

INVESTMENT OPPORTUNITIES IN UK ZERO EMISSION HGVS AND INFRASTRUCTURE

Cenex Expo 2025

Rebecca Advani, Lead Systems Engineer – Connected Places Catapult

Juliet Flamank, Programme Director – Green Finance Institute

INTRODUCTION



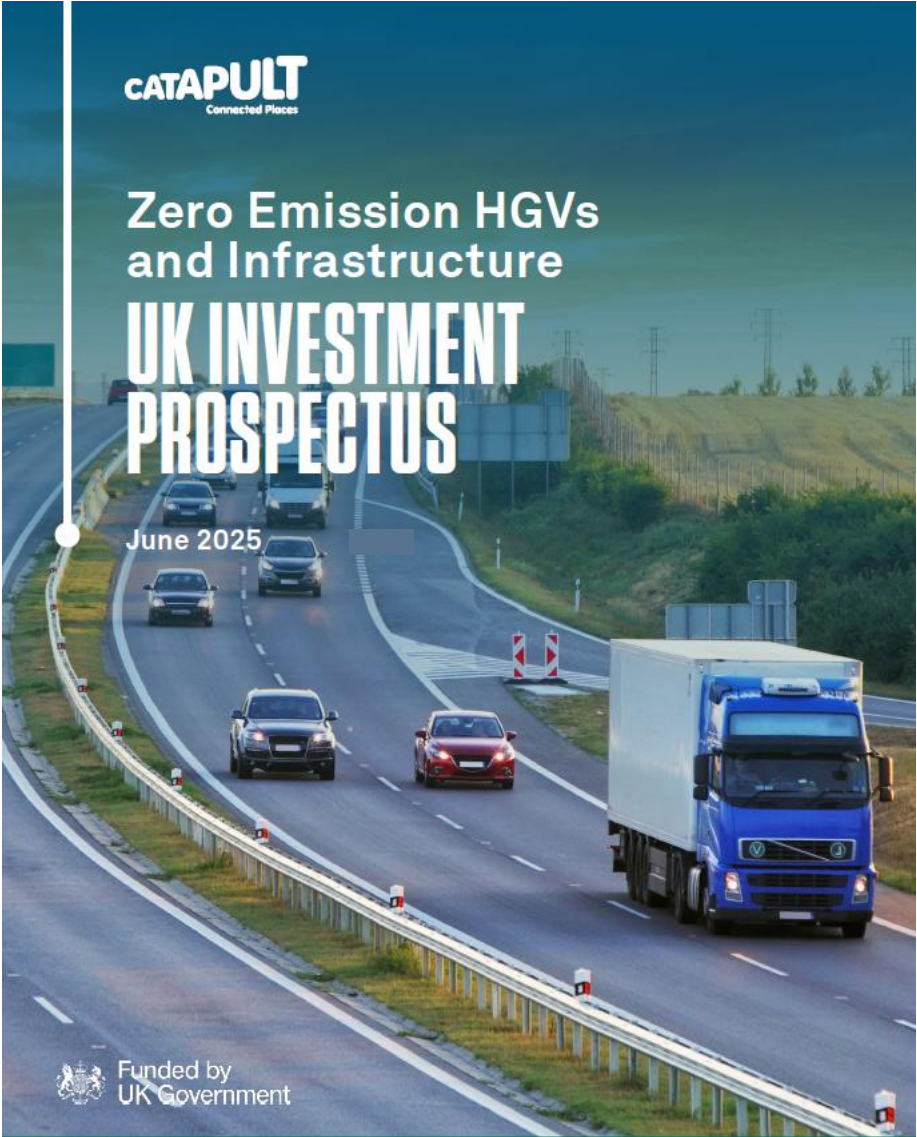
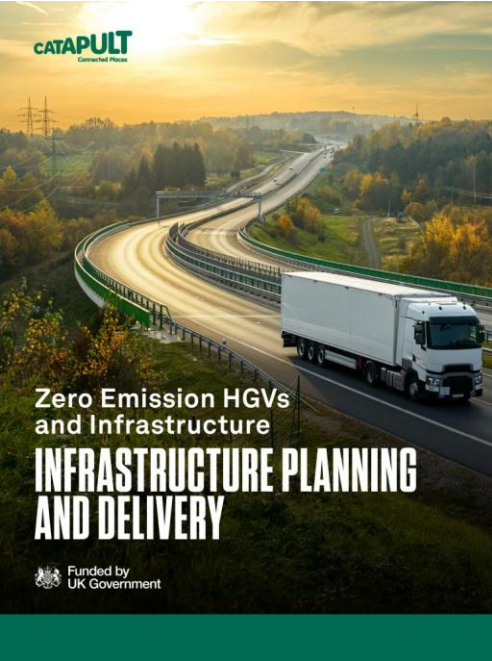
The UK's **innovation accelerator** for transport, the built environment, cities, and local growth.



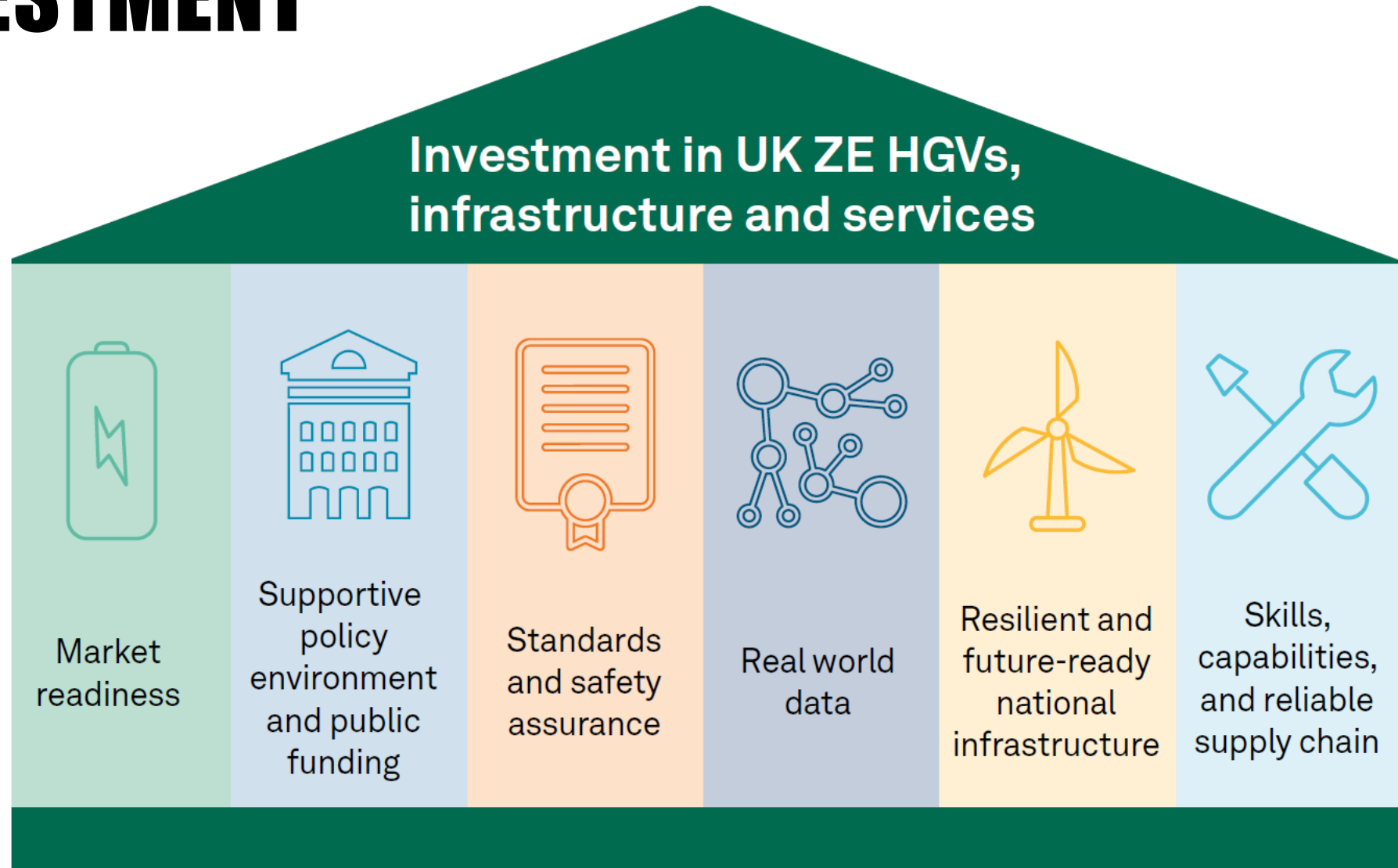
We are accelerating the transition to a clean, resilient and environmentally sustainable economy by channelling private capital at pace and scale towards real-economy outcomes, creating jobs and increased prosperity for all.



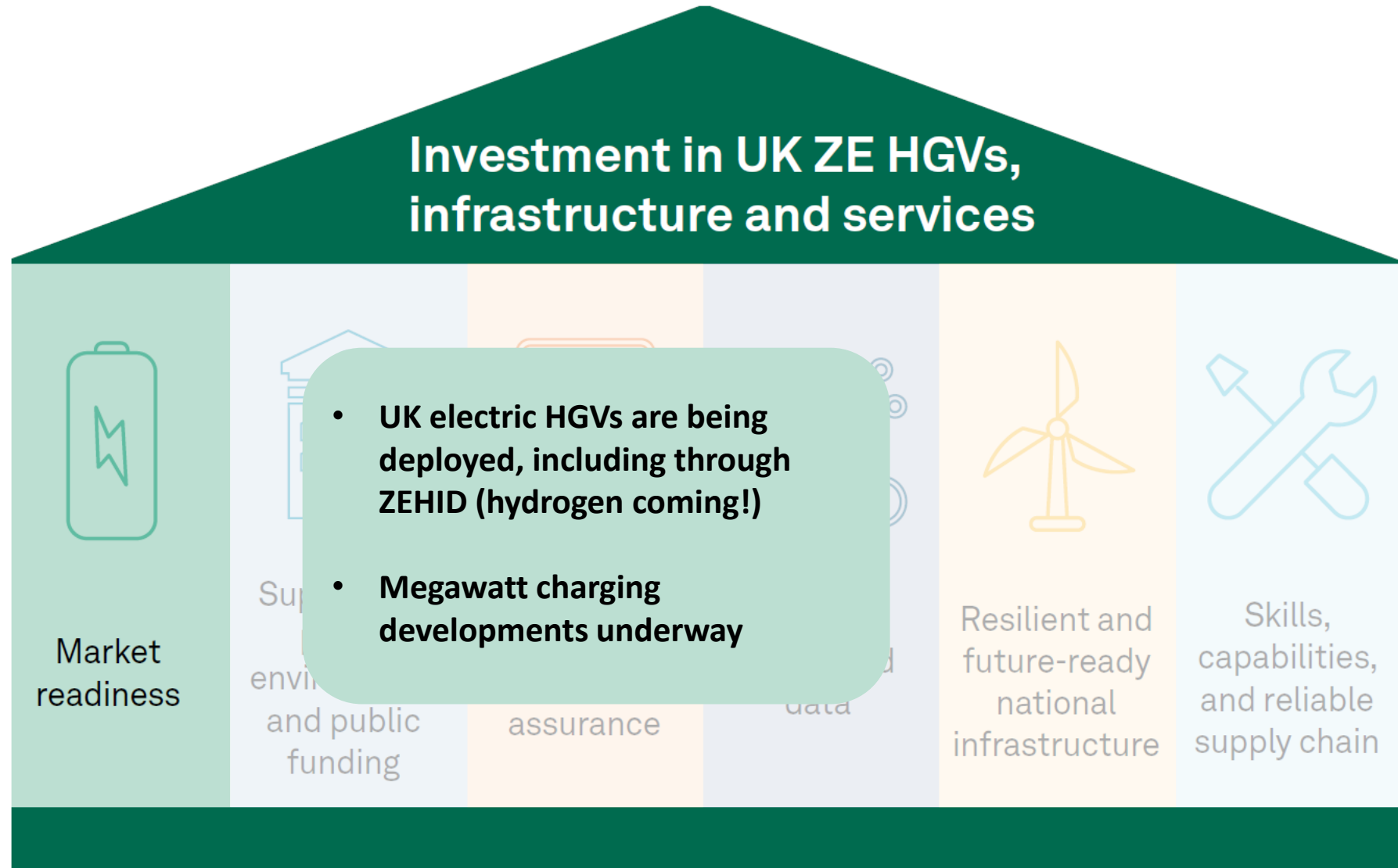
CPC ACTIVITIES IN ZEHID



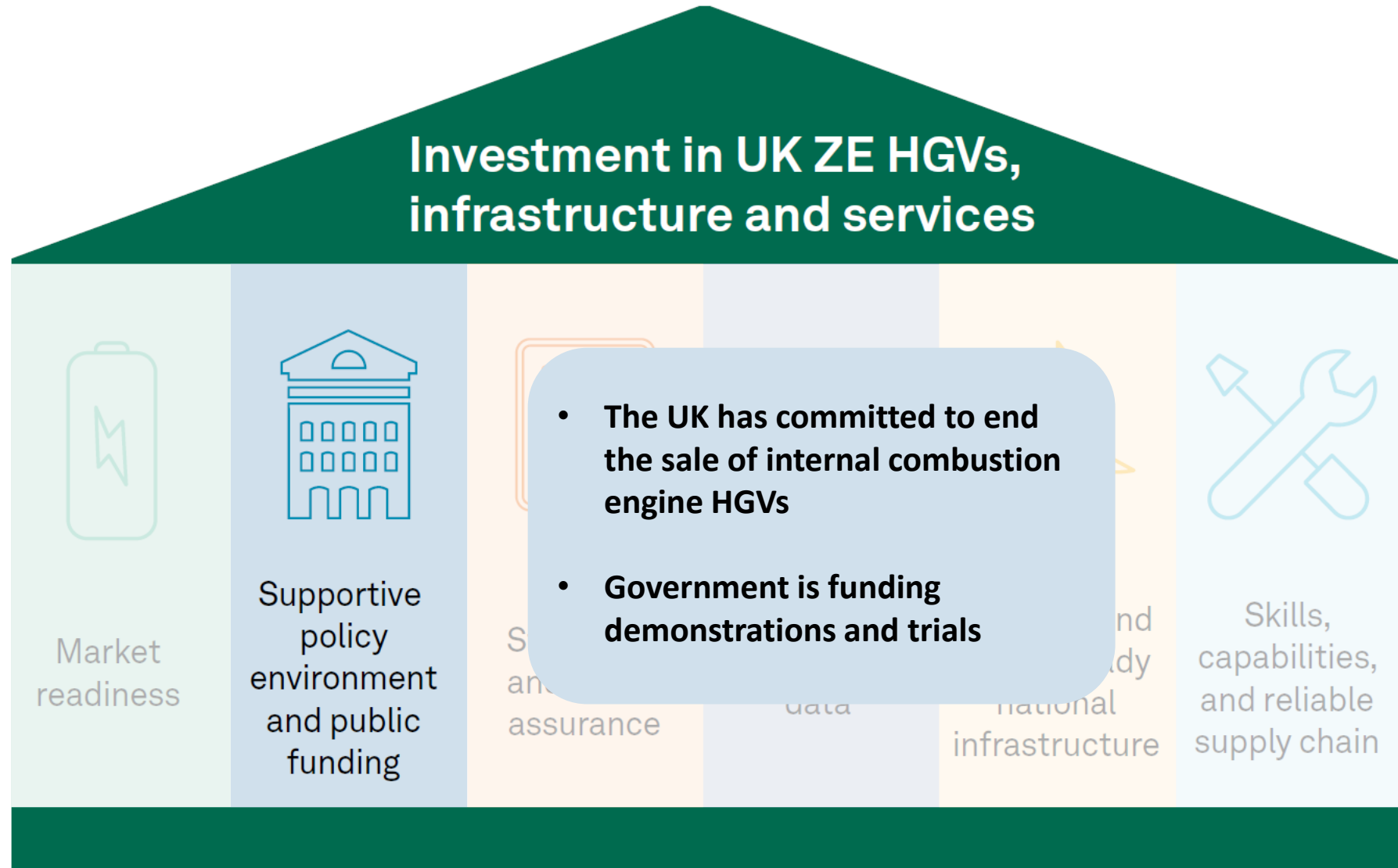
THE UK'S STRONG FOUNDATION FOR ZE HGV INVESTMENT



MARKET READINESS



SUPPORTIVE POLICY AND PUBLIC FUNDING



STANDARDS AND SAFETY ASSURANCE

Investment in UK ZE HGVs, infrastructure and services



Market
readiness



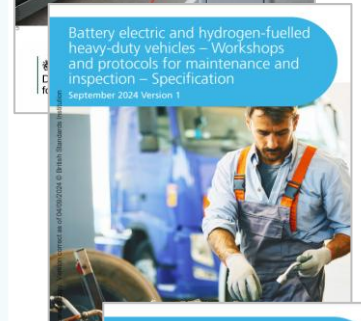
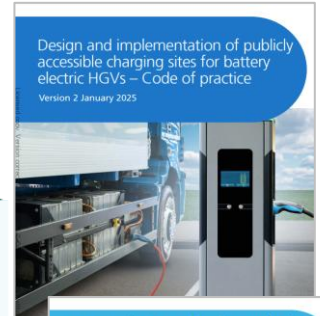
Supportive
policy
environment
and public
funding



Standards
and safety
assurance

BSI has developed three world-leading flex standards

- BSI 2071 - Publicly Accessible Charging Sites for Battery eHGVs
- BSI 2072 - Workshops for Zero Emission Heavy-Duty Vehicles
- BSI 2073 - Design and Implementation of Hydrogen Refuelling Sites



REAL WORLD DATA



Investment in UK ZE HGVs, infrastructure and services

- The ZEHID programme will collect technical and operational data

Real world data

Zero Emission HGVs and Infrastructure: UK Data to Support Investment Decisions

Supporting document to the UK Investment Prospectus

Question	Metrics	Relevance / importance	Availability	Data type
What will be the upfront cost to purchase battery electric HGVs?	Vehicle costs Depot charging installation needs Financing costs	Purchase price of vehicles. Depot charging needs for fleet operator and the associated costs to install infrastructure to serve these needs including electrical connection upgrades. All metrics with 'in table 1' should be considered. Costs associated with financing options for vehicle purchase.	Direct engagement with suppliers at point in time since costs will be expected to change. Duty cycle data from ZEHID demonstrations to inform charging needs. Direct engagement with suppliers for costs for equipment and installation. Direct engagement with OZOs for potential upgrade costs.	Public Commercial
	Charging costs (depot)	Total cost of depot based charging sessions based on electricity costs. All metrics with 'in table 1' should be considered.	Aggregated data for charging sessions within the ZEHID demonstrations. Direct engagement with electricity providers, and market forecasts.	ZEHID / Public
	Charging costs (public)	Total cost of public site charging sessions.	Aggregated ZEHID public charging session data.	ZEHID / Public
	Insurances	Ongoing cost to insure the vehicle and any changes to the business insurances based on the installed site infrastructure.	Direct engagement with insurance providers.	Commercial
	Charging dwell times	Total time stationary for charging sessions including wait time and operational impact of this dwell time.	Aggregated ZEHID charging session data.	ZEHID
	Charging energy losses	Energy lost due to system inefficiencies during charging sessions.	Aggregated ZEHID charging session data.	ZEHID

RESILIENT AND FUTURE READY INFRASTRUCTURE

Investment in UK ZE HGVs, infrastructure and services



Market
readiness



Supply
environment
and
funding

- The UK has one of the most reliable electricity grids in the world
- Electric vehicle charging is well established and HGV charging infrastructure is being installed

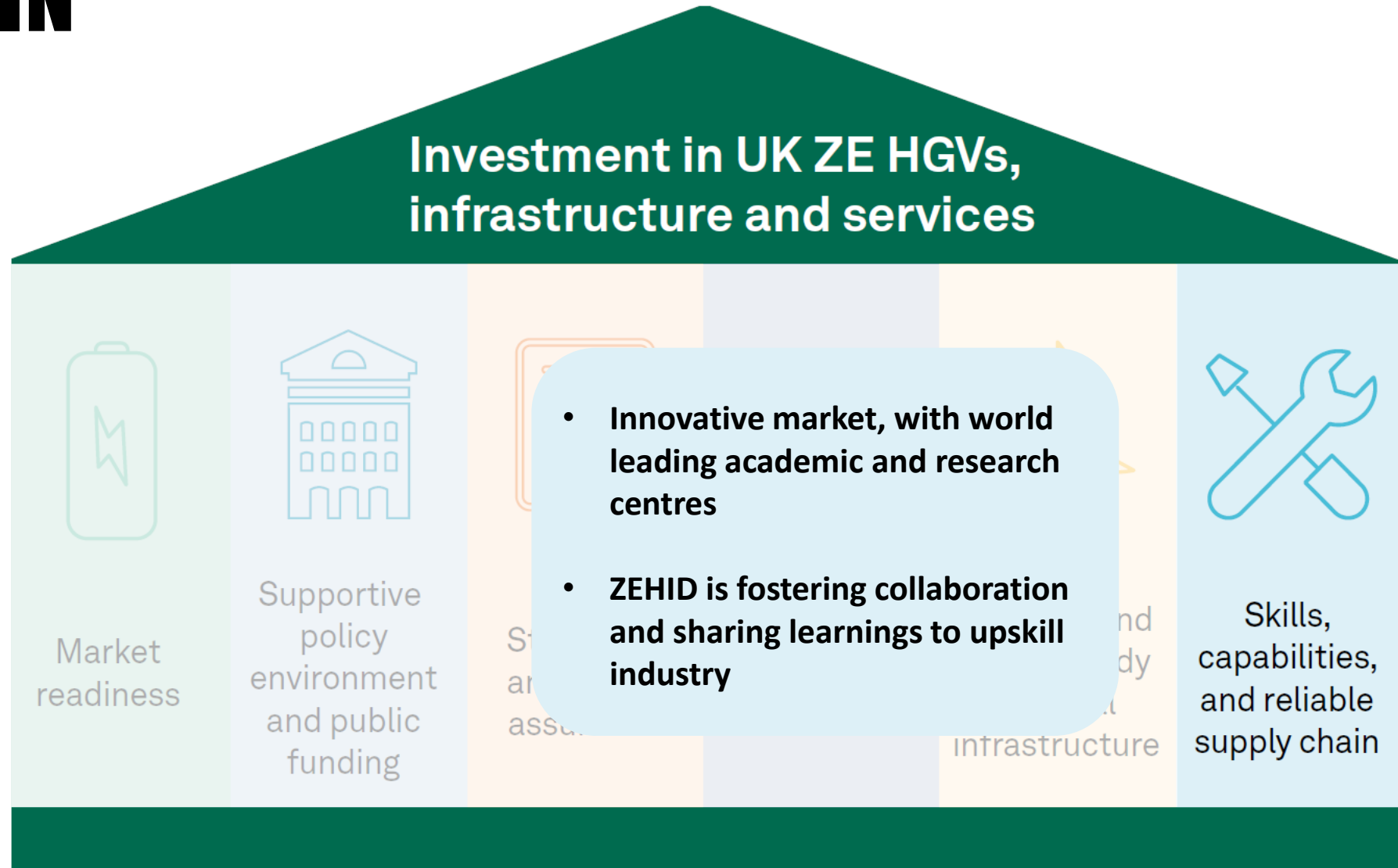


Resilient and
future-ready
national
infrastructure



Skills,
capabilities,
and reliable
supply chain

SKILLS, CAPABILITIES, AND RELIABLE SUPPLY CHAIN



FINANCING CHALLENGES

There are a number of barriers to transitioning to ZETs and installing infrastructure from the perspective of vehicle operators and charging infrastructure installers. These barriers fall into five key categories:

1. High capital cost of zero emission vehicles
2. Lack of infrastructure
3. Vehicle functionality & availability
4. Technology uncertainty
5. Impact on operation

CASE STUDIES

CASE STUDY: Aegis Energy

- Aegis Energy are building a network of 50 clean multi-energy hubs to accelerate the decarbonisation of commercial vehicles.
- In 2025 Aegis Energy secured £100 million to build the UK's first clean, multi-energy refuelling hubs for commercial vehicles.
- This investment was secured from Quinbrook Infrastructure Partners, a specialist global investment manager, and marks Quinbrook's inaugural investment in sustainable transport.
- The network of hubs will meet the needs of all truck and van operators transitioning to cleaner fuels, including electricity, HVO, hydrogen, and bio-CNG.



CASE STUDY: AMAZON UK

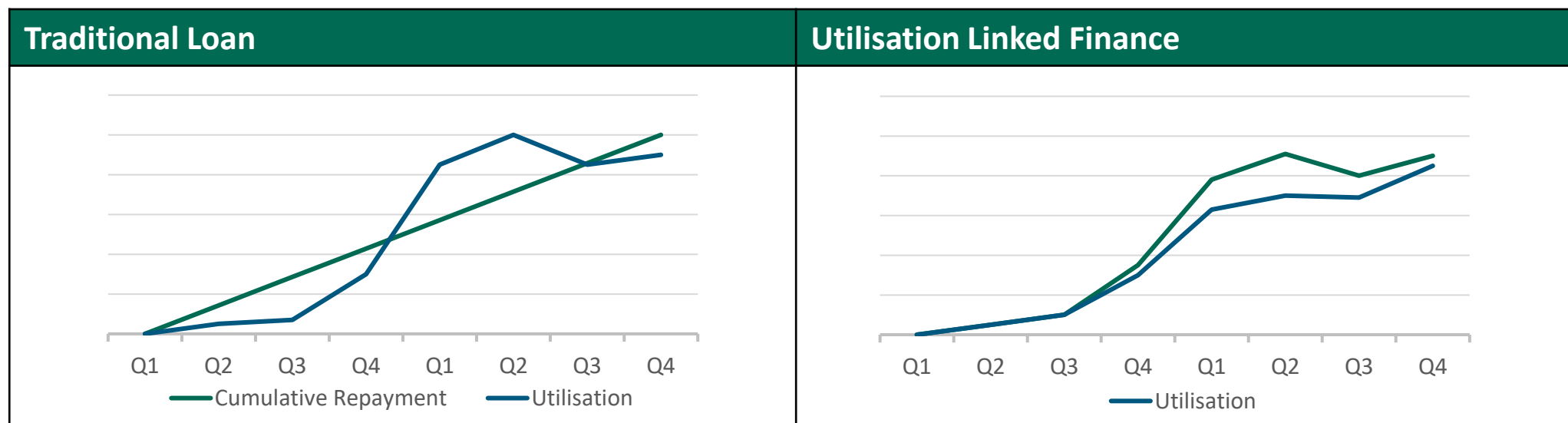
- In 2025, Amazon announced the acquisition of over 140 electric Mercedes-Benz eActros 600 trucks and eight Volvo FM Battery Electric trucks for its UK fleet.
- These vehicles will join Amazon's operations during 2025 and 2026.
- To support this, Amazon will install additional fast charging infrastructure in the UK, including 360kW chargers that can charge the 40-tonne trucks from 20-80% in about an hour.
- The new trucks will have a range of 310 miles (500km) on a full charge, and are expected to transport more than 350 million packages every year.



UTILISATION LINKED FINANCE

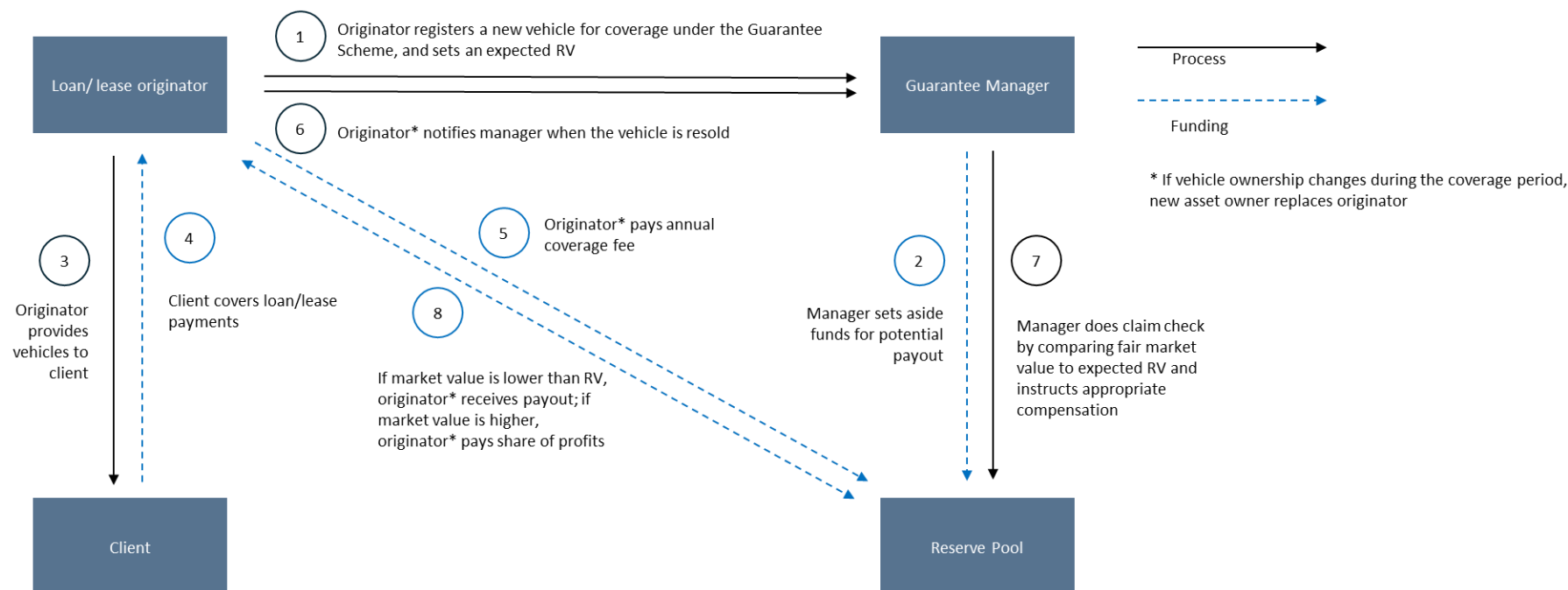
Utilisation Linked Finance (ULF): A financial solution that derisks investment in charging infrastructure through a loan or asset finance, with payments linked to the usage of the chargepoint.

- This can offset the risk of repayment liabilities not matching revenues.
- The finance provider takes the utilisation risk, however, this can be mitigated by flexibility of repayment tenor.
- ULF eliminates the need for upfront capital investment in chargepoints by fleet operators, real estate owners or local authorities.



RESIDUAL VALUE GUARANTEES

- The nascency of the zero emission HGV market means there is very little data on resale values, creating significant perceived residual value (RV) risk for financiers and lessors and reducing appetite for zero emission lending.
- RVGs would help accelerate the availability of affordable finance, by supporting lenders and lessors with RV risk.
- The product would be provided by a government or third party, and is being designed in a capital-efficient way to appeal to institutional investors.
- RVGs mitigate risk by covering a portion of potential losses between a ZE-MHDV's actual resale value and a predefined benchmark.



THANK YOU

Any Questions?

rebecca.advani@cp.catapult.org.uk

Juliet.flamank@gfi.green

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(bottom of page):



<https://cp.catapult.org.uk/programme/zero-emission-heavy-goods-vehicles/>