

Evaluation, impact assessment and upscaling strategy

NextETRUCK Final Conference

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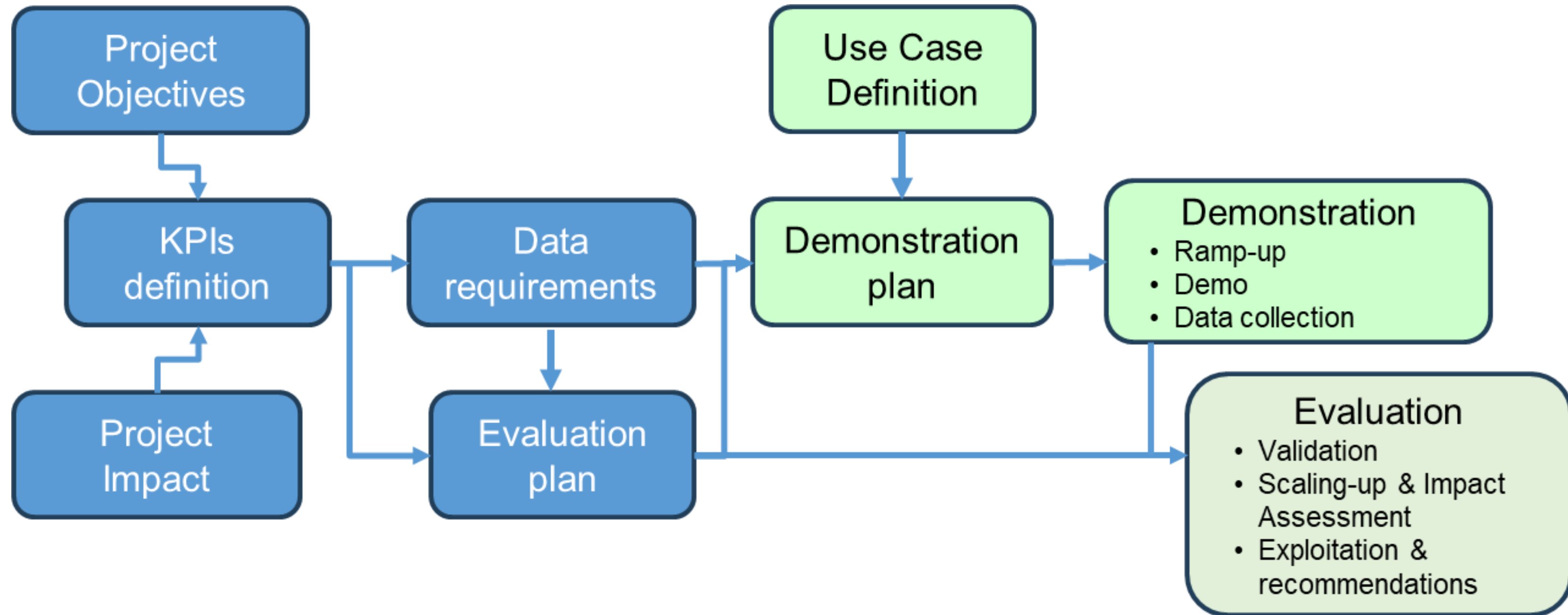
■■■■ Total cost of ownership

Technology validation





From Objectives to Evaluation





Project KPIs

KPI id	KPI title	Link to Hypothesis and Goal	Category classification
KPI-1a	Efficiency Increase & Payload Capacity Distance: <i>Driven per Absolut Energy Consumption</i>	1	ET
KPI-1b	Efficiency Increase & Payload Capacity Distance: <i>Load per mission</i>	2	ET
KPI-2	Thermal management system efficiency	3	ET
KPI-3	Realization of the High-fidelity Digital Twin	4	DT
KPI-4	Realization of fleet management system	5	DT
KPI-5	Digital Twin realization and tools for ZEV virtual validation	6	DT
KPI-6a	TCO reduction of ZEV: <i>vs modern e-trucks</i>	7	UA
KPI-6b	TCO reduction of ZEV: <i>parity with ICE 2020 trucks</i>	8	UA
KPI-7	Charger efficiency	9	ET, CI
KPI-8	Vehicle thermal efficiency	10	ET
KPI-9	e-powertrain design	11	DT
KPI-10	TCO reduction of charging	12	UA
KPI-11	Double shift fleet operation	13	DT
KPI-12a	Charging experience: <i>user perspective</i>	14	UA
KPI-12b	Charging experience: <i>CO₂ reduction</i>	15	DT
KPI-13a	Realisation of UC1: <i>200 km per day</i>	16	ET
KPI-13b	Realisation of UC1: <i>vehicles meet user needs</i>	17	UA

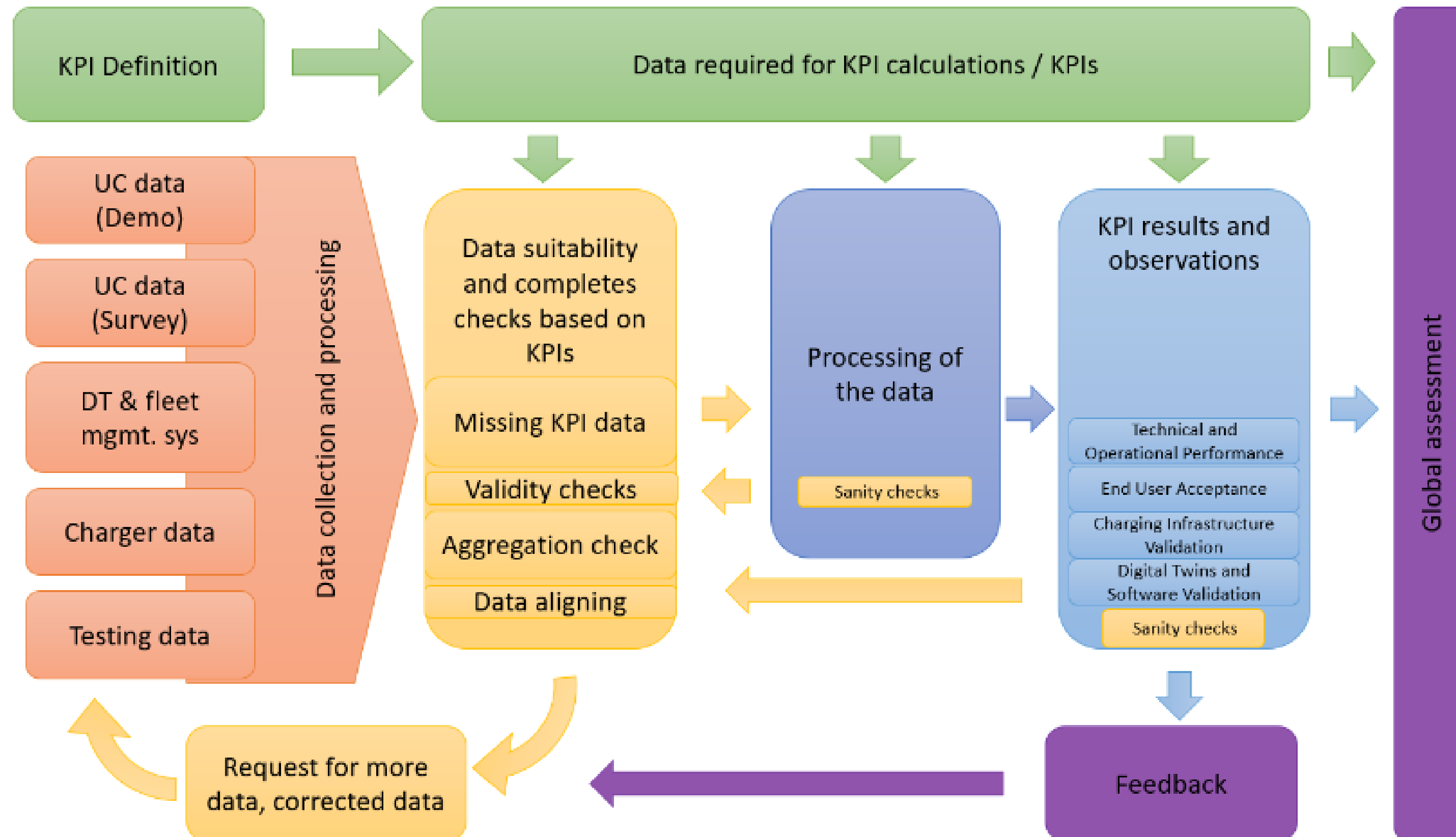
■■■■ KPIs have been sorted out by: e-Truck (ET), Digital Twin models (DT), Charging Infrastructure/Efficiency (CI) and User Acceptance (UA)

■■■■ The last six KPIs of the table (KPI-19 to 24) suggested by the 2Zero partnership

KPI-14a	Realisation of UC2: <i>200 km per day</i>	18	ET
KPI-14b	Realisation of UC2: <i>vehicles meet user needs</i>	19	UA
KPI-15a	Realisation of UC3: <i>200 km per day</i>	20	ET
KPI-15b	Realisation of UC3: <i>vehicles meet user needs</i>	21	UA
KPI-16	Market penetration increase	22	UA
KPI-17	Business models' adoption	23	UA
KPI-18	The NextETRUCK overall system is compatible with the driving/mission tasks	24	UA
KPI-19	High usability of the NextETRUCK overall system	25	UA
KPI-20	Reduction in operational CO ₂ emission	26	ET
KPI-21	Operating hours	27	ET
KPI-22	Charging rate	28	ET, CI
KPI-23	Charging time	29	ET, CI
KPI-24	Driving to charging time	30	ET, CI
KPI-25	Average driving speed	31	ET
KPI-26	Charging cost per km	32	ET, CI

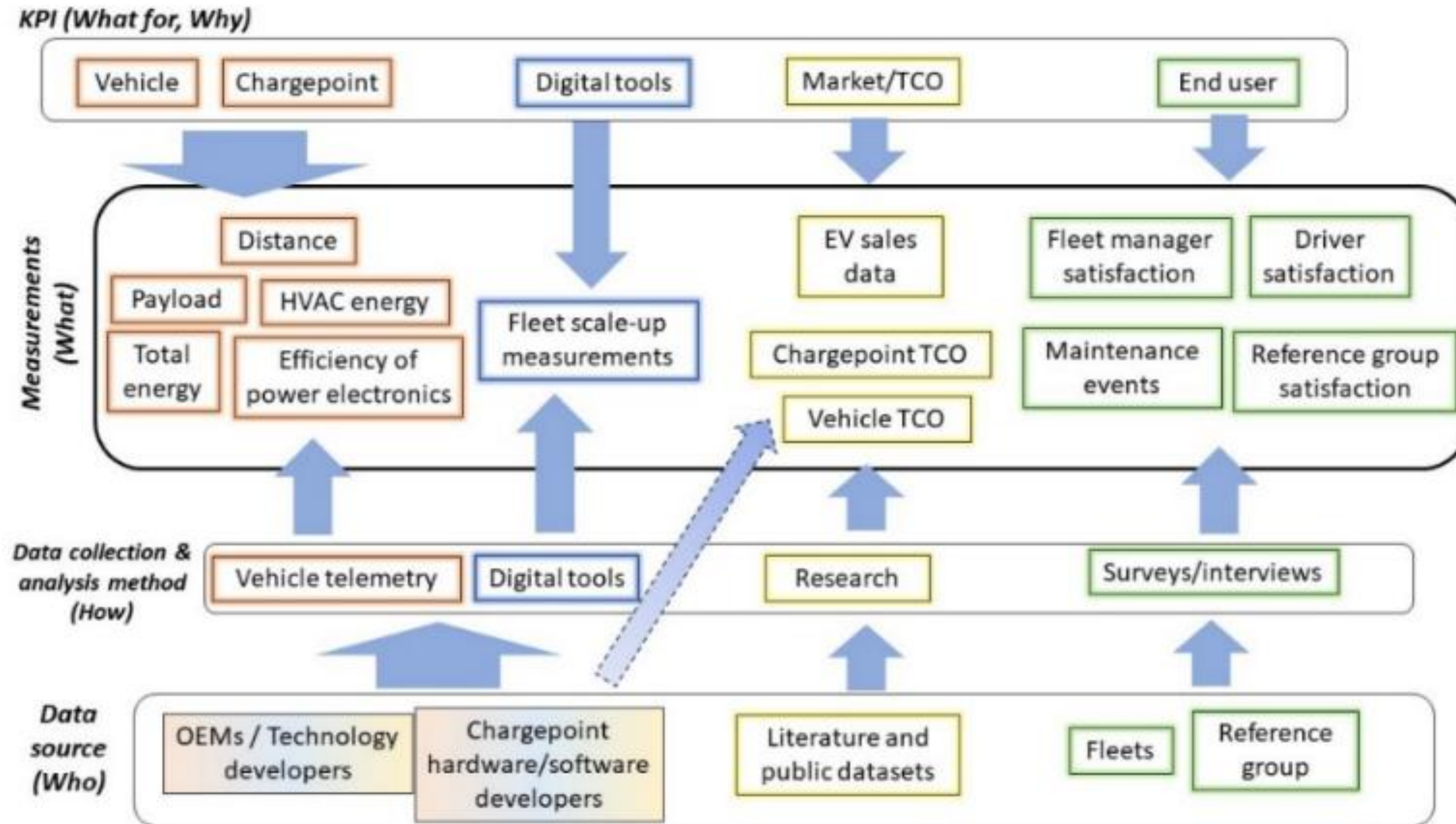


Validation plan





Data flow process





Data analysis

Technical and operational validation



Technical and operational validation



On-road use case



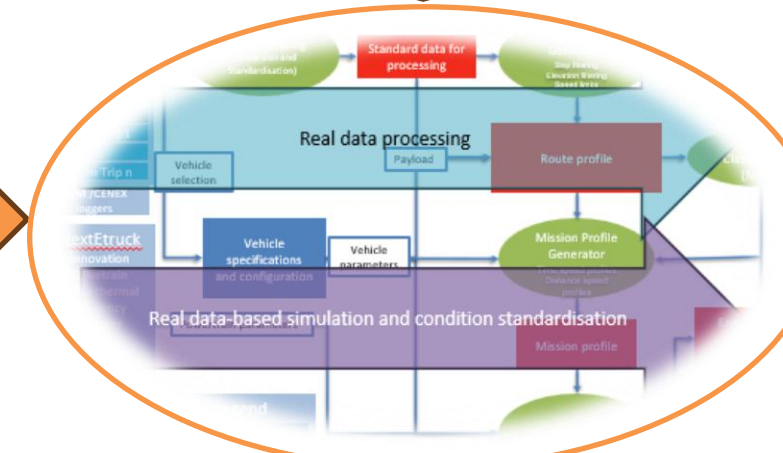
- Variable condition
- Variable topography
- Variable driver behaviour
- Traffic variation

Missions



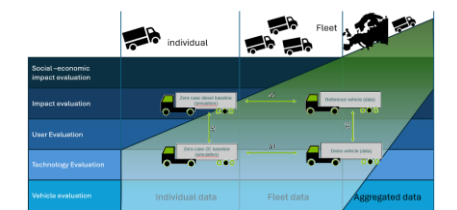
Missions

Calibration and validation



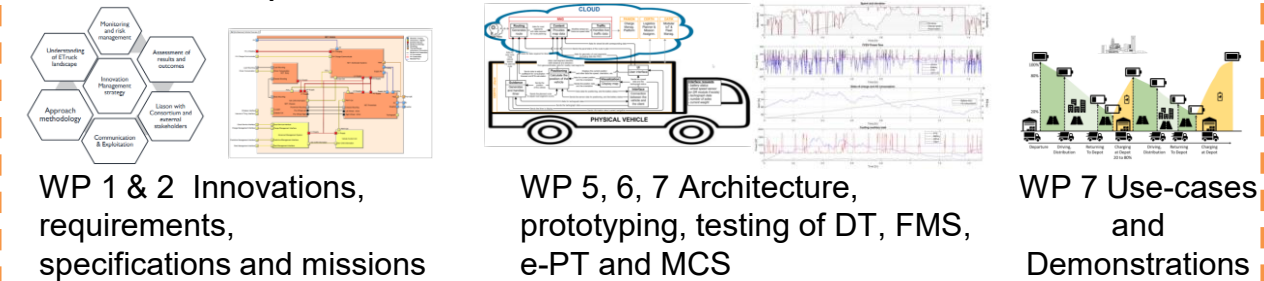
Evaluation

Technical assessment



- Results with similar:
- Payload
 - Innovations
 - Traffic variation
 - Weather

Additional input from WP





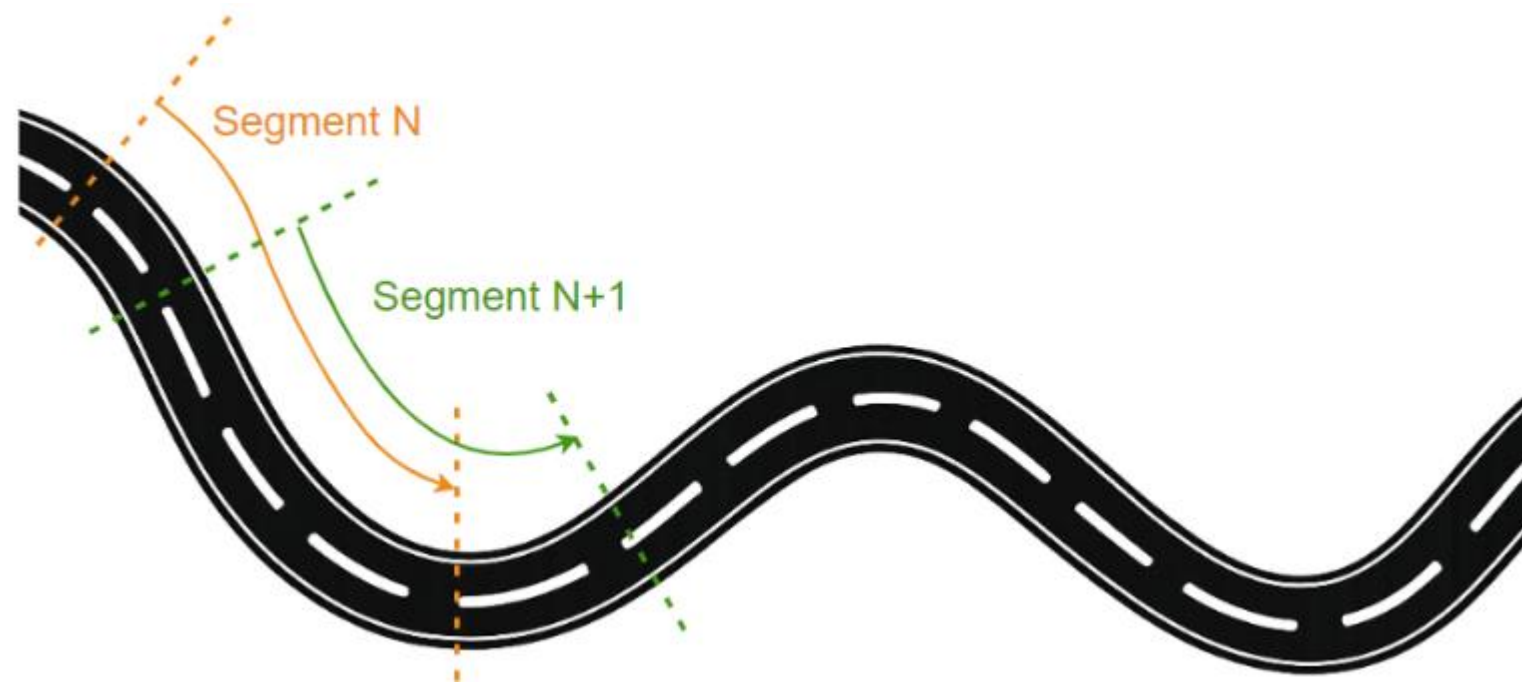
KPI used



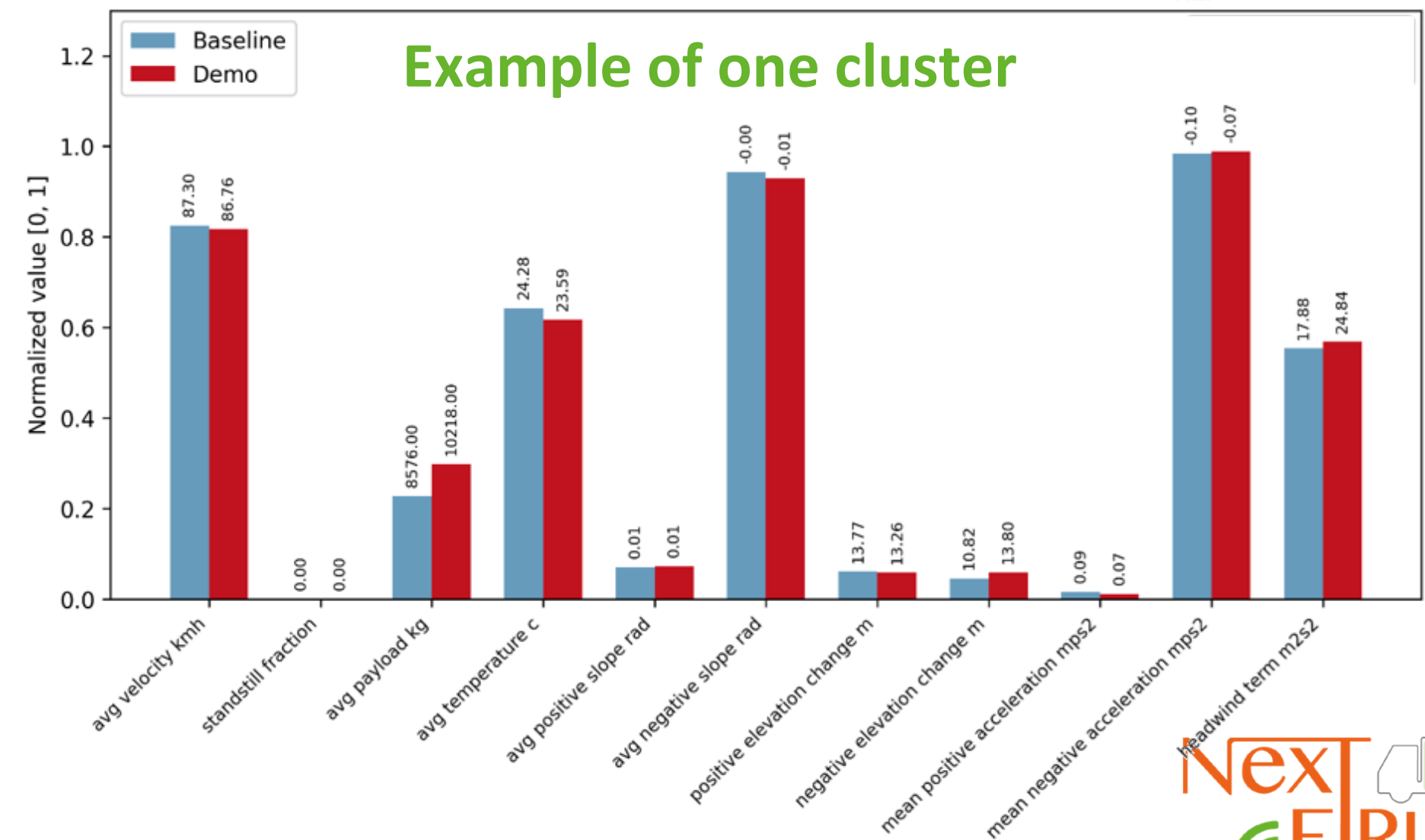
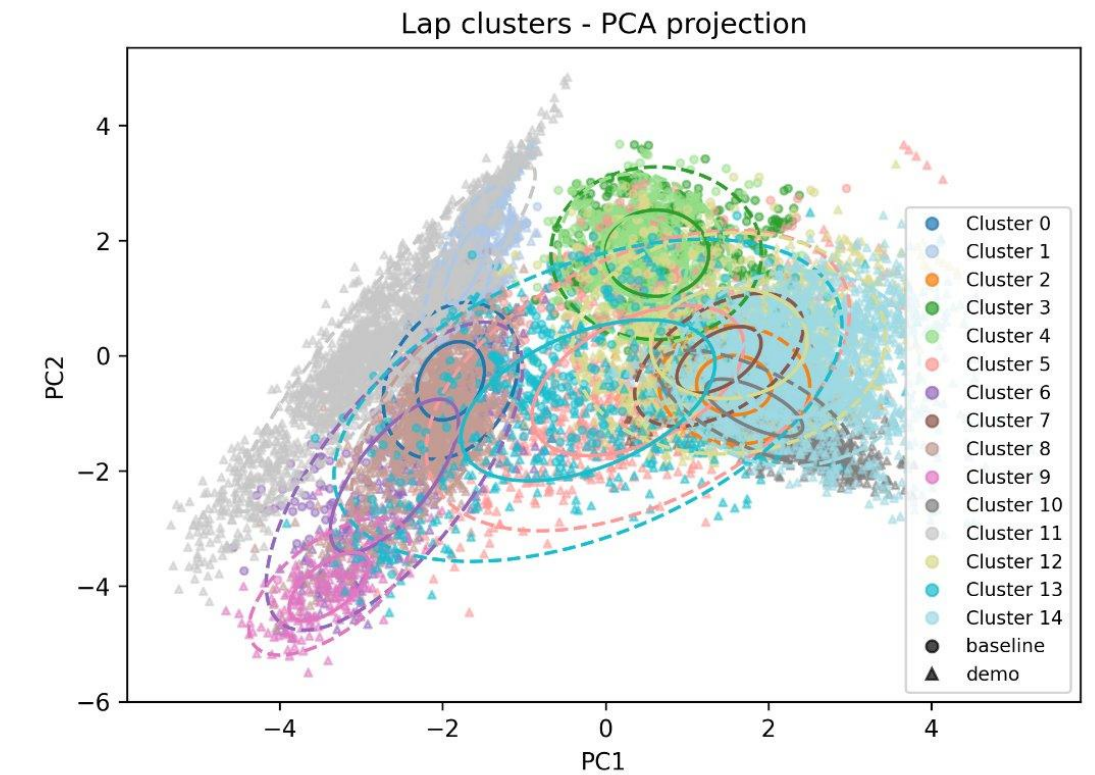
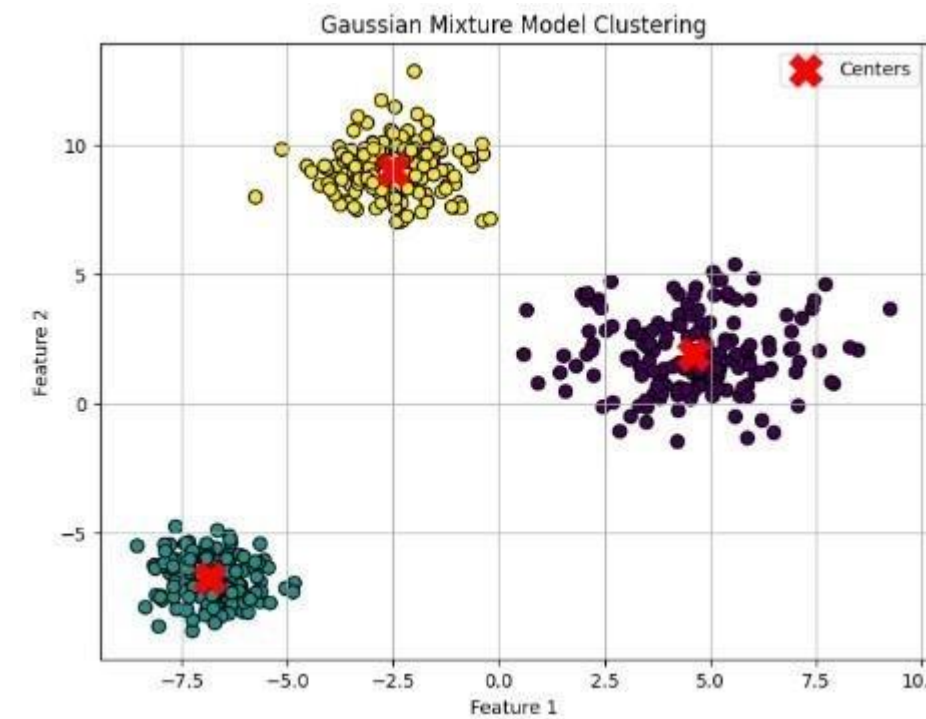
KPI title	UC1 Ford	UC2 Irizar	UC3 DAF
Efficiency increase by 10%	Demo vs Baseline	Demo vs Baseline	Demo vs Baseline
Efficiency Target value: kWh/km	Target	Target	Target
Payload Capacity Distance (10% ICE)	Target	Target	Target
Double shift fleet operation	Target	Target	Target
Charging experience	User perspective	User perspective	User perspective
Realisation of UC: 200 km per day	Target	Target	Target
Realisation of UC: vehicles meet user needs	User perspective	User perspective	User perspective
The TRUCK system compatible with the UC	User perspective	User perspective	User perspective
Operating hours [h]	Same as Baseline	Same as Baseline	Same as Baseline
Charging rate [kW]	No target	WBG charger	n/a
Charging time [min]	Drivers brake	Drivers brake	n/a
Driving to charging time [h]	No target	No target	No target
Average driving speed [km/h]	No target	No target	No target



Methodology GMM



- Comparison against baseline vehicles
- Variable conditions
- Gaussian Mixture model
- 11 dimensions

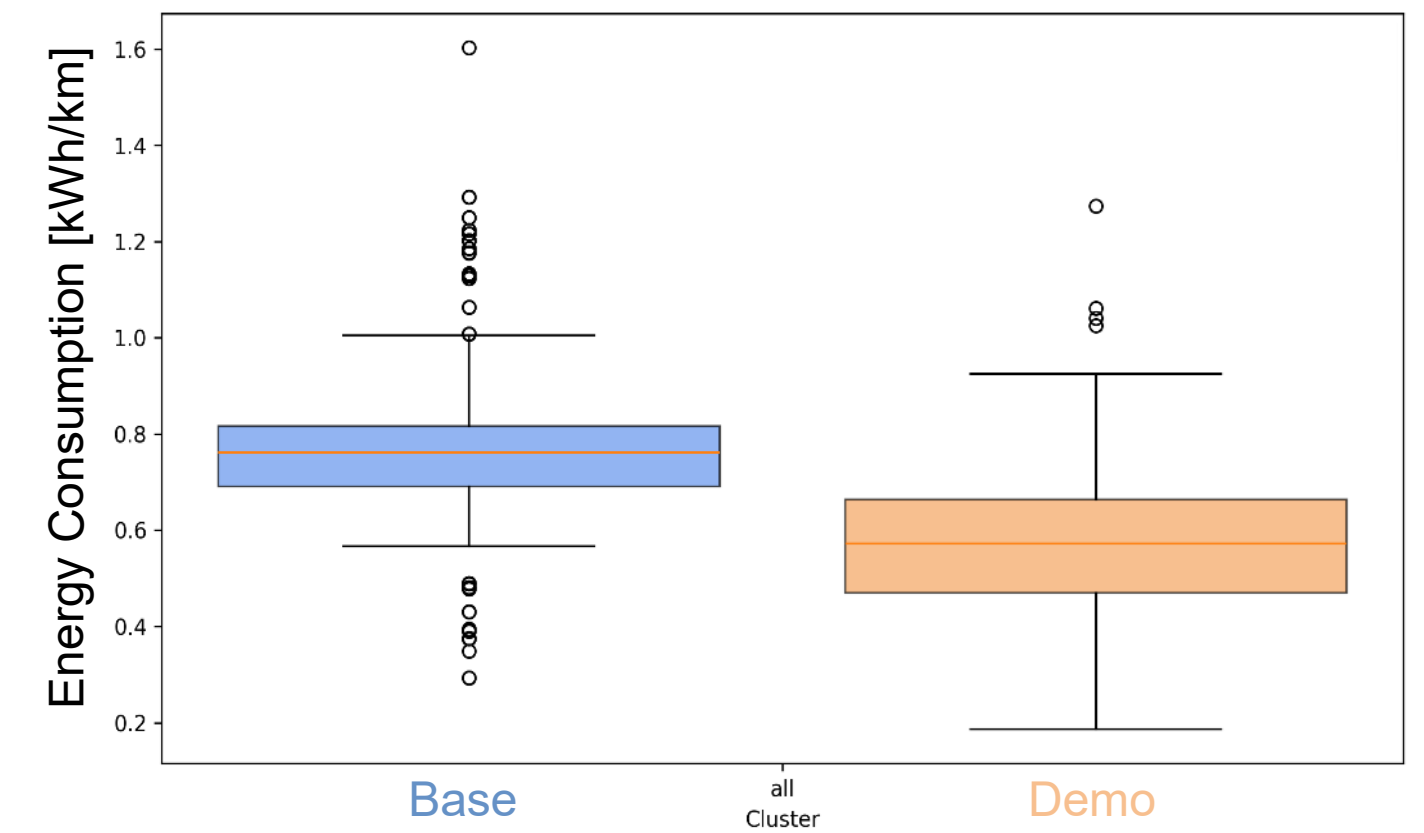
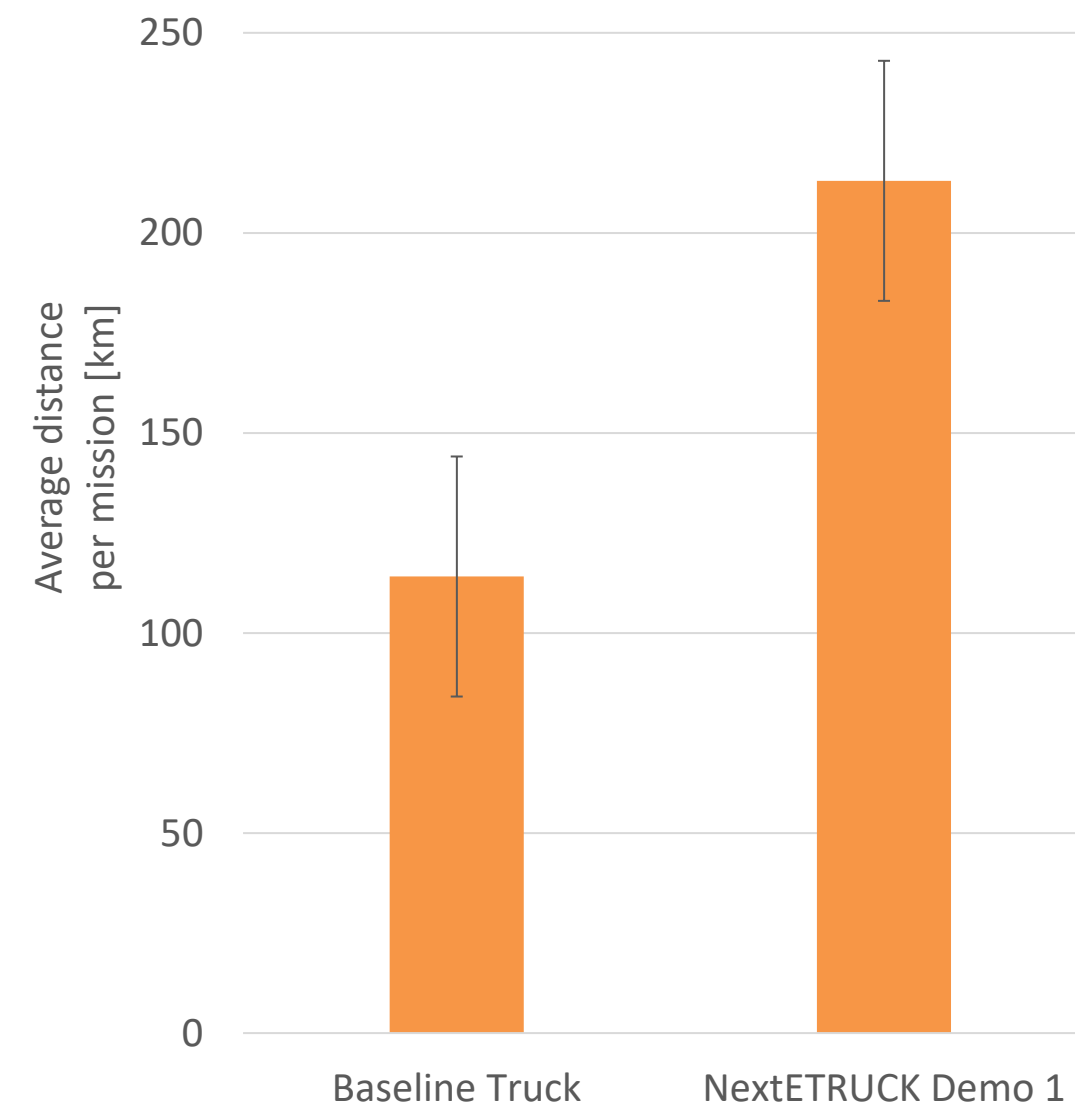
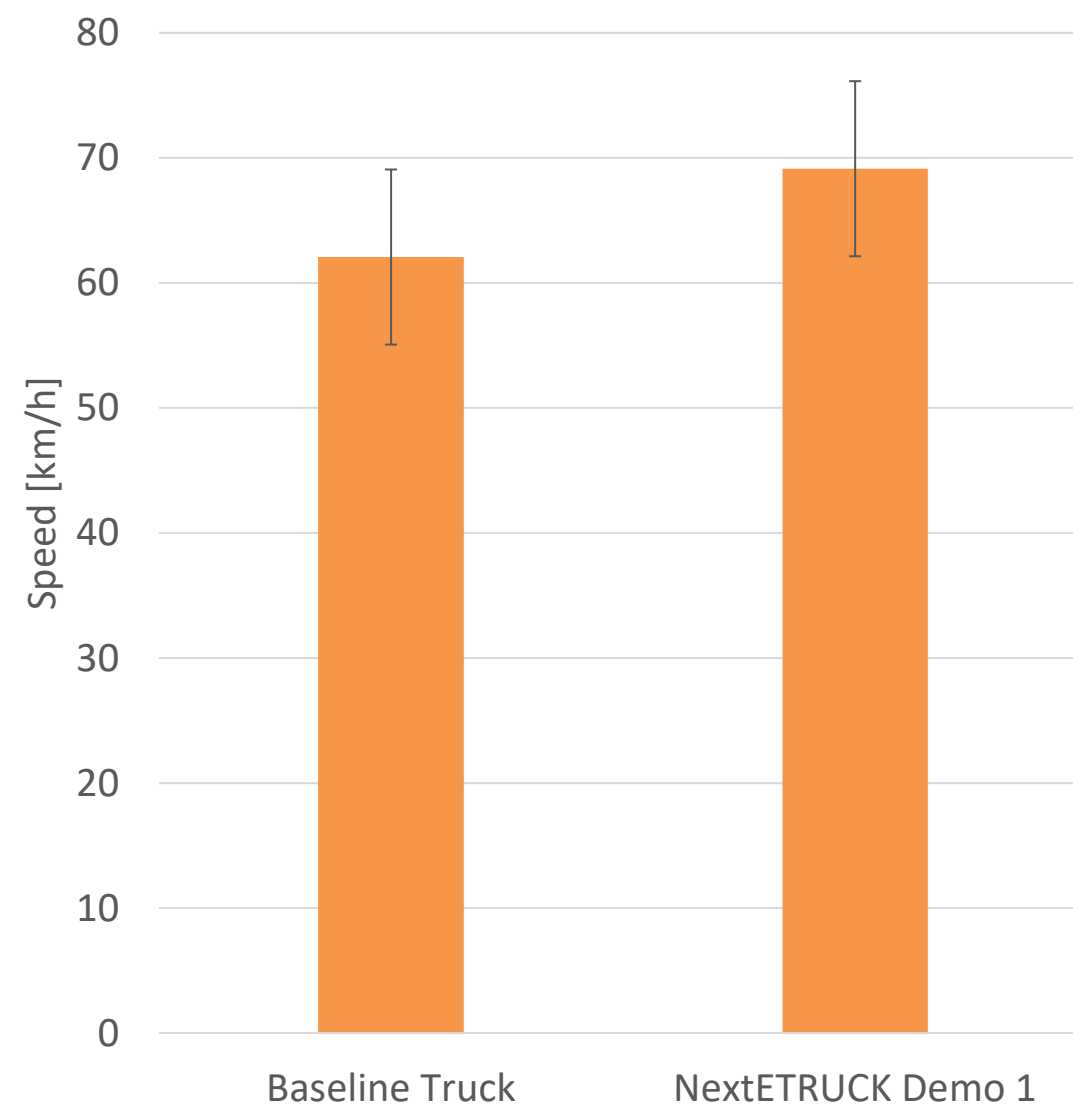
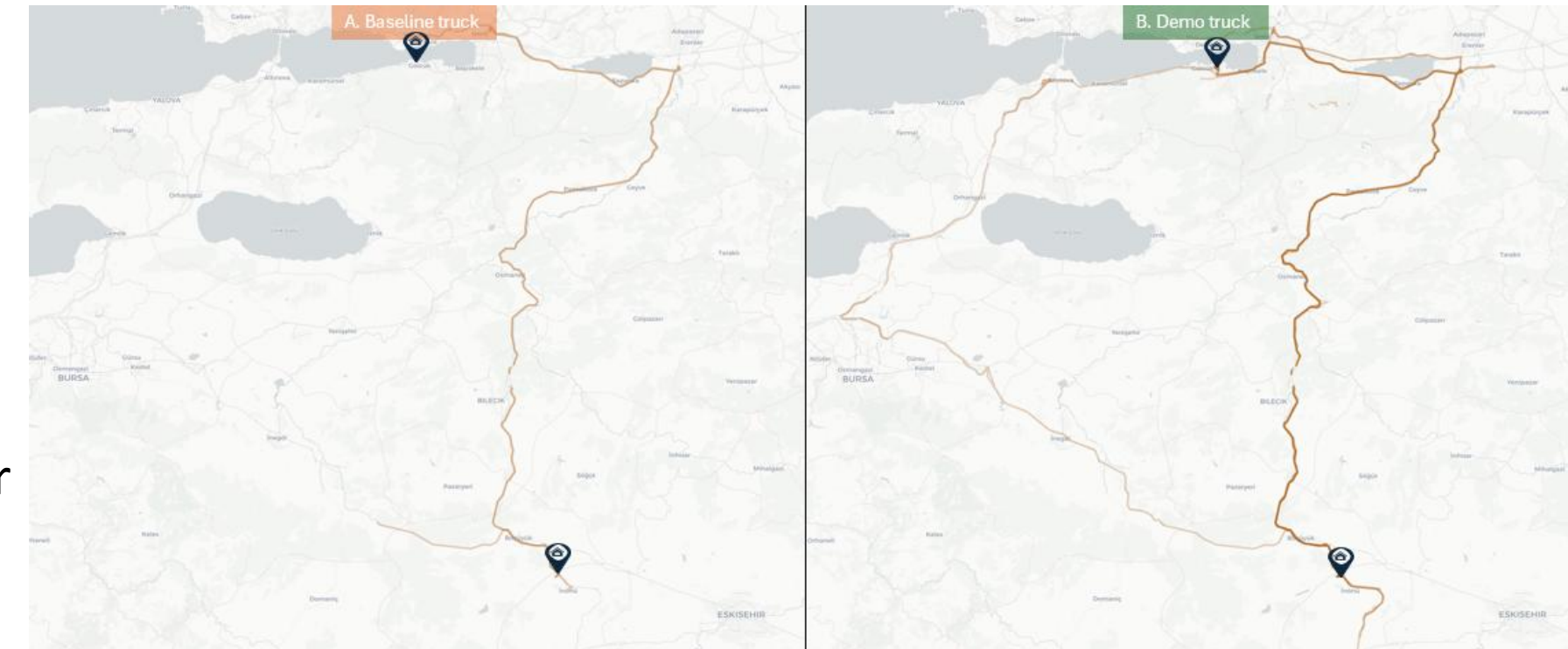




Ford, Istanbul: efficient regional transport

The NextETRUCK achieved:

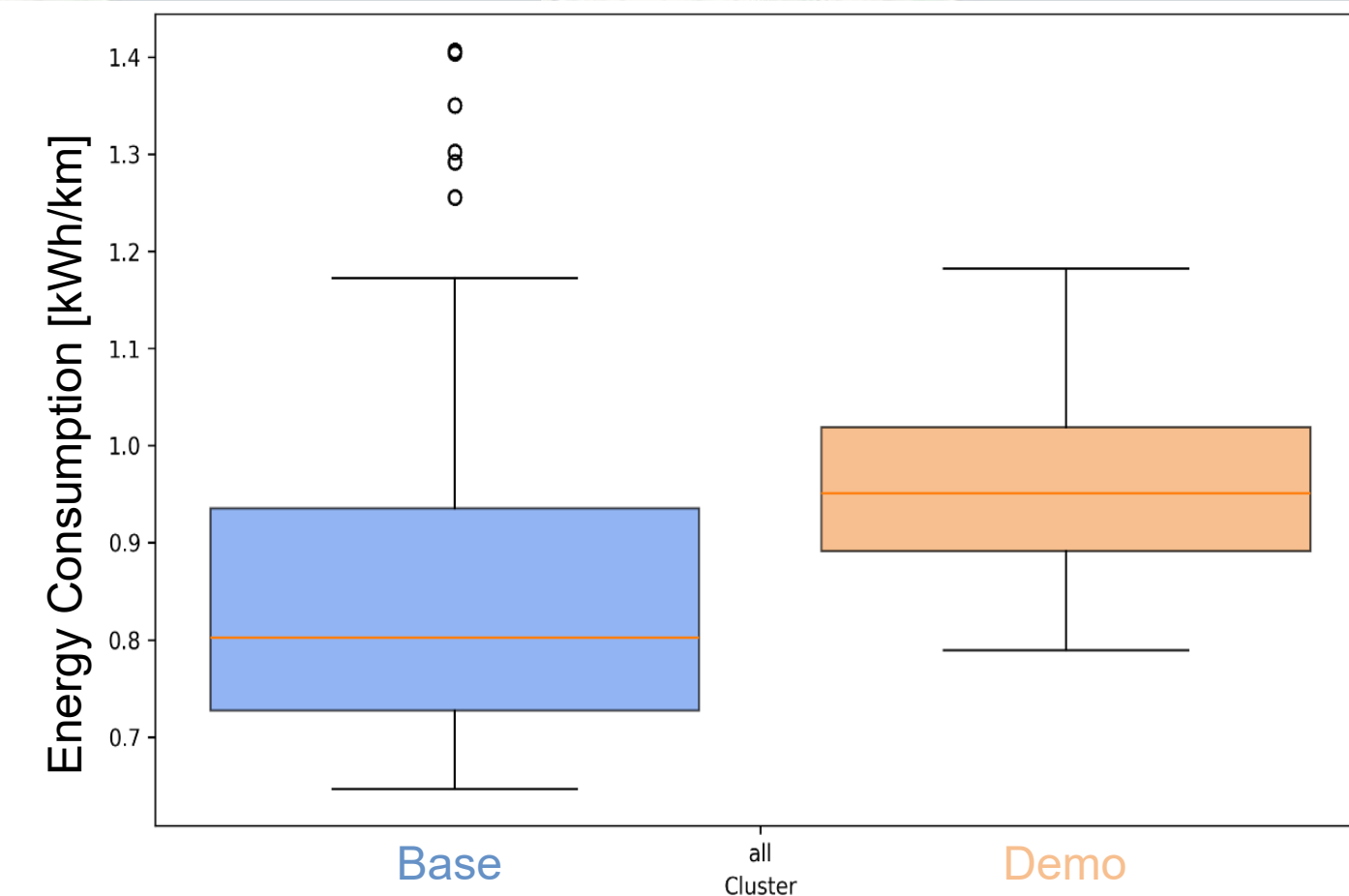
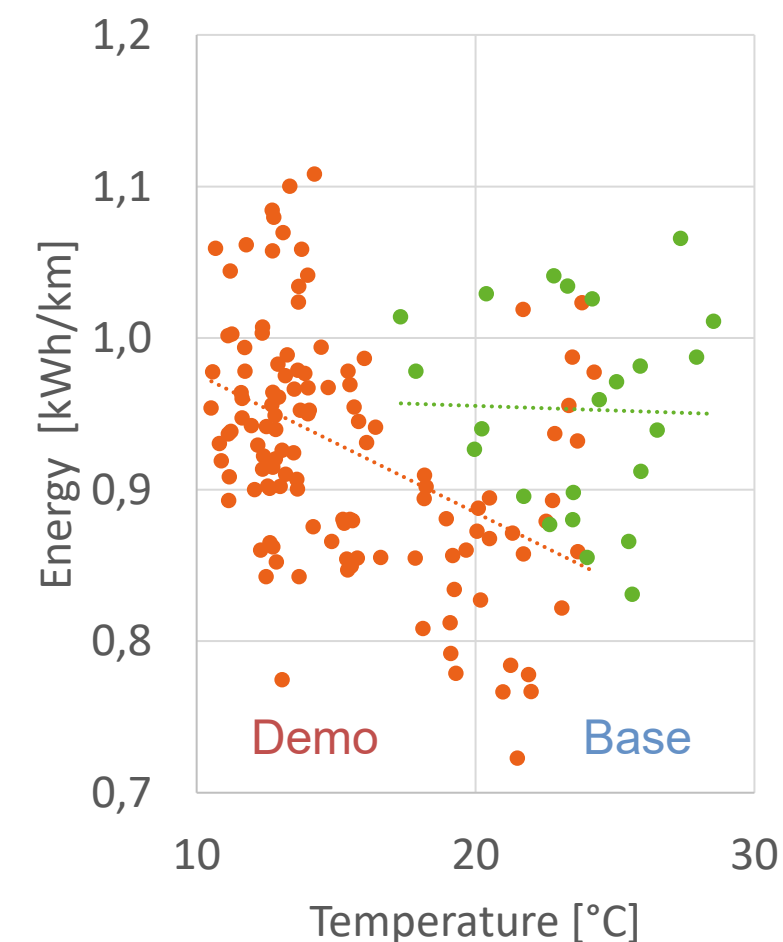
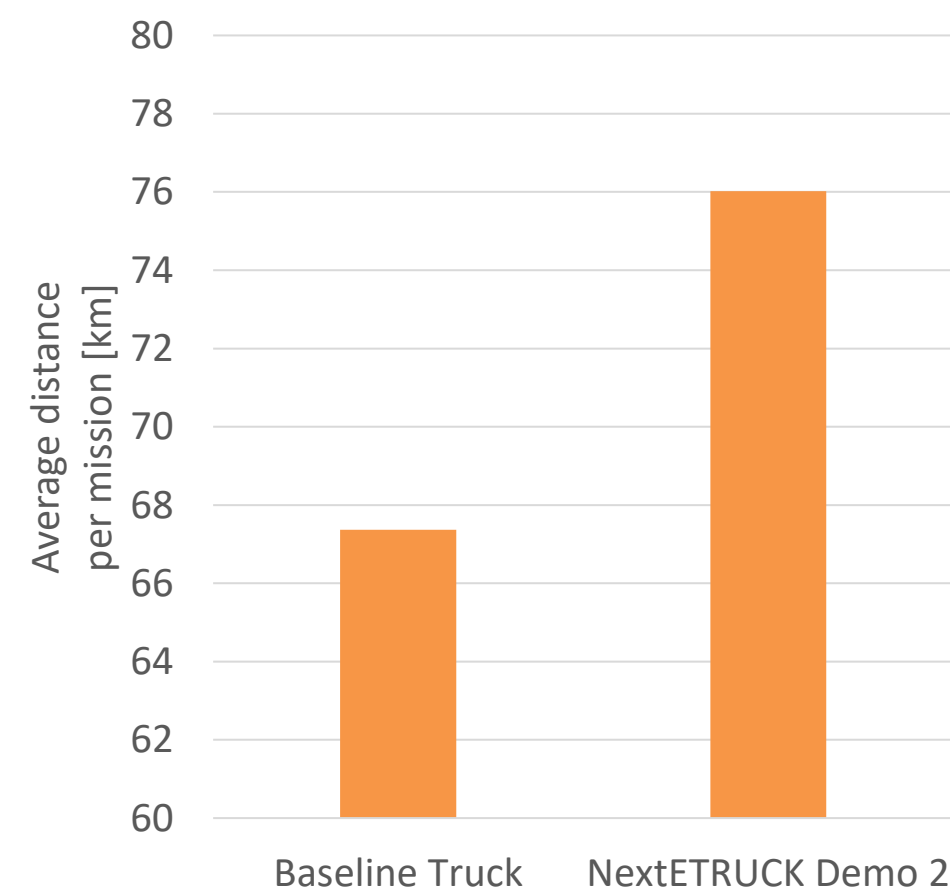
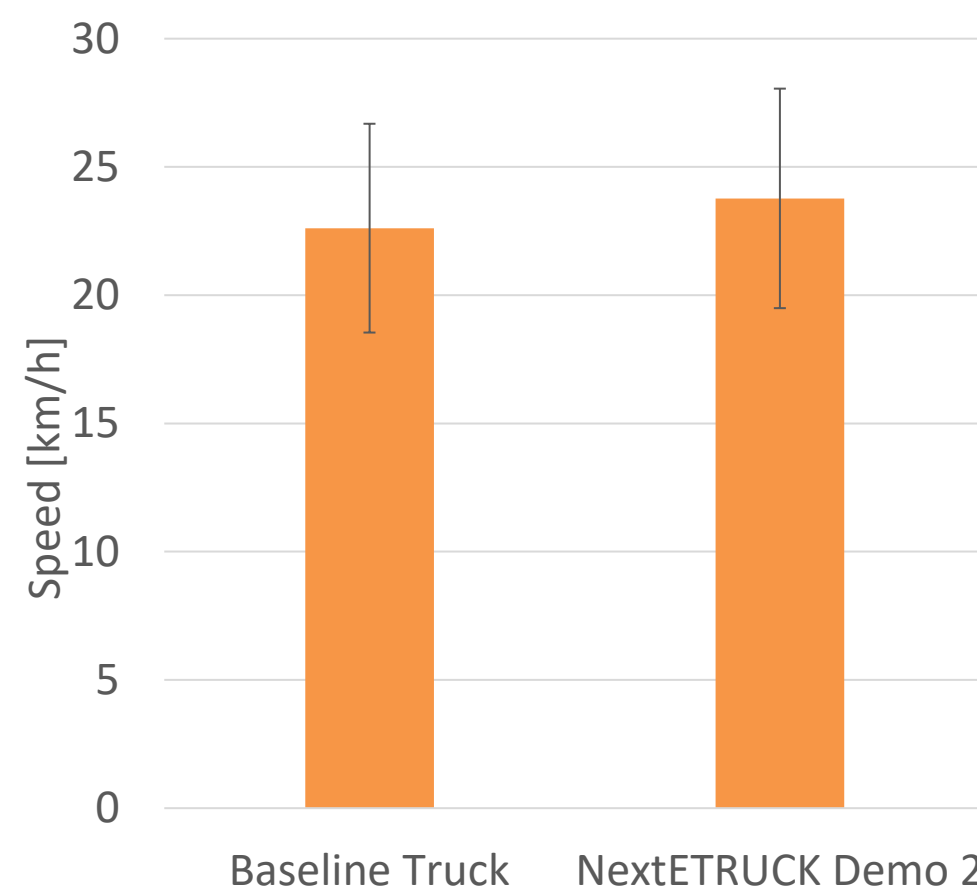
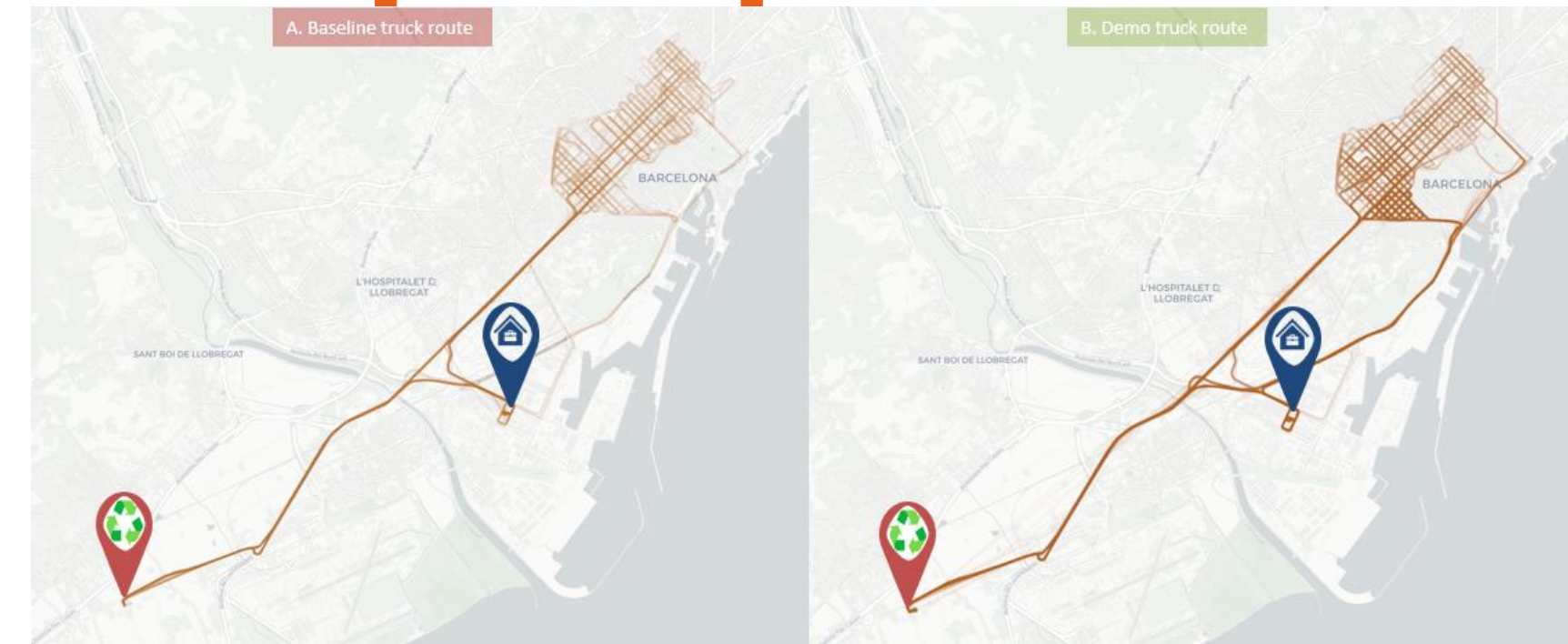
- ■ ■ ■ Average energy consumption improvement of 25% resulting in 0.57 kWh/km.
- ■ ■ ■ Vehicle operated with a payload of 90% of similar ICE truck (10t).
- ■ ■ ■ Average mission: approximately 213 km and 3 hours of driving.
- ■ ■ ■ Estimated 20–80% charging time: approximately 64 minutes.
- ■ ■ ■ Double-shift operation is technically possible without intermediate charging for the assessed mission.





Irizar, Barcelona: robust municipal operation

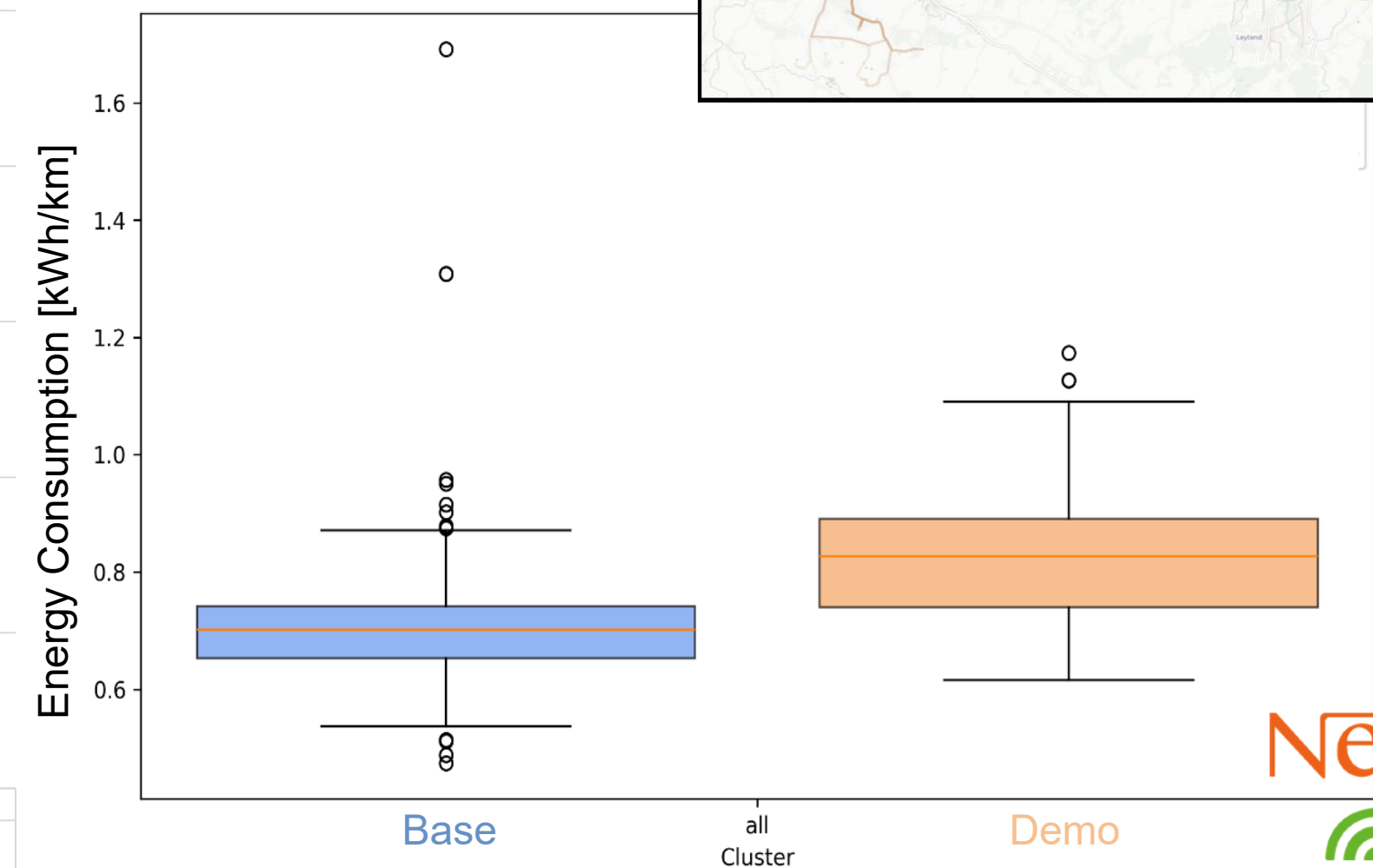
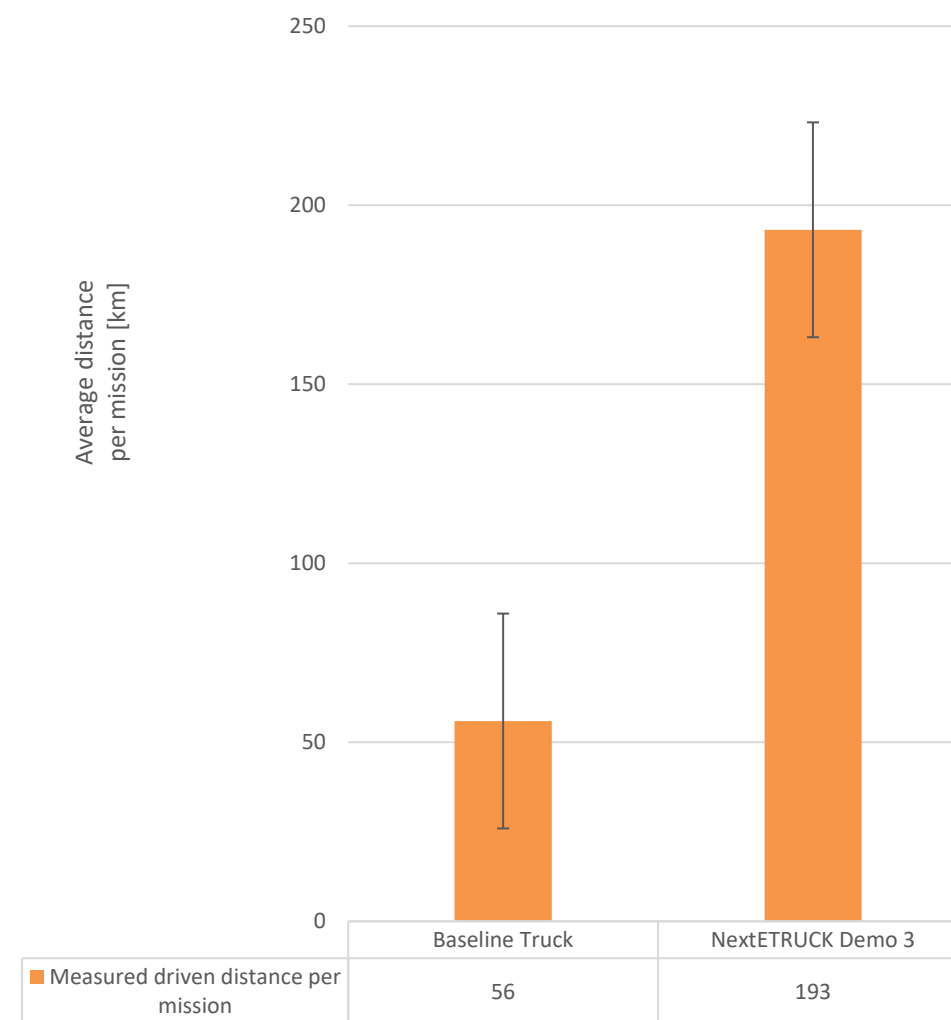
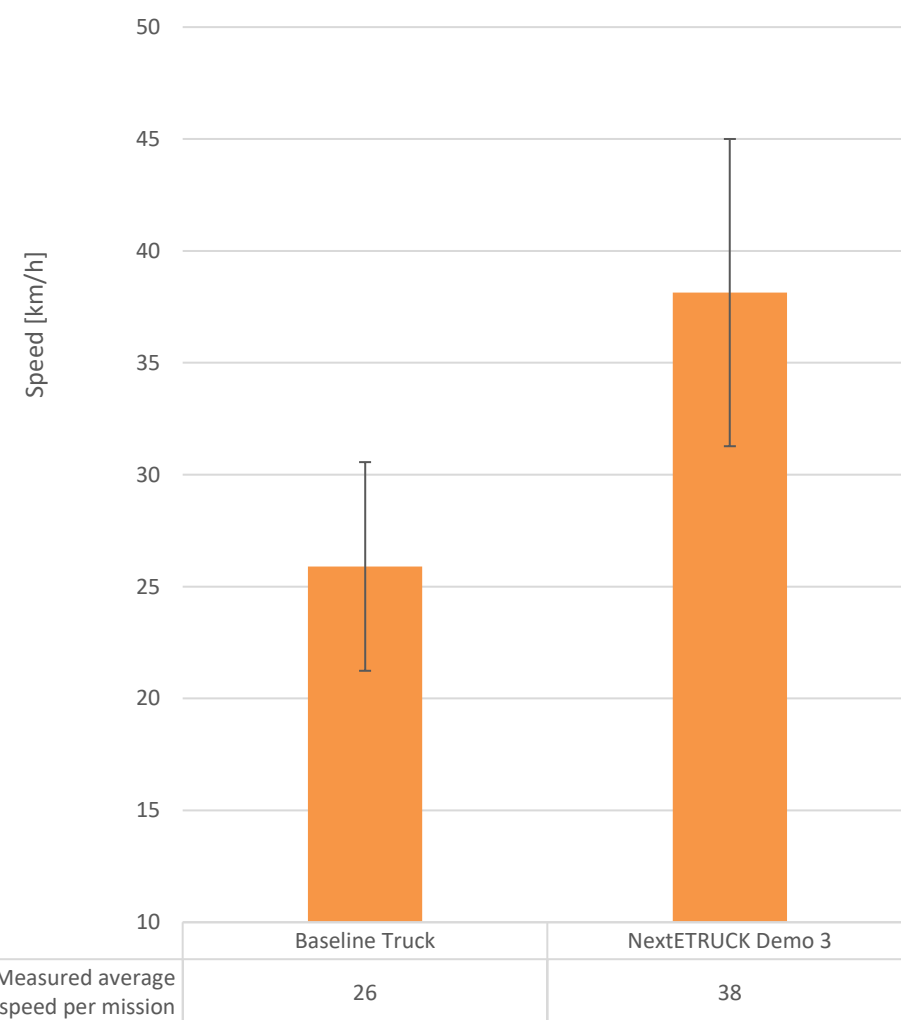
- Energy consumption improvement is inconclusive.
- Energy target of 0.87 kWh/km achieved under comparable temperature conditions as baseline.
- All monitored missions completed without limitations.
- The operational range in comparison with baseline increased by 115% to 320 km. Daily missions generally below 100 km.





DAF, UK: extended distribution missions

- Energy consumption improvement inconclusive.
- Energy consumption below 0.82 kWh/km.
in comparable situation with baseline.
- Available payload capacity was sufficient at 86% of ICE payload (9.8 t).
- Estimated technical range: above 200 km at maximum payload.





End-user acceptance approach

Assessment sources:

- Driver and vehicle questionnaires
- HMI usability and workload questionnaires
- Fleet manager questionnaires
- Driver mission diaries, where available



Main evaluation areas:

- Driving experience and vehicle performance
- Suitability for the operational mission
- Comfort, ergonomics and HMI usability system usability

Operational and fleet management experience:

- KPI Charging experience
- KPI Vehicle meets user needs
- KPI Compatibility with driving and mission tasks
- KPI Overall system usability



Cross-use-case achievements

Demonstration	Main strengths	Main improvement areas
FORD	Acceleration 4.4/5 Braking and comfort above 4/5 Positive responsiveness and driving experience HMI: not evaluated	Cabin ergonomics Seats and armrests Vibration and noise Lateral behaviour and range
IRIZAR	Braking, ride comfort and range rated 5/5 HMI SUS score of 85/100 DALI assessment: Generally low additional workload (vs. usual)	Prototype-related technical issues Passenger ergonomics Rearward visibility Manoeuvrability
DAF	Smooth driving, Handling Braking Ride quality Suitable for urban operation HMI: not evaluated	Range Motorway and hill-start performance Practical stop-start functionality



User acceptance

KPI	FORD	IRIZAR	DAF	Overall interpretation
System usability	Achieved	Achieved with comments	Achieved with comments	Positive usability, with specific areas requiring refinement
Vehicle meets user needs	Achieved (expectation)	Achieved with comments	Achieved	Vehicles generally supported user and mission needs
Mission compatibility	Achieved overall	Achieved overall	Achieved overall	Demonstrations were successfully completed
Charging experience	No issues have been reported	No issues have been reported	No issues have been reported	No major issues reported, but not directly assessed
Multi shift operations	Feasible with charging	Feasible	Feasible with charging	Sufficient amount of energy at the end of the mission or recharging within 45 min possible



Validation challenges and lessons learned

- ■ ■ ■ Baseline and demonstrator datasets differed in duration and completeness.
- ■ ■ ■ Baseline and demonstrator operated on different routes or/and under different climatic conditions/ time of a year.
- ■ ■ ■ Many unknown factors influencing truck behaviour – system failures.
- ■ ■ ■ Limited data and interrupted data– especially GPS and charging.
- ■ ■ ■ Harmonised signal names – contents of the signal and how this signal is obtained or created in vehicle was not always clear.



Final takeaway

The NextETRUCK demonstrations confirmed that electric medium-duty trucks can provide sufficient range, payload capacity, energy performance and operational flexibility for regional freight, municipal refuse collection and multi-drop distribution.

■■■■ Ford: good efficiency at 90% ICE payload and long-distance capability.

■■■■ Irizar: substantial range margin and successful daily operation with multiple stops starts.

■■■■ DAF: sufficient payload, good efficiency and technical capability for distribution missions.



Tools: KITE & TEIDE



Today's challenges

- Availability of electric trucks
- Access to financing (upfront costs remain high)
- Clarity on current possible range vs fleet requirements
- Reliable information on costs of truck and depot electrification
- Timely & affordable access to grid connections
- Availability of public and shared charging infrastructure
- Development of electricity market knowledge for lowering costs



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KITE

TEIDE



Cenex tools

The screenshot shows the homepage of the Cenex Sustainable Fleet Transition Tools website. At the top, there is a navigation bar with the Cenex logo, links for Home, About, and Contact, and a Login button. The main heading is "Sustainable Fleet Transition Tools" with the subtitle "Comprehensive solutions to help fleet owners make the transition to sustainable transport". Below this, it states "A collaborative initiative by" followed by the logos of Cenex and Cenex Nederland. The page is divided into two main sections. On the left, there is a "Transition Stage" filter with five categories: Planning (Strategic planning for fleet transition), Assessment (Evaluating current fleet and infrastructure), Implementation (Executing transition strategies), Monitoring (Tracking progress and performance), and Optimization (Refining strategies for maximum efficiency). On the right, there are six tool cards arranged in a 2x3 grid. The top row includes "KITE" (Key Infrastructure for Truck Electrification - Free), "NEVIS" (National Evaluation of Vehicle Infrastructure Solutions - Free), and "NEVIS Car Park EVI Calculator" (Freemium). The bottom row includes "BETT" (Battery Electric Truck Trial - Free), "EIGER" (Consultancy), and "CIBCAT" (Free). Each tool card displays its name, a brief description, and the stages it covers (Assessment, Monitoring, Planning, Implementation).

<https://cenex-tools.io/>
<https://cenex.cademy.io/>



- Range of digital tools to help with various stages of fleet decarbonisation
- Heavy duty, passenger cars, micromobility, shared mobility, etc.
- Many tools are free, created from research projects
- Online course for Continuous Professional Development or general learning



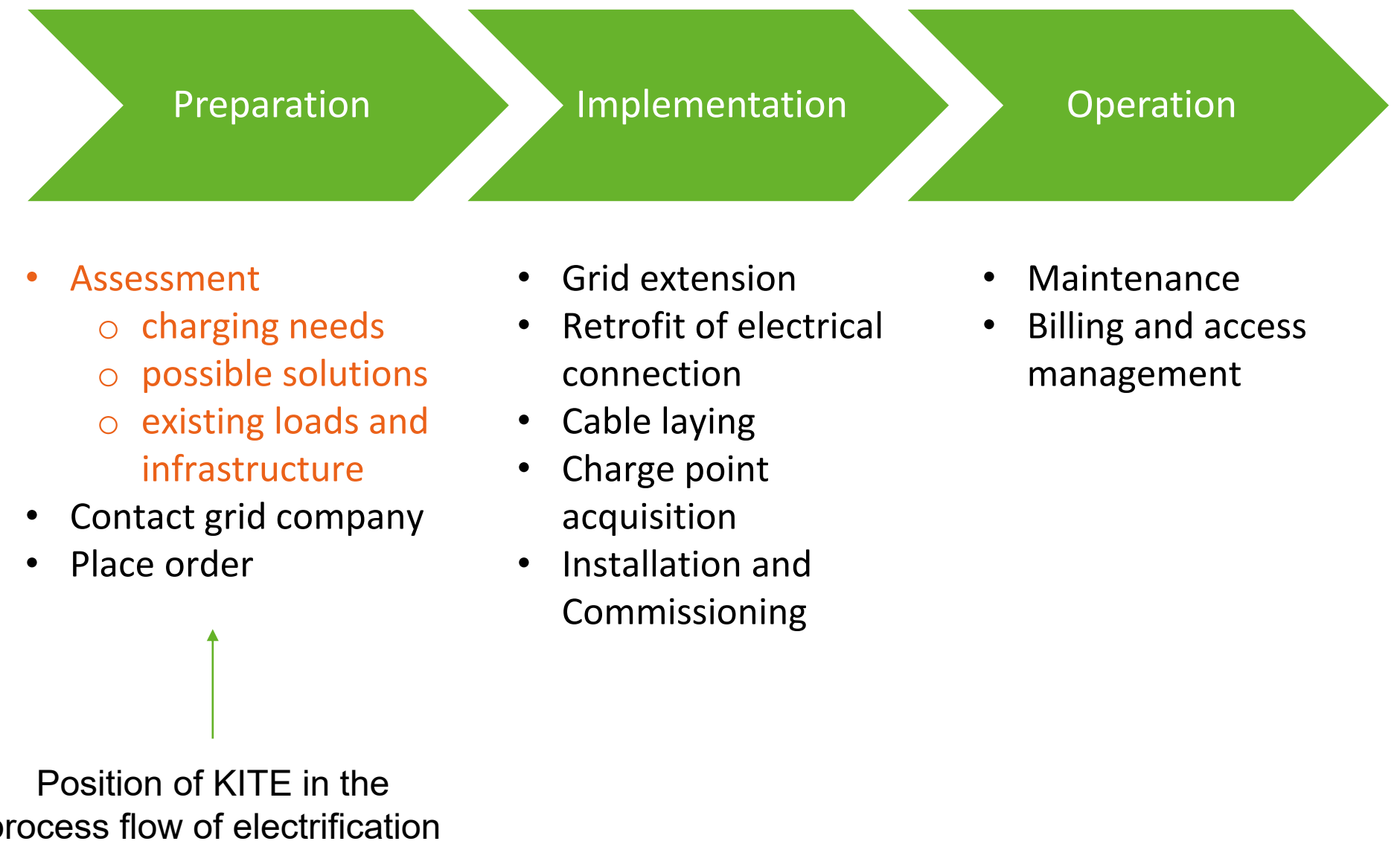
KITE – Key Infrastructure for Truck Electrification

■■■■ Target audience:

Logistics operators in small companies (<20 trucks)
who are planning to electrify their depots

■■■■ Fully online, no downloading of executables

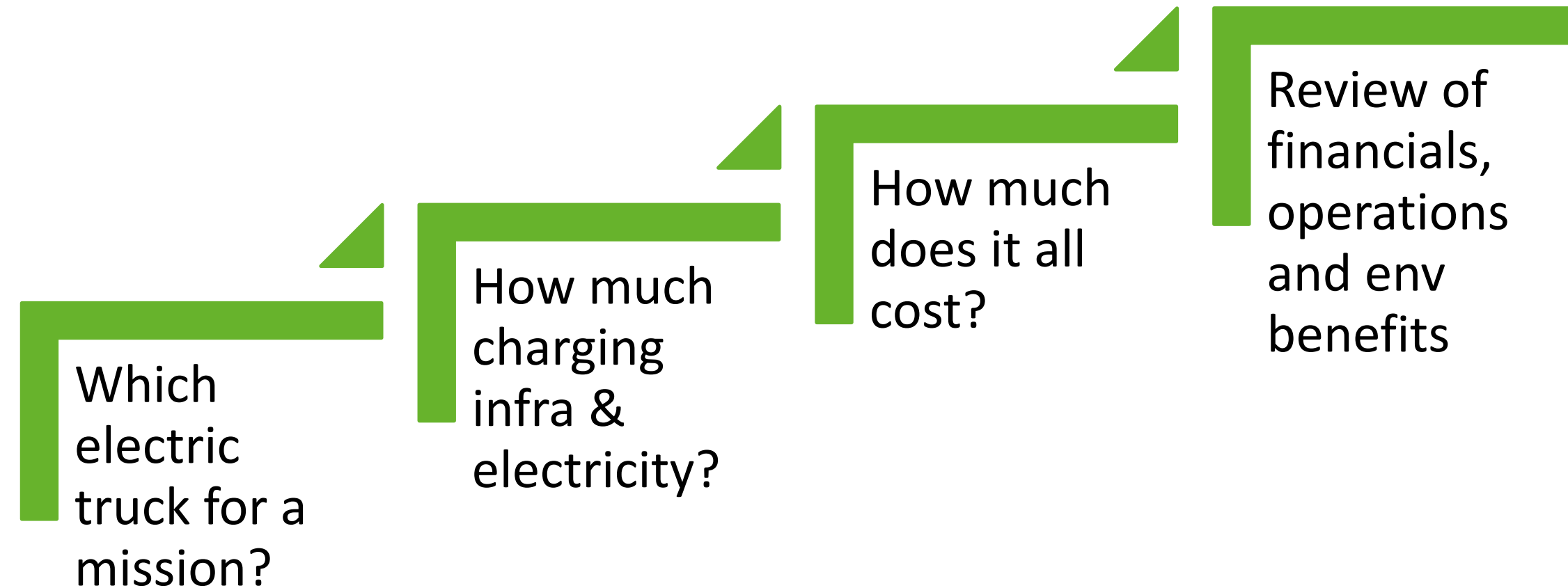
■■■■ Free to access





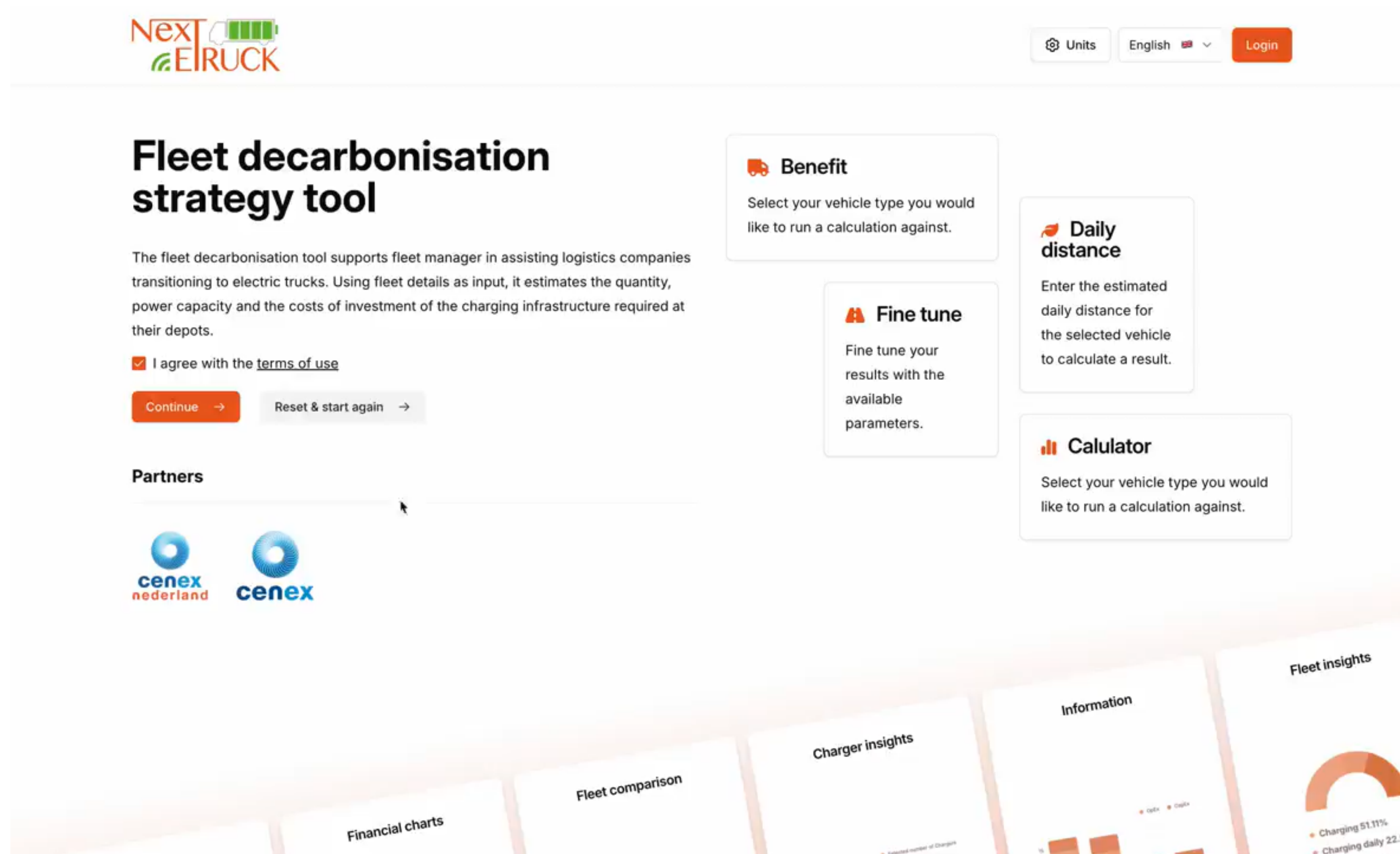
KITE – what can it be used for?

- Check the average capabilities of various types of electric trucks
- Estimate the truck charging infrastructure required
- Estimate the total cost of ownership (TCO)
- Identify truck routes where the TCO of electric trucks is low
- Match truck with lowest TCO route.





KITE – process flow





KITE – main advantages and limitations

Advantages

■■■■ Includes many features

■■■■ Infra sizing

■■■■ TCO

■■■■ Grid upgrade estimation

■■■■ Battery salvage

■■■■ GHG emissions

■■■■ Default values for many European countries

■■■■ Highly customisable for local requirements

Limitations

■■■■ Mainly focused on depot charging at a single depot.

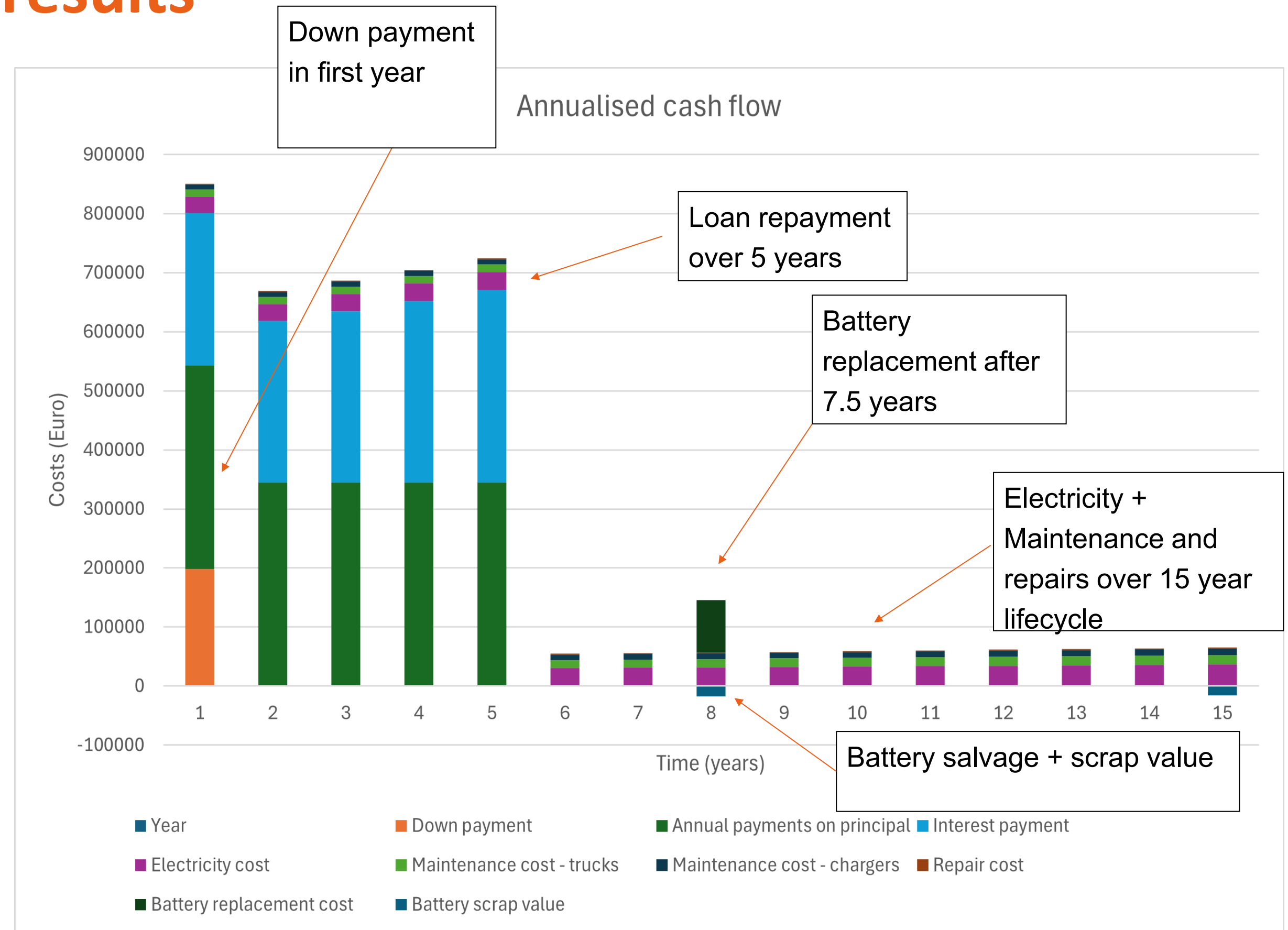
■■■■ No national and sub-national level subsidies

■■■■ Does not consider time-of-use tariffs, V2G or stationary battery storage



KITE – Analysing the results

- Upfront costs of battery electric trucks remain 1.5 to 3 times as high as diesel.
- Battery replacement is needed around 7 to 8 years
- TCO per km is very sensitive to
 - 1) Lifetime of operation
 - 2) Electricity price
 - 3) Discount rate





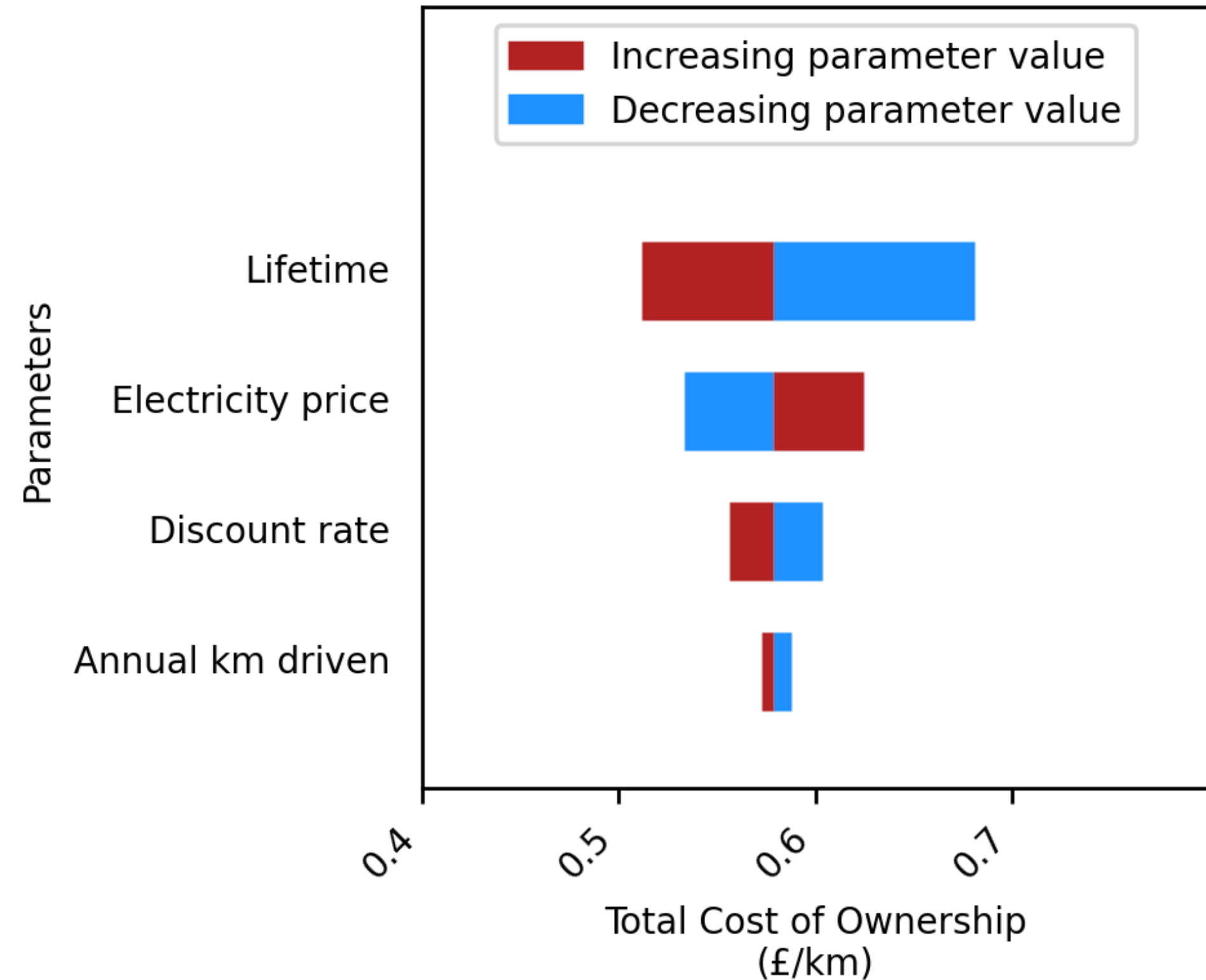
KITE – Sensitivity of etruck TCO – UK case study

||||| TCO/km is sensitive to various parameters

||||| Longer lifetime, lower electricity price, higher discount rate and higher km driven all reduce the TCO.

||||| TCO/km is most sensitive to lifetime and electricity prices

||||| Actual TCO is very sensitive to km per year, effect less visible per km





KITE - Main takeaway messages

- Battery electric trucks are close to diesel in total cost of ownership. For some fleets, battery electric is cost competitive.
- The main reason is lower cost per electric-km.
- The number of fleets for which battery electric trucks are cost competitive will increase.
- TCO/km reduces with longer lifetime, lower electricity prices and longer annual distances.
- There is considerable scope for further reduction in TCO of battery electric vehicles due to vehicle design improvements, battery cost reduction and digitalisation/optimisation of route-planning.
- The KITE tool is freely available to help with planning for electrification.



Today's challenges

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■■■■ Timely & affordable access to grid connections

■■■■ Availability of public and shared charging infrastructure

■■■■ Development of electricity market knowledge for lowering costs

KITE

TEIDE



TEIDE – En route charging

Coverage

Are we enabling all drivers access to equitable EV charging?

Will we meet peak demand without queues?

Utilisation

EV adoption rate

Competition (existing chargers)

How many EV driver pass, visit or stay at or near this location

Will drivers want to or need to charge there?

- Do they have other cheaper charging arrangements? e.g. home charging.
- Is the site safe, well-lit and have accessibility provision?

Installation

Land suitability, accessibility and planning

Pavement widths (on-street charging only)

Grid connection costs, distance to substation



TEIDE – Tool for Evaluating Infrastructure Deployment En Route

■■■■ Purpose:

To forecast the energy-based utilisation of chargepoints installed at en route locations (journey charging).

■■■■ Target audience:

CPOs who are planning public charging infrastructure for passenger vehicles and Heavy-duty vehicles

■■■■ Outputs:

- Future chargepoint utilisation.
- Average daily charging sessions.
- Annual energy delivered.
- Annual margin for the site.

“If you put chargepoints at this en route location, what (energy based) utilisation will you get now, and in the future.”



TEIDE – what can it be used for?

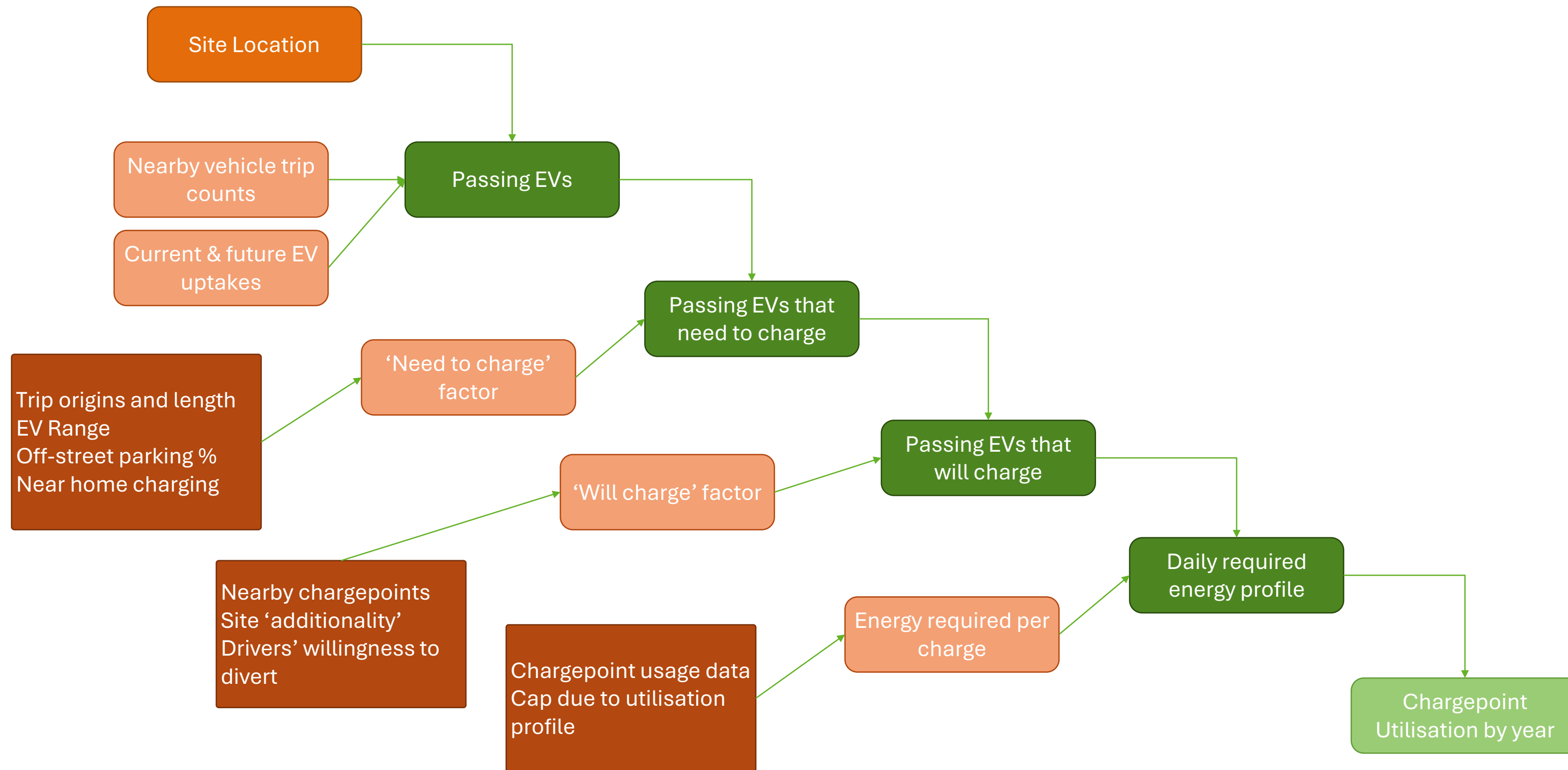
- Show how utilisation might vary throughout the day and year (data permitting).
- Provide recommendations of top locations to site en route charging.
- Inform on offer for wider retail revenue.

But TEIDE will not

- Say how feasible it is to put charging there (e.g. grid connection).
- Provide the business case for charging (other tools do this).



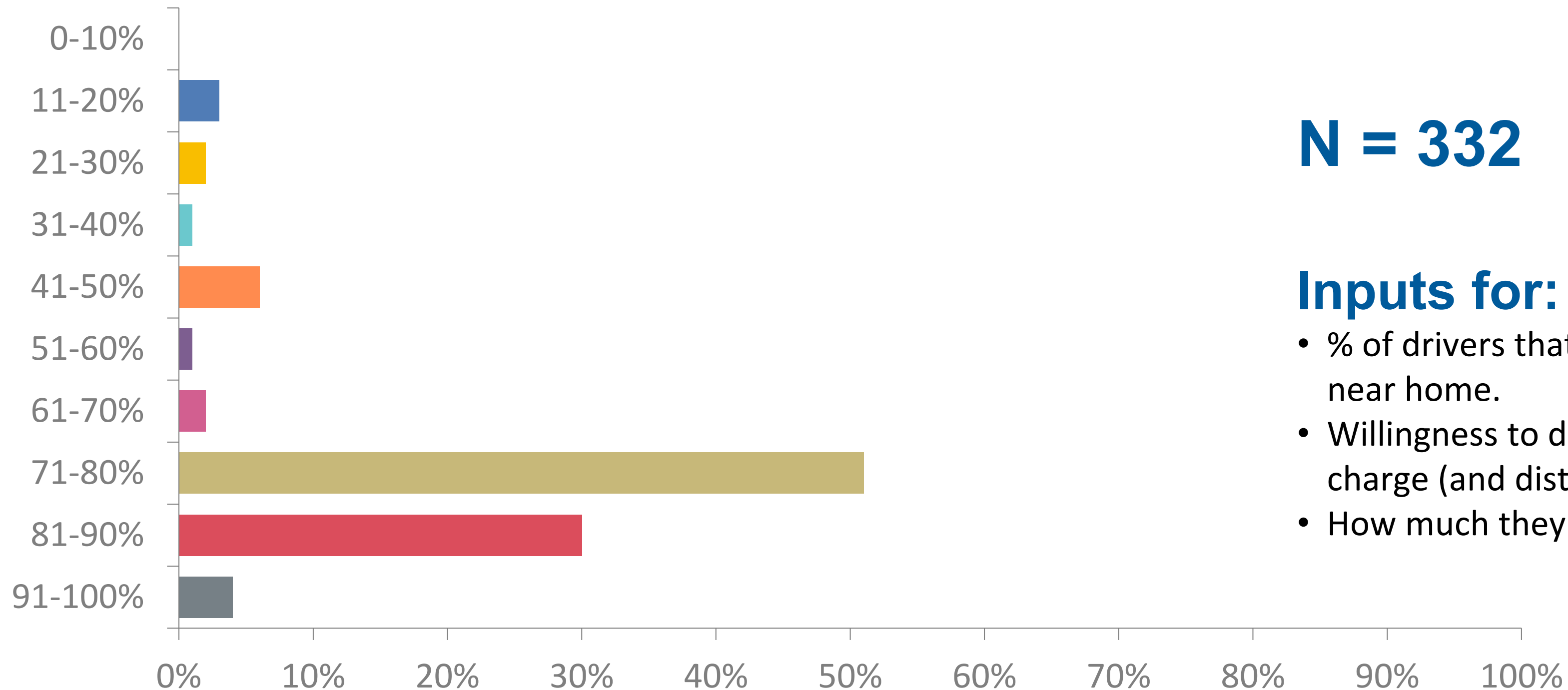
TEIDE – how it thinks?





TEIDE – modelling of driving behaviour when looking for charging with survey data

Q: On average, what percentage state of charge would you typically seek to charge your vehicle to whilst en-route charging?

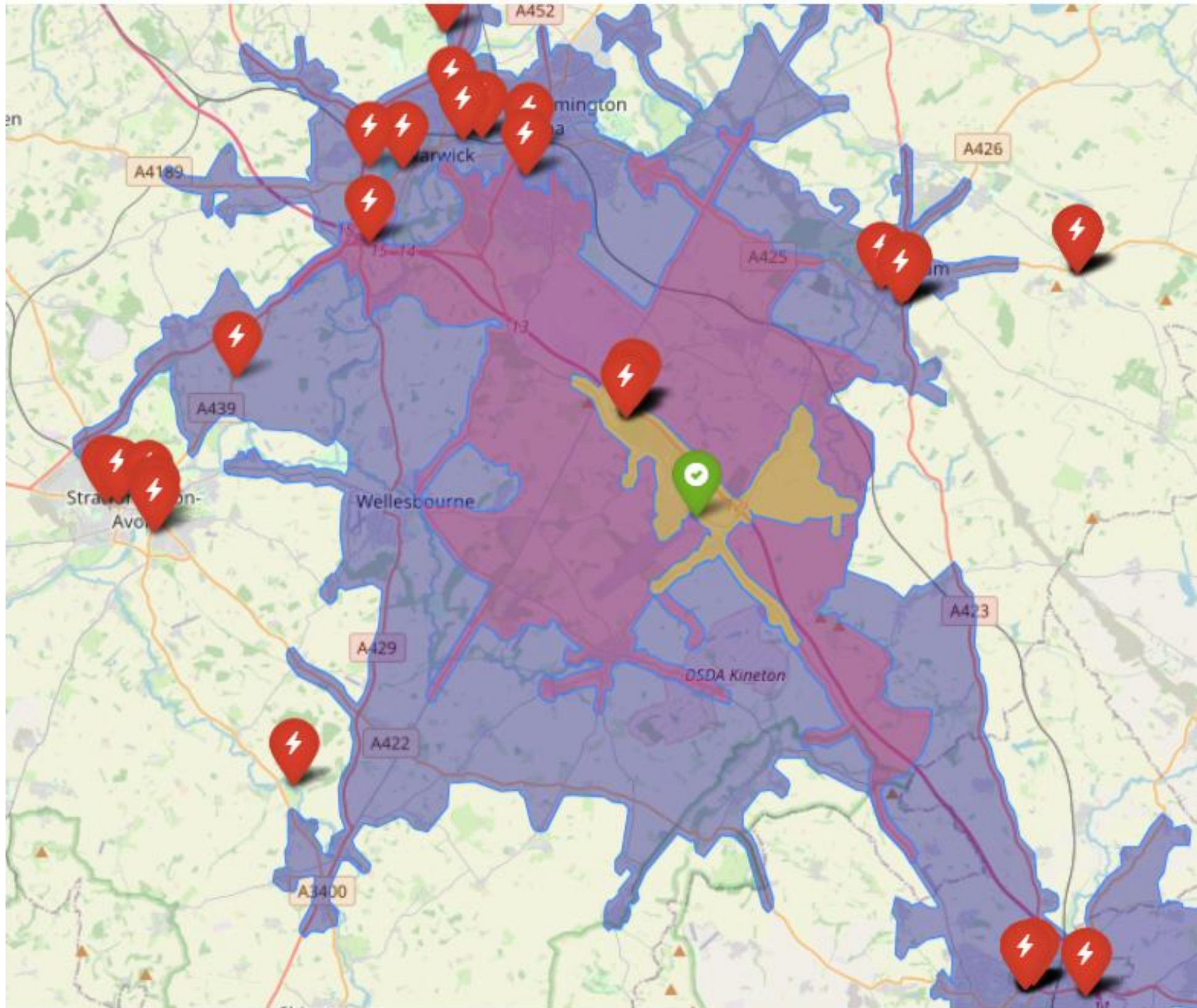


Inputs for:

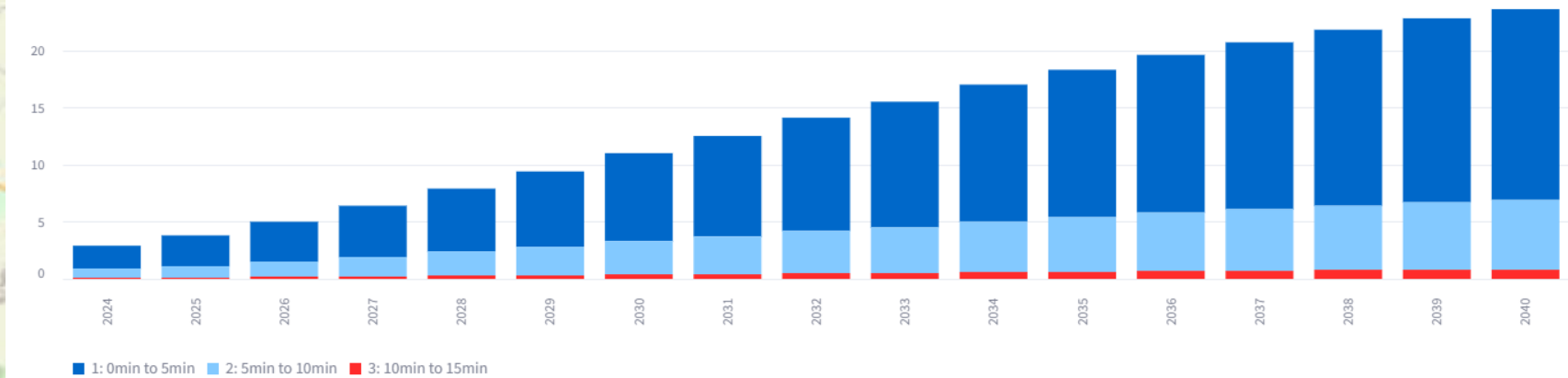
- % of drivers that can charge at or near home.
- Willingness to divert their journey to charge (and distance).
- How much they recharge by.



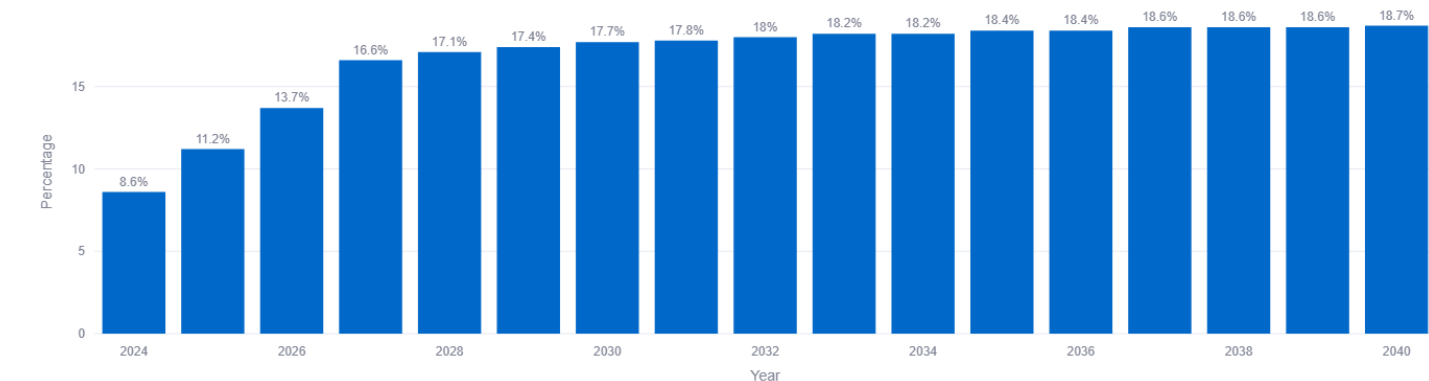
TEIDE – example site at the British Motor Museum



Daily EVs that may charge at site – no future competition



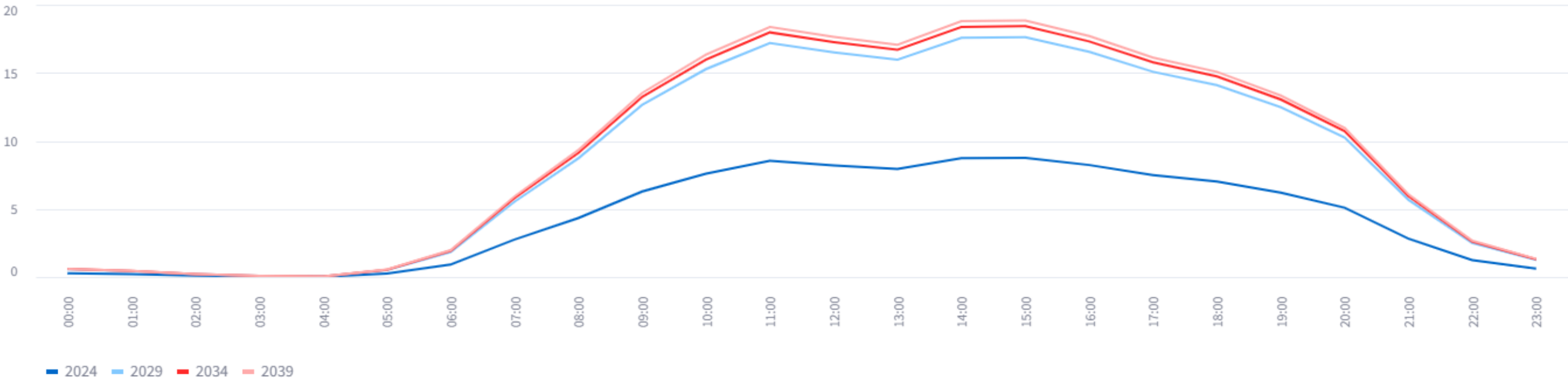
Energy based utilisation – future competition



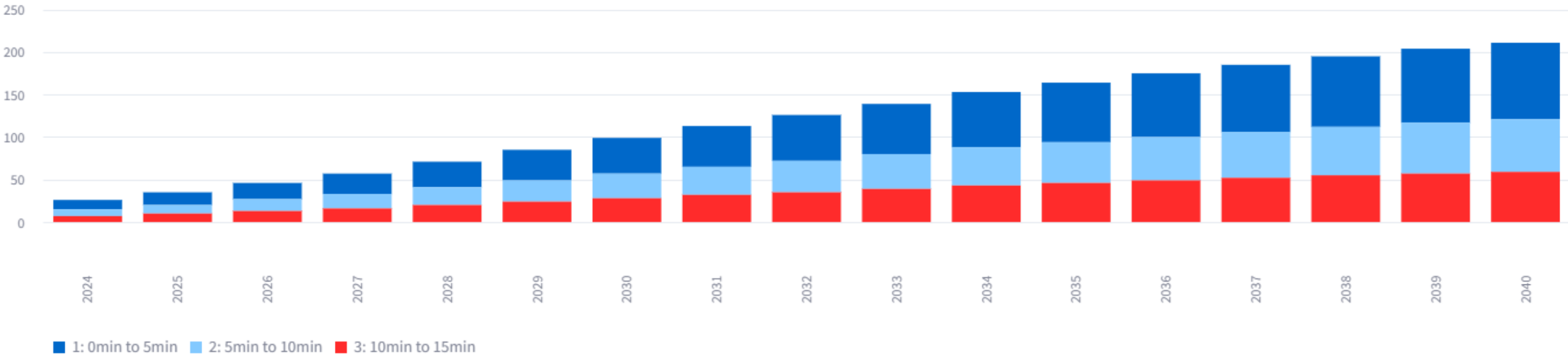


TEIDE – example site at the British Motor Museum

Chargepoint
energy profile
(kWh)



Required 50kW
Chargers in each
isochrone at 20%
utilisation





TEIDE – main advantages and limitations

Advantages

- Traffic-flow based assessment of sites
- Adjustable for EV adoption forecasts (optimistic to pessimistic)
- Applicable to passenger vehicles as well as Heavy Duty
- Easy replication to new locations (countries), and scalable for batch processing of sites

Limitations

- Validation done at a few sites, but that is not generaliseable to all locations
- Currently enabled only for UK and NL
- Does not consider grid connection, etc. factors for site feasibility study



TEIDE - Main takeaway messages

- Site selection for truck charging is challenging
- There are not a lot of e-trucks now, and these sites are expensive to install
- Utilisation is critical for a successful business case
- Some other factors are important too, but Location, Location, Location
- A site that expects high utilisation does not mean the site is feasible. But it is the necessary pre-requisite for an economically sustainable charging plaza.
- The TEIDE tool can help estimate utilisation at a given site.



Business models



Sector benchmarking

Brand & model	GVW / class	Battery capacity	Published range	Power	Charging
Volvo FL Electric	Up to 18.6 t GCW	280–565 kWh	Up to 450 km	Up to 130 kW continuous	150 kW DC
DAF XB Electric	16 / 19 t versions	210 / 282 kWh installed; 185 / 248 kWh available	Up to 350 km	190 kW	150 kW DC
Renault Trucks E-Tech D	16 t	200–565 kWh, depending on configuration	Up to 560 km	185 kW max / 130 kW continuous	Configuration-dependent
Renault Trucks E-Tech D Wide	19 / 26 t	200–375 kWh	Up to 315 km	370 kW max / 260 kW continuous	Configuration-dependent
Volta Zero	16 t	150 / 225 kWh usable	260+ km current published range	Configuration-dependent	—
IRIZAR ie truck NG	Heavy rigid; configuration-dependent	200–512 kWh NMC/LTO; 240–500 kWh LFP options	Up to 400 km	Configuration-dependent	Configuration-dependent
Volvo FE Electric	Up to 28 t GCW	280–375 kWh	Up to 275 km	Up to 225 kW continuous	150 kW DC
Mercedes-Benz eEconic	19 t 4x2 / 27 t 6x2	336 kWh installed	Up to 100–150 km, depending on duty cycle	330 kW continuous / 400 kW peak	160 kW DC





Customer willingness to have (WTH)

■■■■| McKinsey (2025) survey of 288 truck buyers in France, Germany, Italy, Poland and the UK found that:

■■■■| only about 7% would switch to zero-emission trucks if TCO were 20% higher than an ICE truck

■■■■| nearly half would switch at TCO parity

■■■■| ICCT real-world fleet research (2025) concludes that:

■■■■| early adopters may accept higher costs for pilots, but

■■■■| TCO parity is needed for deployment at scale





Costs and annual sales

Parameter	FORD	IRIZAR	DAF	JEMA MCS
Innovation cost				
Industrialisation cost				
Operational fixed cost / year				
Promotion & distribution / year				
Indicative cost / unit				
Initial target selling price				

Product	2027	2028	2029	2030	2031
FORD e-truck					
DAF e-truck					
IRIZAR refuse e-truck					
JEMA MCS					



CBA results

■■■■ The sensitivity analysis examined two boundary scenarios:

- worst-case scenario (higher initial investment and commercialisation costs and a lower selling price)
- best-case scenario (lower investment costs with a higher selling price)
- projected annual sales volumes remained unchanged in both scenarios

■■■■ Wide variation between the two scenarios

■■■■ Under the worst-case conditions, FORD, IRIZAR and JEMA generate negative net NPVs,

indicating that revenues would not fully recover the assumed investment and commercialisation costs during the five-year period.

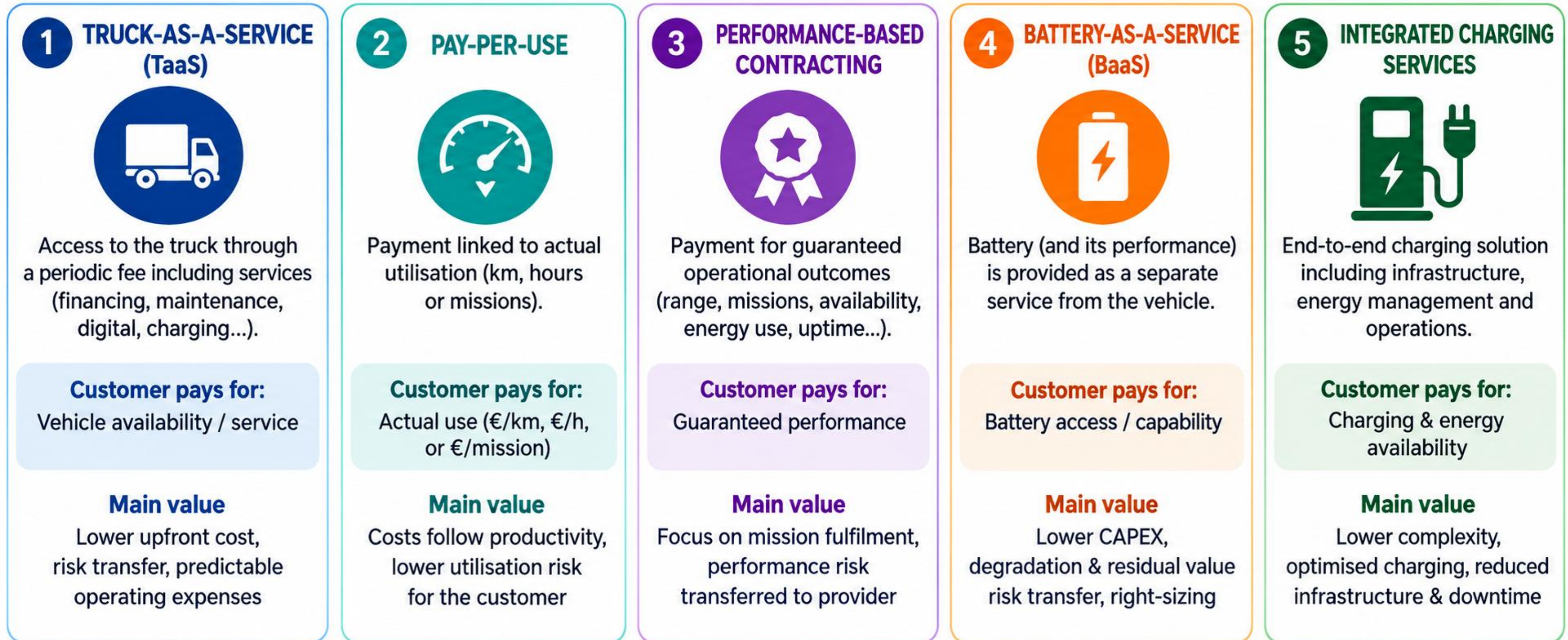
■■■■ **DAF remains economically positive**, mainly because of its higher projected sales volumes and because the NextETRUCK solution represents an improved version of an existing truck model

■■■■ Under the best-case conditions, all four solutions achieve positive net cash flows and positive NPVs

■■■■ FORD and DAF produce the strongest results due to their larger projected sales volumes, while IRIZAR and JEMA also become economically viable as sales increase over time



Costs and annual sales





Truck-as-a-Service (TaaS)

Parameter	FORD	DAF	IRIZAR
Initial target selling price			
Vehicle acquisition price used – midpoint			
Contract duration	7 years	7 years	7 years
Residual value	20% of acquisition price	20%	20%
Residual value after 7 years			
Discount / financing rate	8%	8%	8%
Base annual utilisation	50,000 km/year	50,000 km/year	50,000 km/year
Utilisation sensitivity	30k / 50k / 70k km/year	30k / 50k / 70k km/year	30k / 50k / 70k km/year
Additional operational indicator	—	—	~2 missions/day
NextETRUCK energy consumption	0.57 kWh/km	0.82 kWh/km	0.95 kWh/km
IRIZAR favourable-condition consumption	—	—	0.87 kWh/km
Electricity price – base	€0.18/kWh	€0.18/kWh	€0.18/kWh

Parameter	FORD	DAF	IRIZAR
Energy cost/km	€0.103/km	€0.148/km	€0.171/km
Annual electricity consumption	28,500 kWh	41,000 kWh	47,500 kWh
Annual electricity cost	€5,130	€7,380	€8,550
Indicative maintenance & service cost	€5,000/year	€5,000/year	€7,000/year
Annualised vehicle acquisition cost			
Base annual provider cost	~€40,800/year	~€51,800/year	~€59,300/year
Indicative annual TaaS fee	€43–47k/year	€54–60k/year	€62–68k/year
Monthly equivalent	€3.6–3.9k	€4.5–5.0k	€5.2–5.7k



Pay-per-Use (PPU)

Parameter	FORD	DAF	IRIZAR
Indicative annualised vehicle cost			
Total indicative annual provider cost	~€40,800/year	~€50,400/year	~€57,600/year
Provider break-even PPU fee	~€0.82/km	~€1.01/km	~€1.15/km equivalent
Indicative commercial PPU fee	€0.9–1.00/km	€1.10–1.20/km	€1.25–1.40/km equivalent
Indicative annual customer payment at 50,000 km	€45–50k	€55–60k	€62.5–70k equivalent





Battery-as-a-Service (BaaS)

Parameter	Each vehicle
Assumed battery value	€55,000
Assumed cost recovery period	8 years
Annualised battery cost (provider cost)	€6,875/year
Indicative commercial BaaS fee	€7,560–8,250/year
Equivalent monthly fee	€630–690/month
Equivalent cost at 50,000 km/year	€0.15–0.17/km



Note:

- ❑ The estimated €55,000 battery value is based on market values for 200-300kW/h batteries
- ❑ The commercial fee applies an approximate 10–20% mark-up to the annual provider cost
- ❑ Electricity and the vehicle excluding its battery are outside this BaaS fee



Adoption potential and viability factors

■■■■ These models could support market adoption by reducing:

- customers' initial investment
- linking payments to vehicle use or performance
- sharing battery, residual-value and infrastructure risks between customers and providers

■■■■ Their viability will depend mainly on

- utilisation
- service pricing
- operational reliability
- customer willingness to adopt alternatives to conventional ownership



Total cost of ownership



Total Cost of Ownership: Framework

TCO compared to ICEV baseline (powertrain cost & fuel efficiency) and BEV baseline (design changes & energy efficiency).

Vehicle-to-vehicle savings

- ICEV vs BEV baseline vs NextETRUCK
- OEM and Use-Case specific costs
- Identical mission between baseline & NextETRUCK

Fleet level

- Averaged NextETRUCK model & mission
- Vehicles + chargers + software improvements

EU impact

- Averaged NextETRUCK model & mission
- High-level annualised savings assuming NextETRUCKs replace older vehicles
- Considers material and fuel cost changes over time



Total Cost of Ownership: Scope

In scope

- Vehicle:
 - Material/component costs
 - Innovation costs and impacts
 - Manufacture to retail markup
 - Fuel costs
 - Subsidies & tax
- Charger:
 - Retail cost
 - Innovation costs and impacts

Partial (high-level)

- Operational/fleet composition efficiencies (project software)
- Historic component cost changes

Not in scope

- Financing options (lease vs purchase)
- Labour/other costs assumed constant per use case



Vehicle-level TCO

UC1 Türkiye

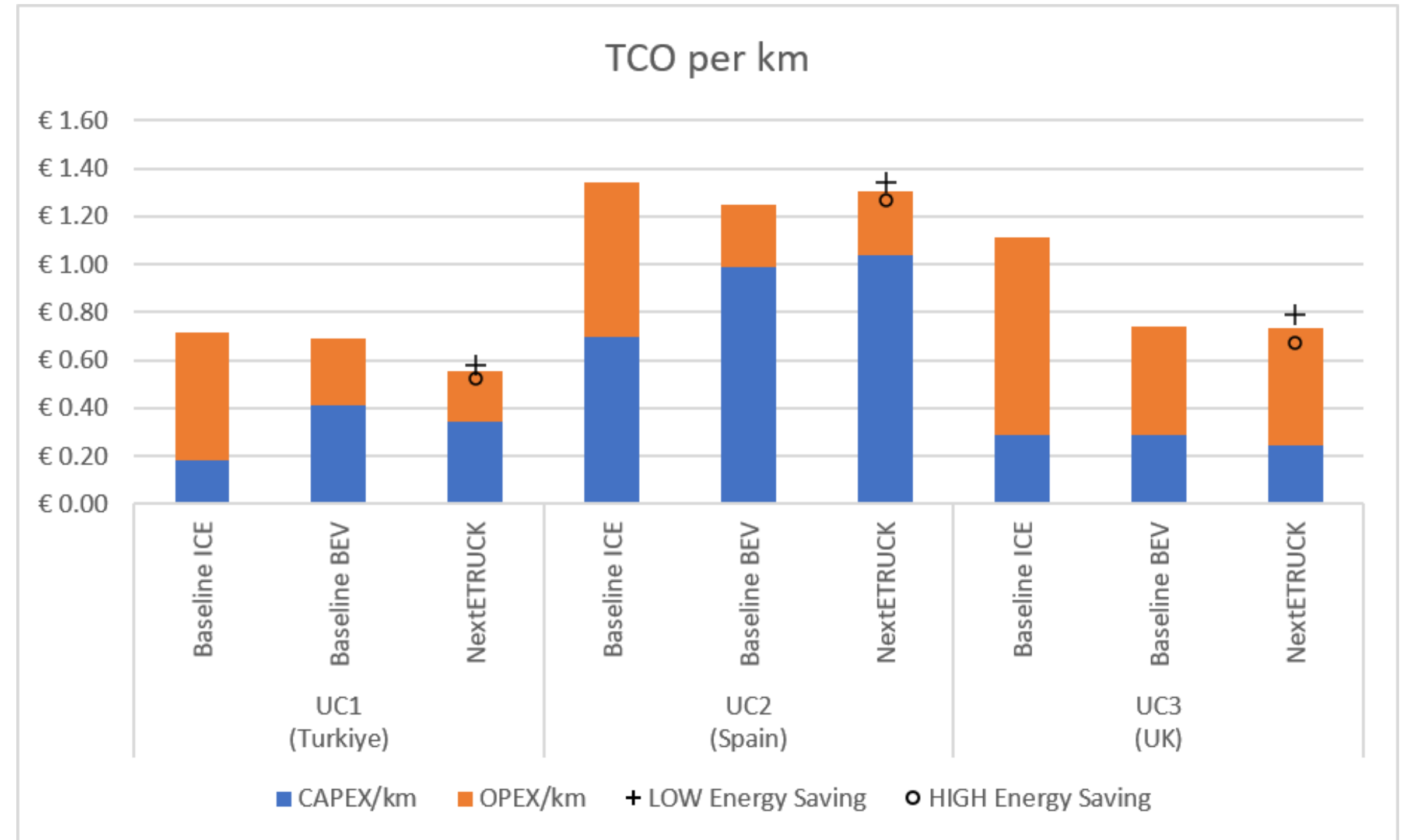
- Larger impact from capital costs
- Glider size change between baseline and NextETRUCK: cost reduction

UC2 Spain

- Highest vehicle cost (specialised body)
- BEV-NextETRUCK increases battery size: higher cost but higher range
- Lowest annual km (urban waste collection)

UC3 UK

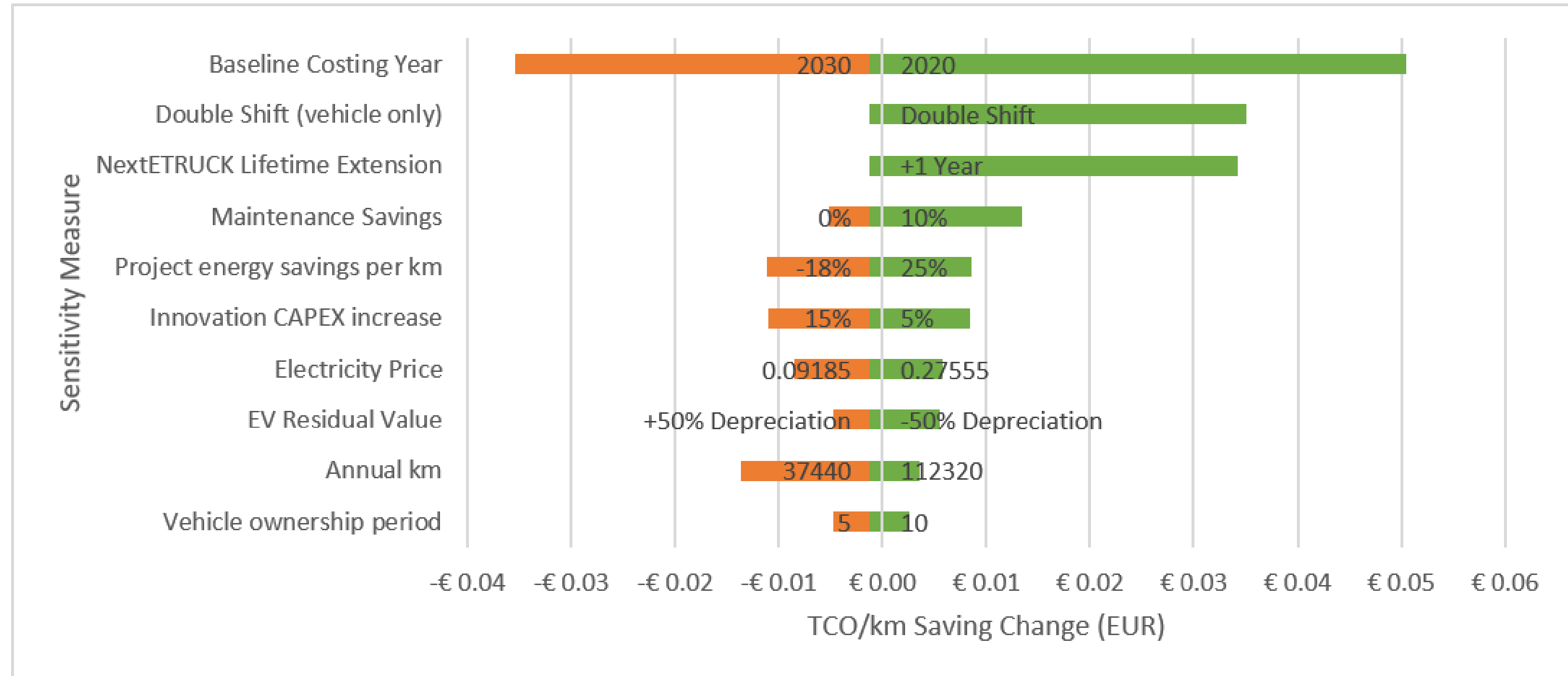
- Available subsidy: lower capital cost impact
- Highest unit fuel/electricity costs: higher impact from operations & energy saving



*BEV Baseline CAPEX based on start-of-project purchase price provided by OEMs



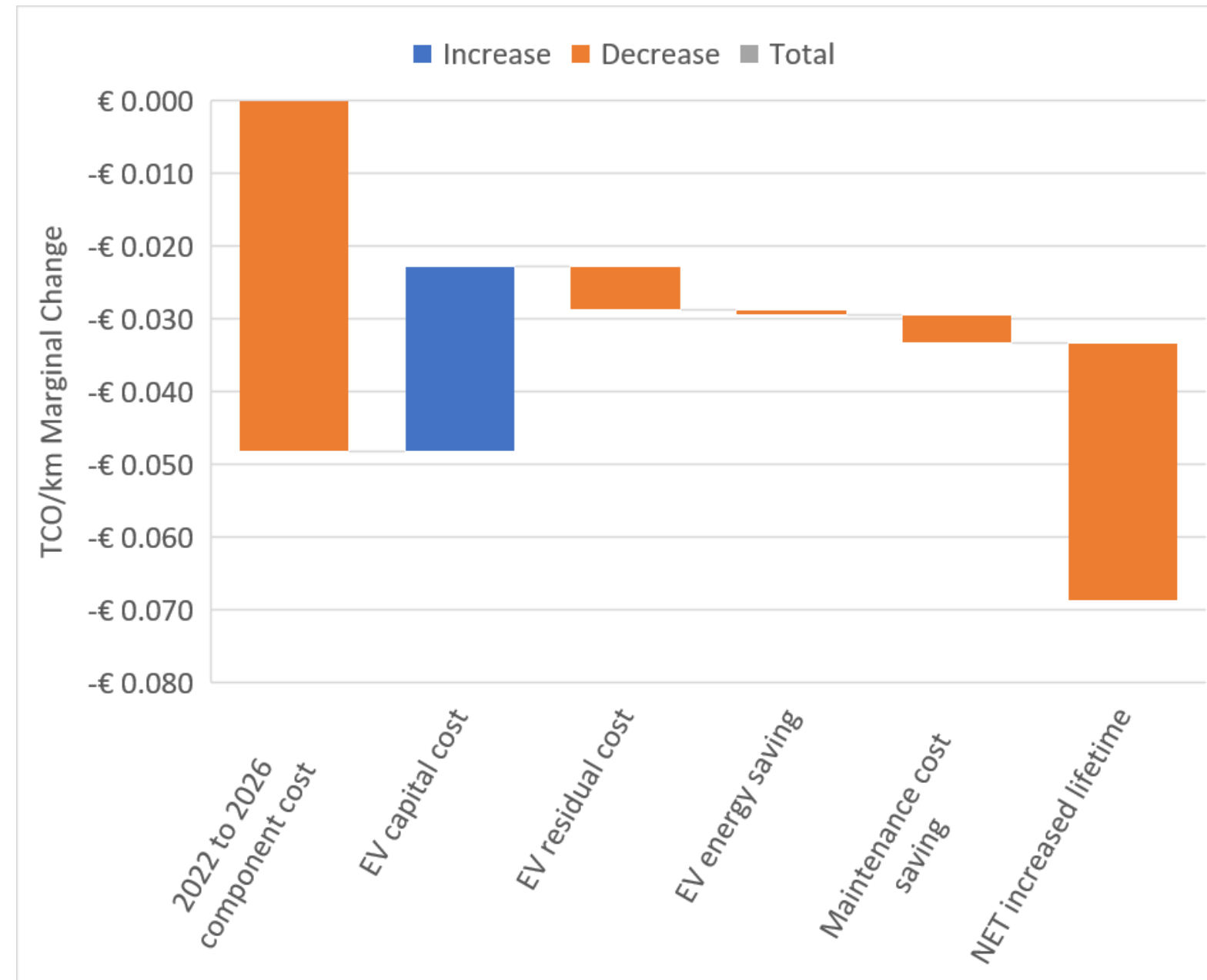
TCO Saving Sensitivity Analysis





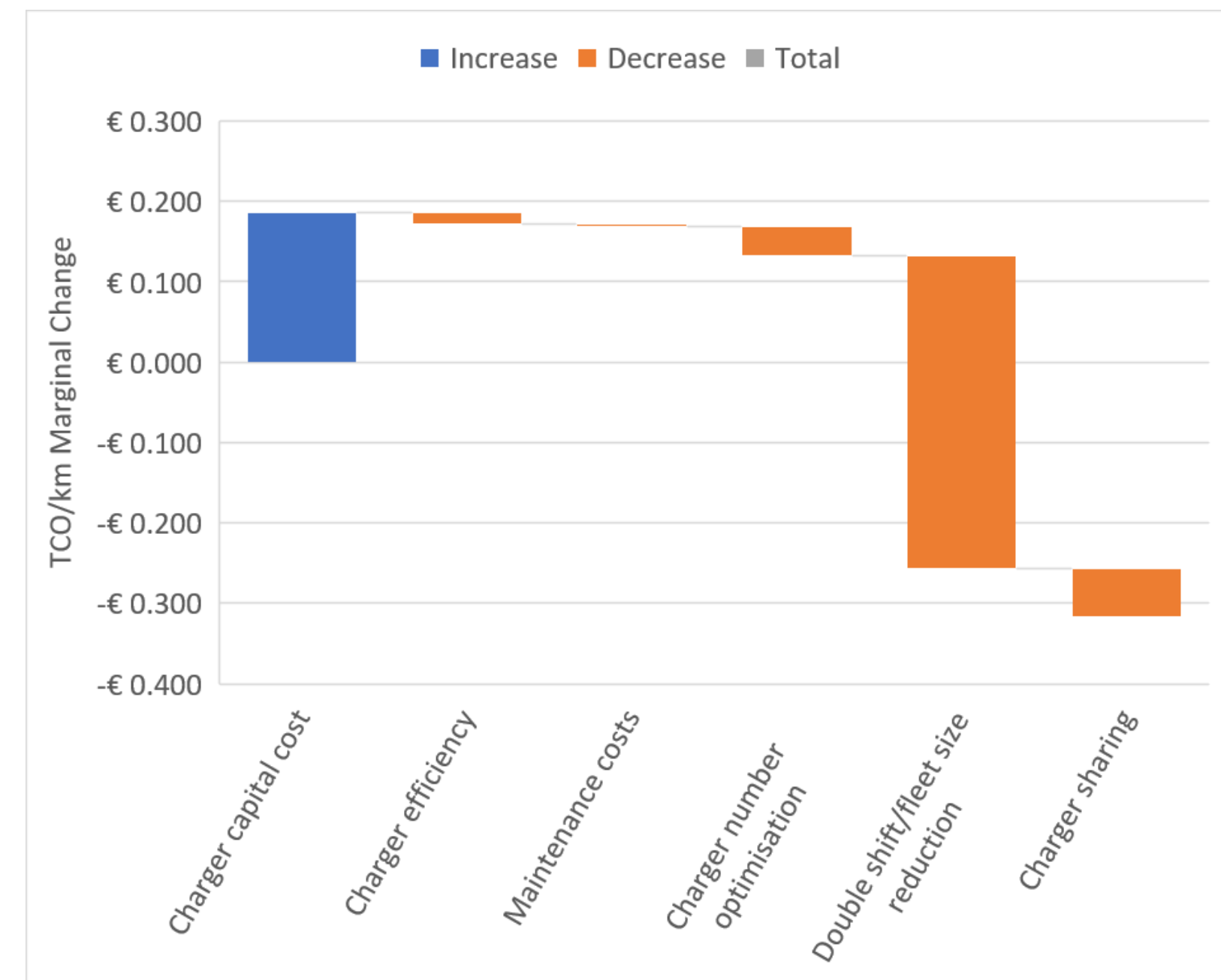
Fleet-level TCO: 20-vehicle fleet savings breakdown

Vehicle/Fleet Cost Changes:



- High impact from component costs and potential lifetime increase from management software

Charger/Software Cost Changes:



- Charger power upgrade increases capital costs, but potentially allows double shift operation to reduce overall fleet size



EU Impact

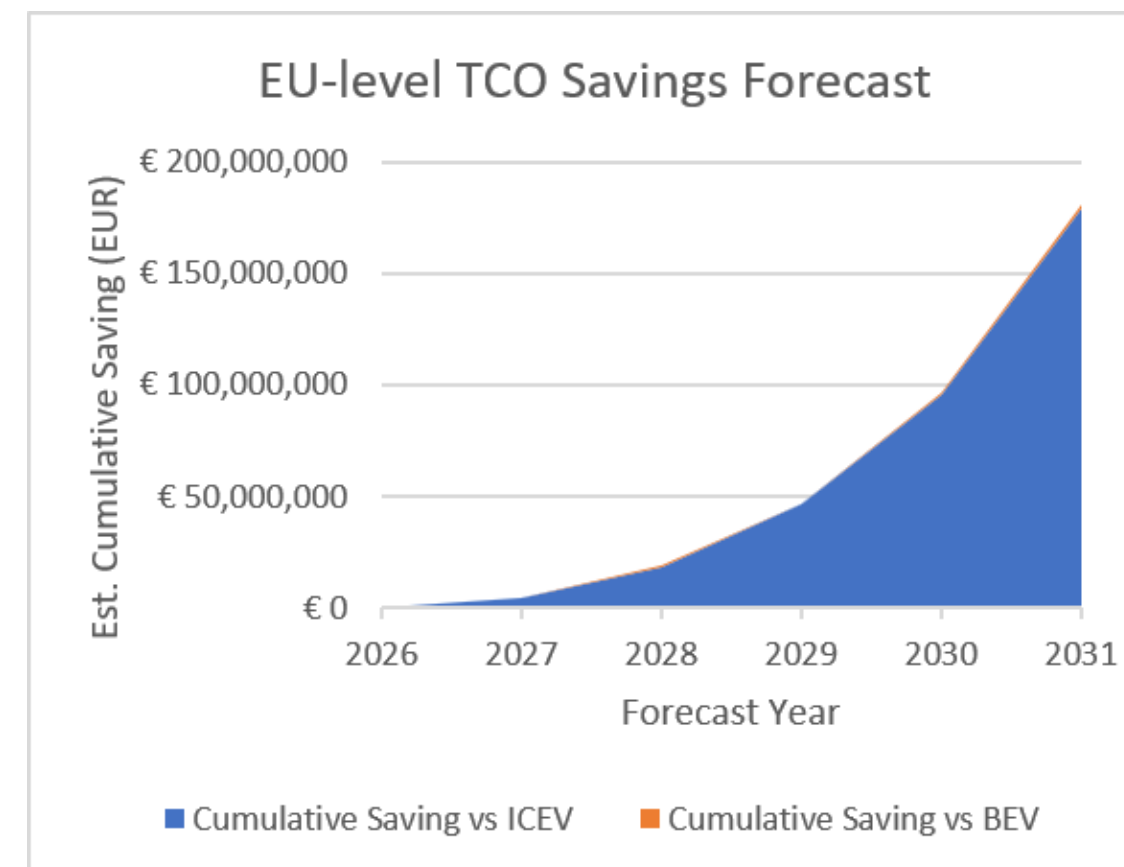
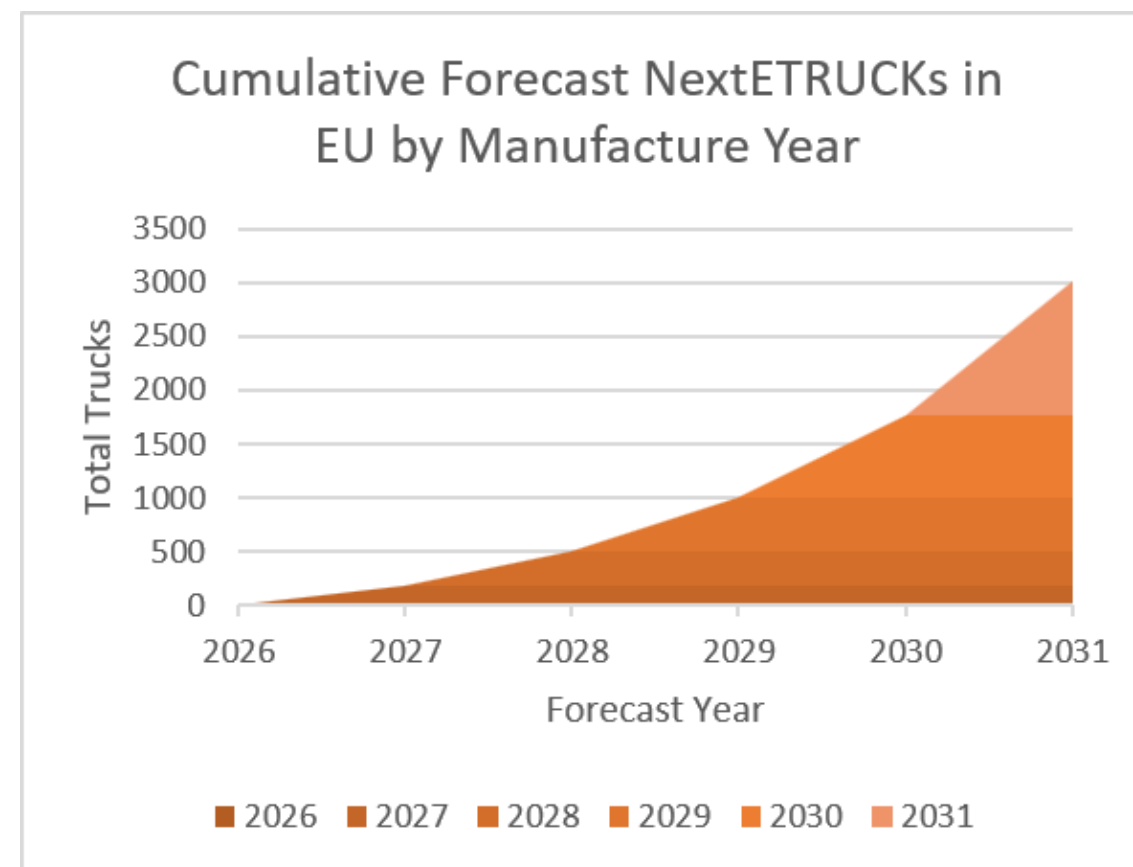
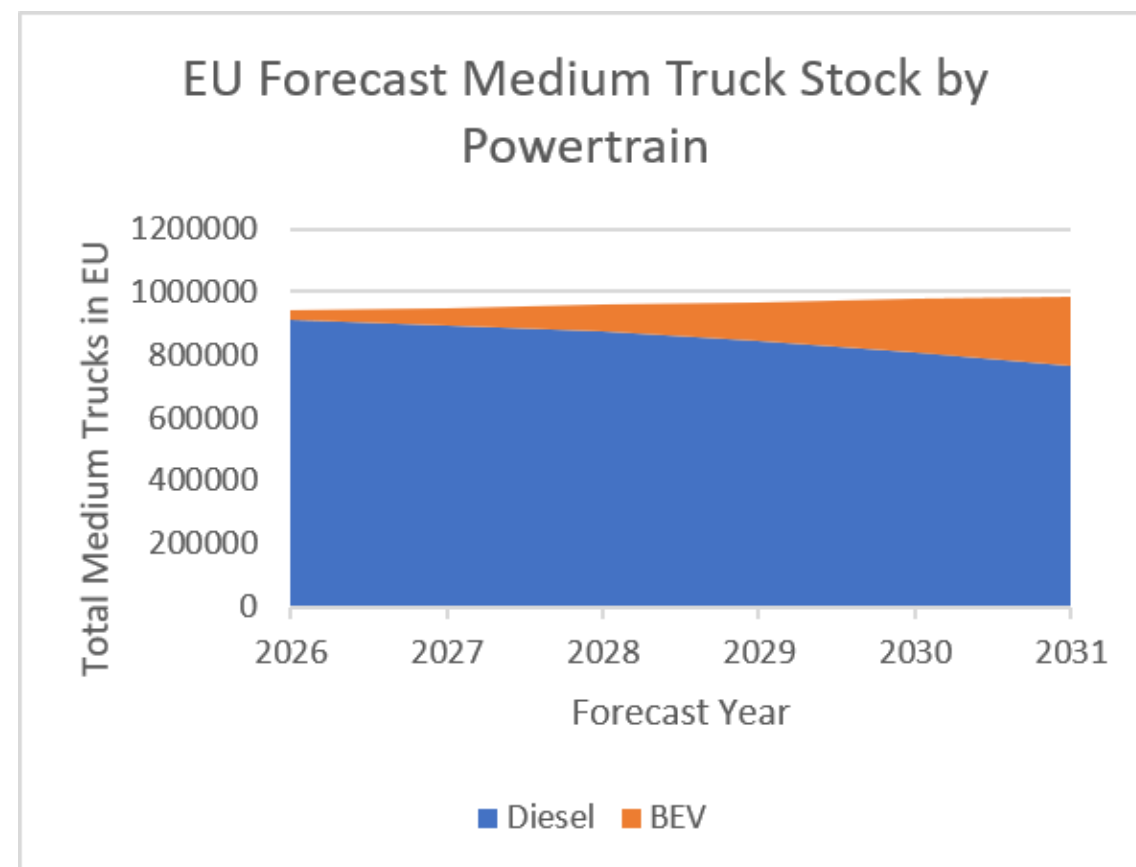
Forecast BEV Uptake



OEM NextETRUCK Forecast



Replace Proportionately



- Expected over 3000 NextETRUCK cumulative sales by 2031 from OEM forecasts
- Margin against ICEV expected to increase over time from fuel price increases etc.
- Potential cumulative savings over € 180m in 5-year period 2027-2031



TCO: Key Takeaways

- All 3 NextETRUCK demonstrator vehicles estimate a positive TCO against ICEV baseline
- Vehicle-to-vehicle savings vs BEV baseline are dependent on:
 - Use case (annual km, driving mission type etc)
 - Truck specifications
 - Local costs (electricity rates, infrastructure etc)
- TCO impact across the EU scales with NextETRUCK forecast sales and ICEV replacement
- Depending on application, potential for significant additional savings through operational efficiencies and fleet composition change



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