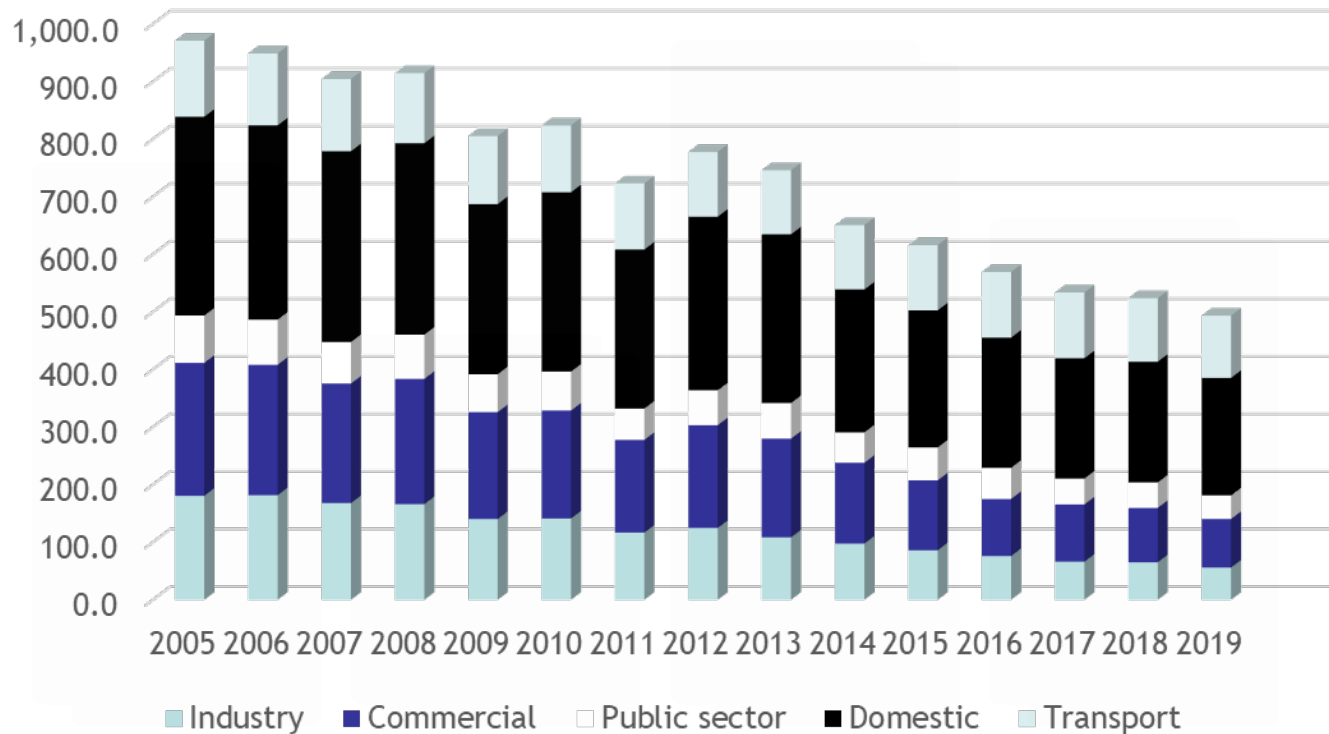
- Social, economic and environmental benefits which come from combating climate change.
- Emissions targets agreed by central government and the programme for delivering change, as set out in the



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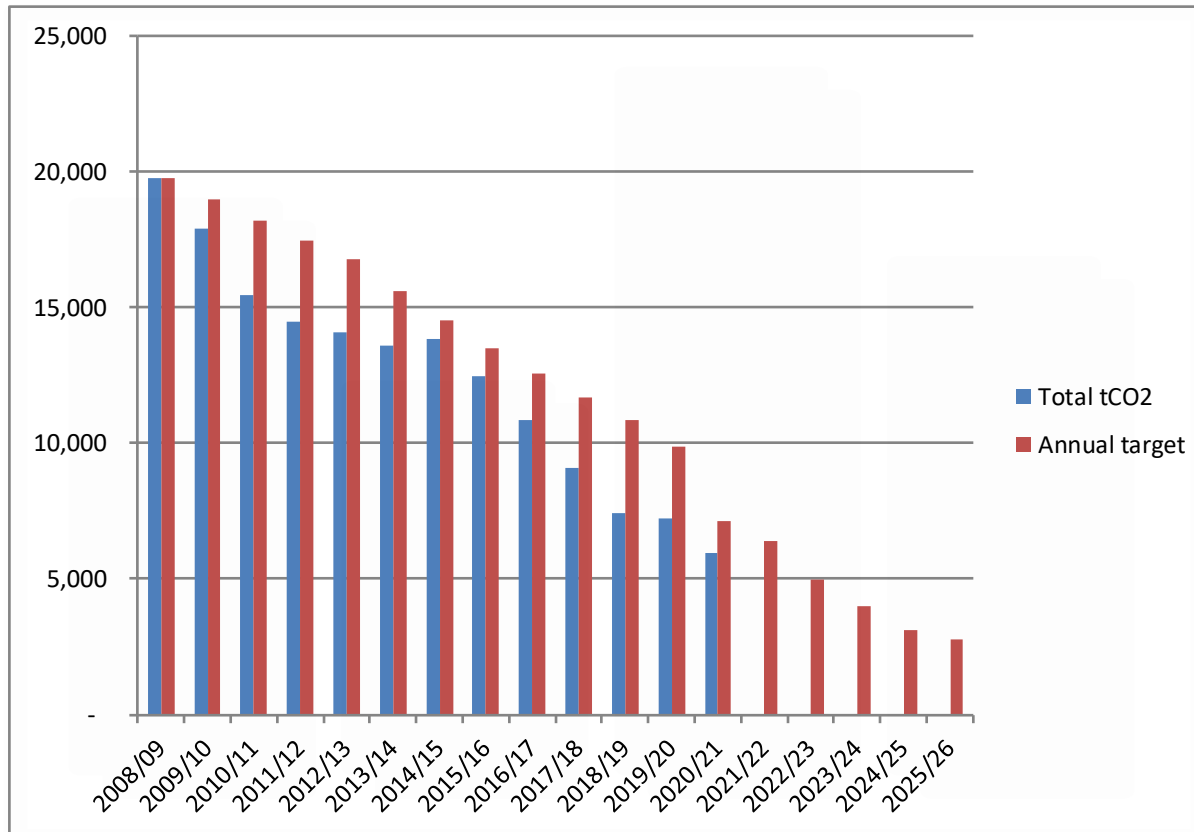
Reading Borough emissions 2005-2019



- Reading's emissions have fallen by 49% since 2005
- 5th highest reduction of 379 UK council areas



Council emissions 2008/09-2020/21



- **69.8% cut in RBC emissions since 2008/09**
- **17.3% cut between 2019/20 and 2020/21 (pandemic restrictions a major factor)**



Carbon Plan 2020-2025

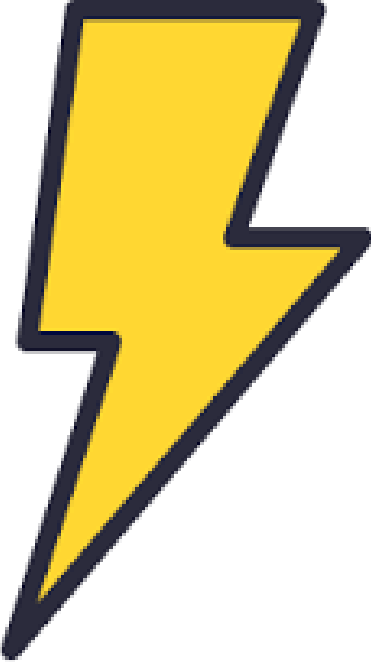
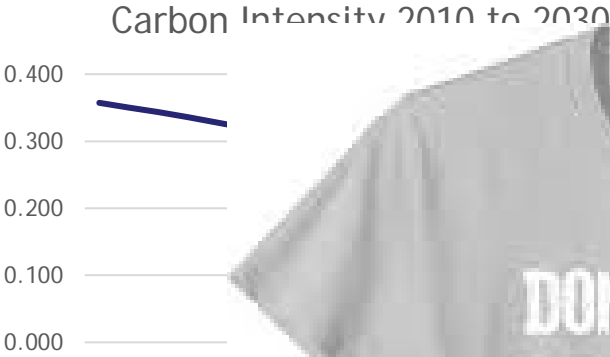


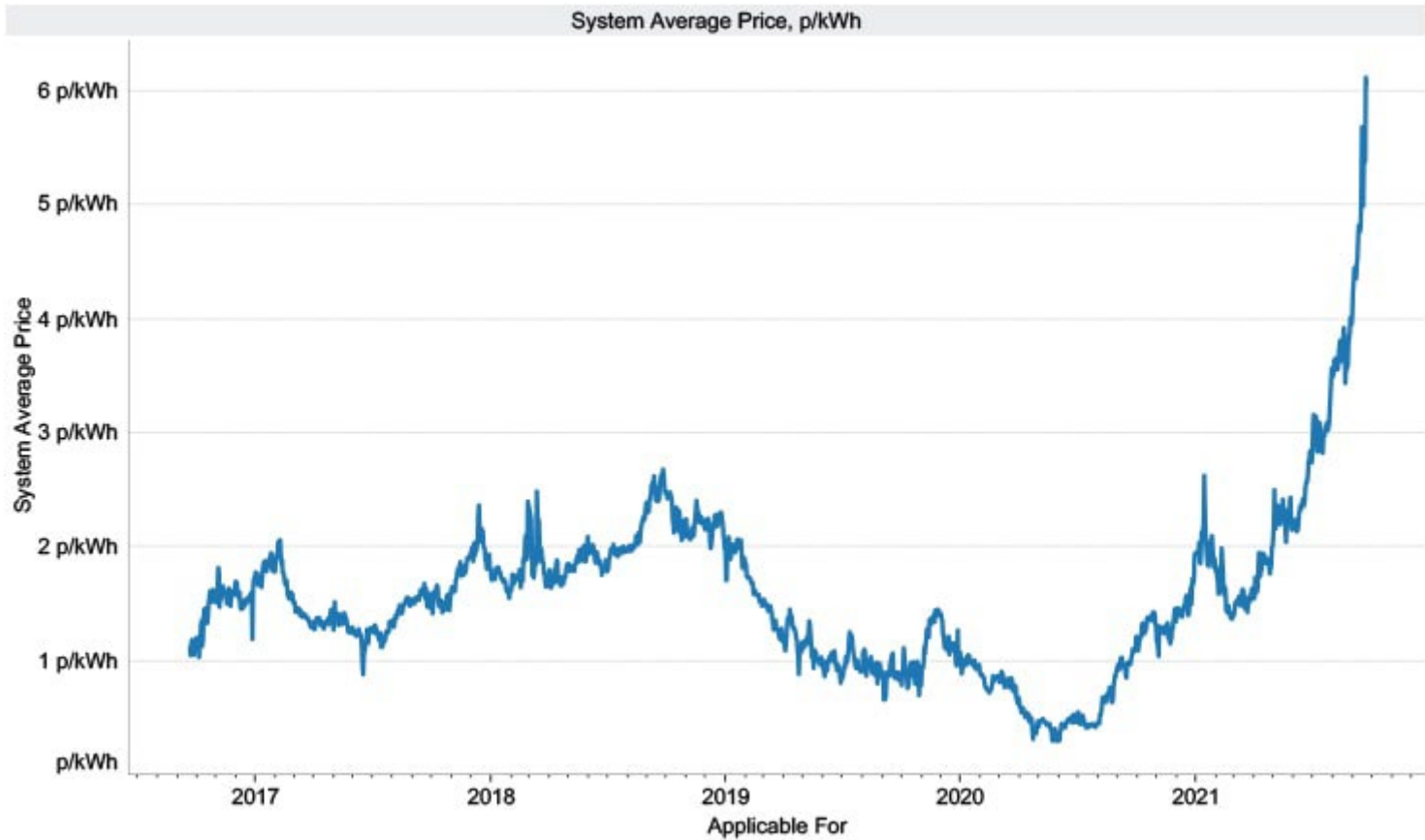
Our pathway to zero



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The Future is Electric





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10,000
solar panels
on >500
buildings

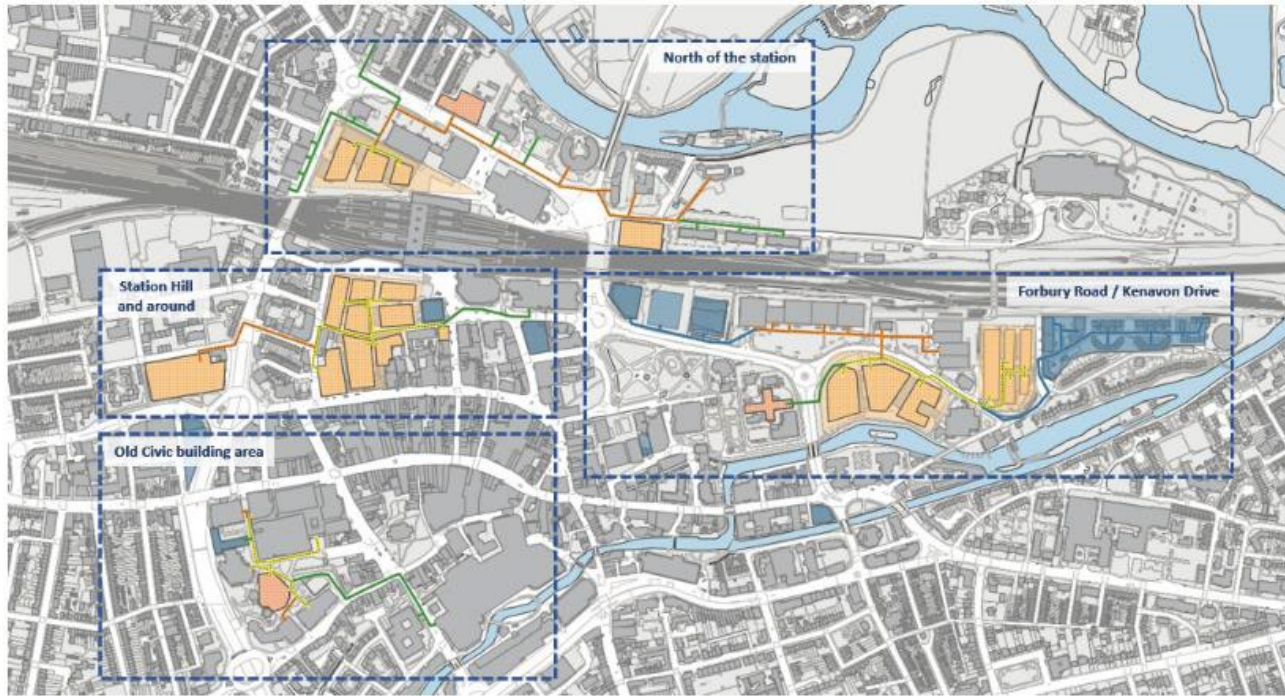


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Danger
Keep Away

A low carbon central heating system for the town centre



Cow manure powered bus breaks speed record





Finance

Transformation

Health & Social Care

Property

Analysis



Laura Sharman 18 November 2021



Eleven UK cities named as global leaders on climate action

Eleven UK cities have been recognised as global leaders for climate action and ambition.

Environmental charity CDP has published its Cities A List, which celebrates those demonstrating their climate leadership through concerted and effective action.



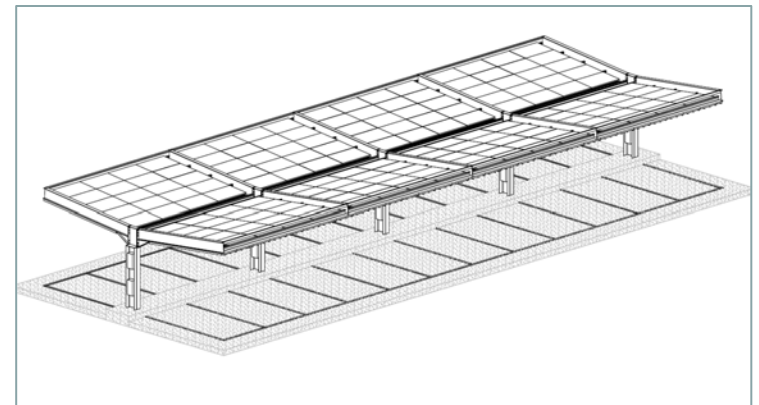
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Zero Carbon Depot Project



14 x eRCV's by 2024
(electric bin lorries)
200 fleet EVs - 2028

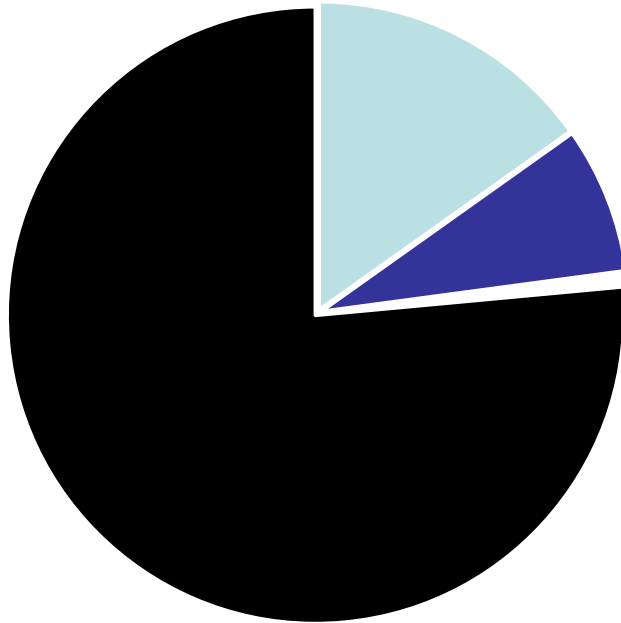


Solar canopies 274kWp



Depot eRCVs

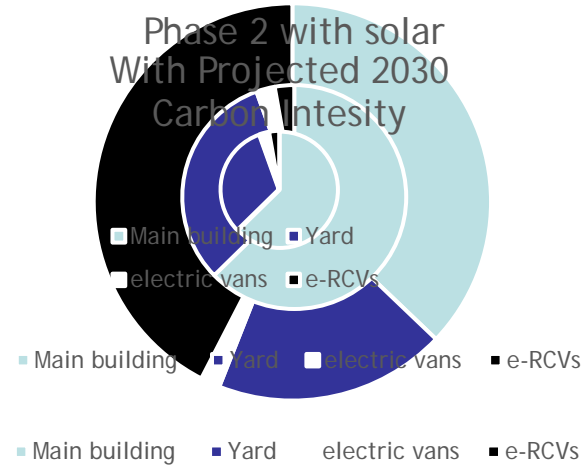
Phase 1



■ Main building ■ Yard ■ electric vans ■ e-RCVs

324 tonnes

Phase 2



■ Main building ■ Yard ■ electric vans ■ e-RCVs

■ Main building ■ Yard ■ electric vans ■ e-RCVs

17.5 tonnes
78 tonnes
132 tonnes



Performance against targets:

- 63% 2020 Emissions vs 2008/9 baseline
- 85% 2025 Carbon Plan target

Equates to 60% reduction on 2020 by 2025

Depot project - 95% reduction on 2020

Carbon saved 306 tonnes



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Costs

lit = £2

3kWh = £0.81

eRCV = £400k

dRCV = £180k

Electricity £1.16m vs Diesel £3.42m

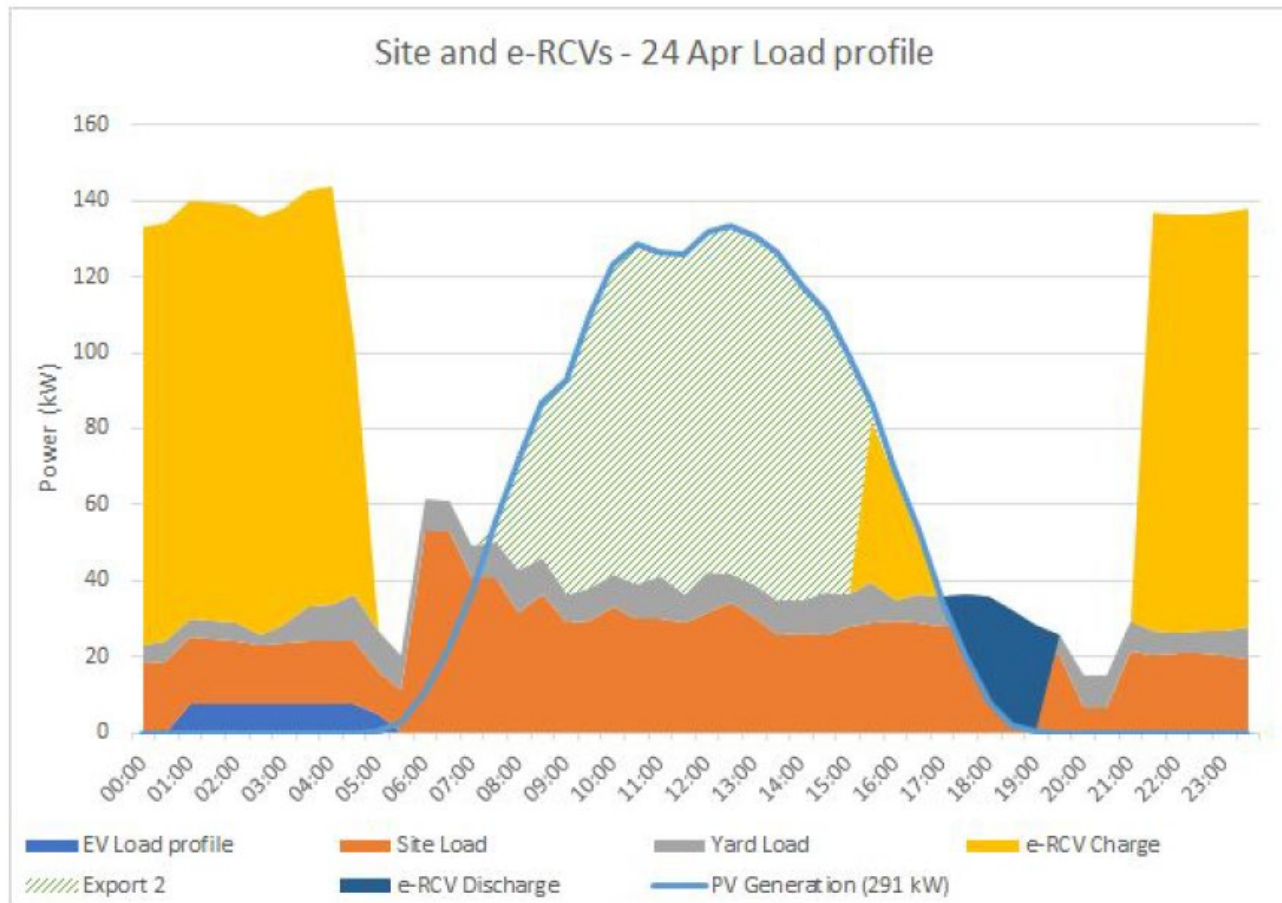
Total costs = £7.3m vs £7.28m



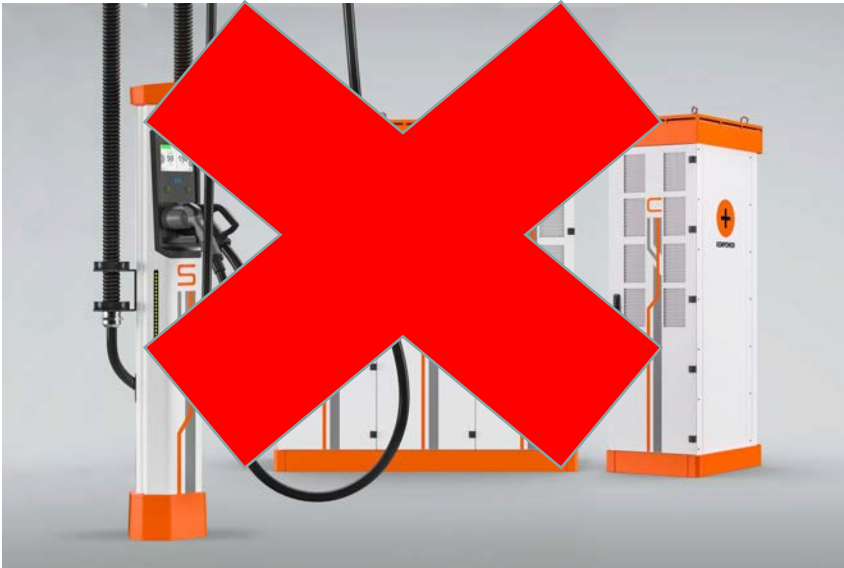
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The potential....



Vehicle to Grid (V2G)



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“Runs completely on electricity – generated by a tiny coal-burning power plant.”



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