

Arc by Element™

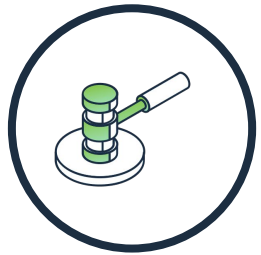
How to Approach Life Cycle Costs of EVs
Compared to Other Fuels

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Element Fleet Management

May 2023



Key EV Macro Trends Impacting Fleet Electrification



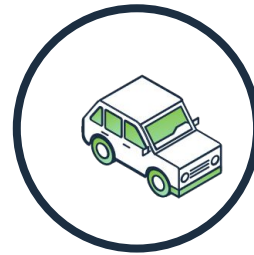
Legislation



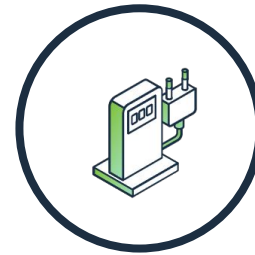
Battery Costs



**Vehicle
Connectivity
& Data**



Availability



**Charging
Infrastructure**






**Corporate
Fleet
Sustainability**

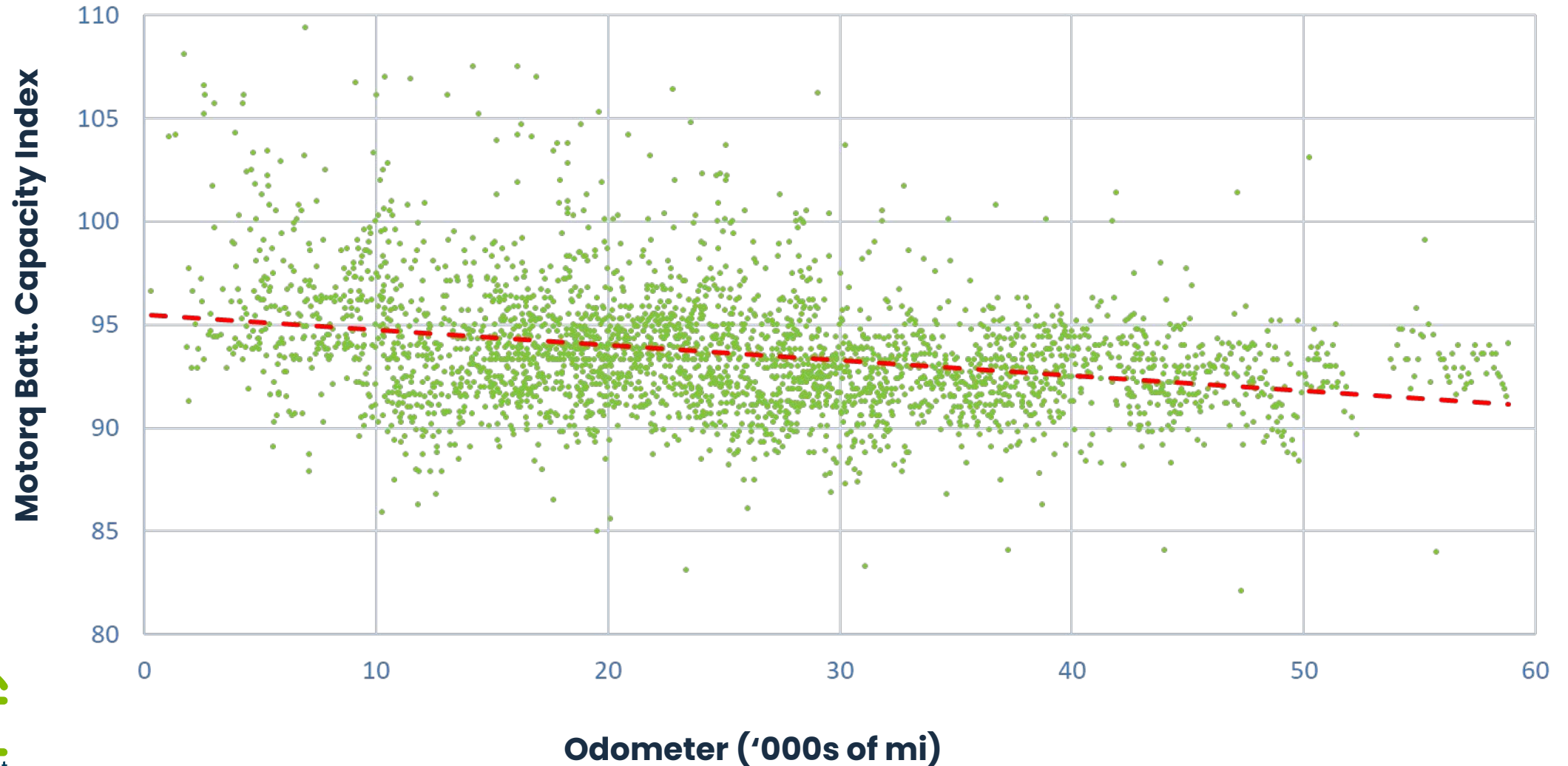
BCG expects 47% of all light vehicles sold globally will be fully electric or hybrids in 2025.

Lifecycle cost analysis: EV vs ICE

- **Initial costs:** BEVs are still higher than equivalent ICE vehicles
- **Maintenance costs:** 30% less
- **Energy “Fuel” costs:** 30-70% less
- **Remarketing value:** TBD (assumed to be similar to ICE equivalents)
- **TCO parity:** At or better in some cases

element				2023 Ford F-150 4x4 SuperCrew Cab 5.5' box 145" WB Raptor			2023 Ford F-150 Lightning Lariat 98kW Electric AWD 1500 Crew			2022 Rivian R1T Launch Edition 135kW Electric AWD Midsize Crew			
ASSUMPTIONS													
Financial	Interest Rate	XXX%		SPECIFICATIONS			SPECIFICATIONS			SPECIFICATIONS			
	Management Fee	XXX%		3.5L 6 Cyl. w/10 Speed Automatic			38kW Electric Motor w/1 Speed Automatic			135kW Electric Motor w/1 Speed Automatic			
	Amortization Mont	42		3.5L V6 EcoBoost High Output			Dual eMotor - Standard Battery			Motors: Rivian Quad-Motor Drive			
	Rental Tax	XXX%		Average Lease Payment	\$2,304			\$2,538			\$2,567		
	Monthly Insurance	\$0.00		Acquisition Cost	\$80,978			\$91,306			\$90,229		
	Monthly Program	\$0.00		Estimated Resale	\$30,400			\$28,300			\$30,300		
Replacement Polic	72 mo / 120,000 mi (1667 mi/mo)			FIXED EXPENSES			MONTH			MONTH			
Replacement Cycle	72 mo / 120,000 mi			Effective/Real Depreciation	\$702	\$50,578	\$0.4215	\$875	\$63,006	\$0.5251	\$824	\$53,329	\$0.4944
Fuel/Electric Cost	Regular	\$3.330		Interest	\$137	\$9,831	\$0.0819	\$154	\$11,085	\$0.0924	\$152	\$10,954	\$0.0913
	Premium	\$4.080		Management Fee	\$40	\$2,860	\$0.0238	\$42	\$3,034	\$0.0253	\$42	\$3,016	\$0.0251
	Diesel	\$3.800		Taxes	\$44	\$3,163	\$0.0264	\$54	\$3,856	\$0.0321	\$51	\$3,665	\$0.0305
	Electricity	\$0.143		Personal Use Charge	\$0	\$0	\$0.0000	\$0	\$0	\$0.0000	\$0	\$0	\$0.0000
Electric Usage	Level 2: 240V 40A	100%		Adjustment	\$0	\$0	\$0.0000	\$0	\$0	\$0.0000	\$0	\$0	\$0.0000
Driving Use	Highway	45%		TOTAL FIXED EXPENSES	\$923	\$66,432	\$0.5536	\$1,125	\$80,381	\$0.6743	\$1,063	\$76,364	\$0.6413
	City	55%		OPERATING EXPENSES			MONTH			MONTH			
VEHICLE INFORMATION				Fuel / Electricity	\$211	\$15,188	\$0.1266	\$75	\$5,392	\$0.0449	\$79	\$5,687	\$0.0474
Engine/Transmission				Preventative Maintenance	\$13	\$911	\$0.0076	\$3	\$183	\$0.0015	\$3	\$192	\$0.0016
Engine Option				Repairs	\$37	\$2,660	\$0.0222	\$19	\$1,334	\$0.0111	\$18	\$1,314	\$0.0109
Average Lease Payment				Tires	\$30	\$2,172	\$0.0181	\$42	\$3,008	\$0.0251	\$39	\$4,273	\$0.0356
Acquisition Cost				TOTAL OPERATING EXPENSES	\$291	\$20,931	\$0.1745	\$139	\$9,917	\$0.0826	\$159	\$11,466	\$0.0955
Estimated Resale				COMBINED EXPENSES			MONTH			MONTH			
				Total Fixed & Operating	\$1,214	\$87,363	\$0.7281	\$1,264	\$90,898	\$0.7575	\$1,228	\$88,430	\$0.7368

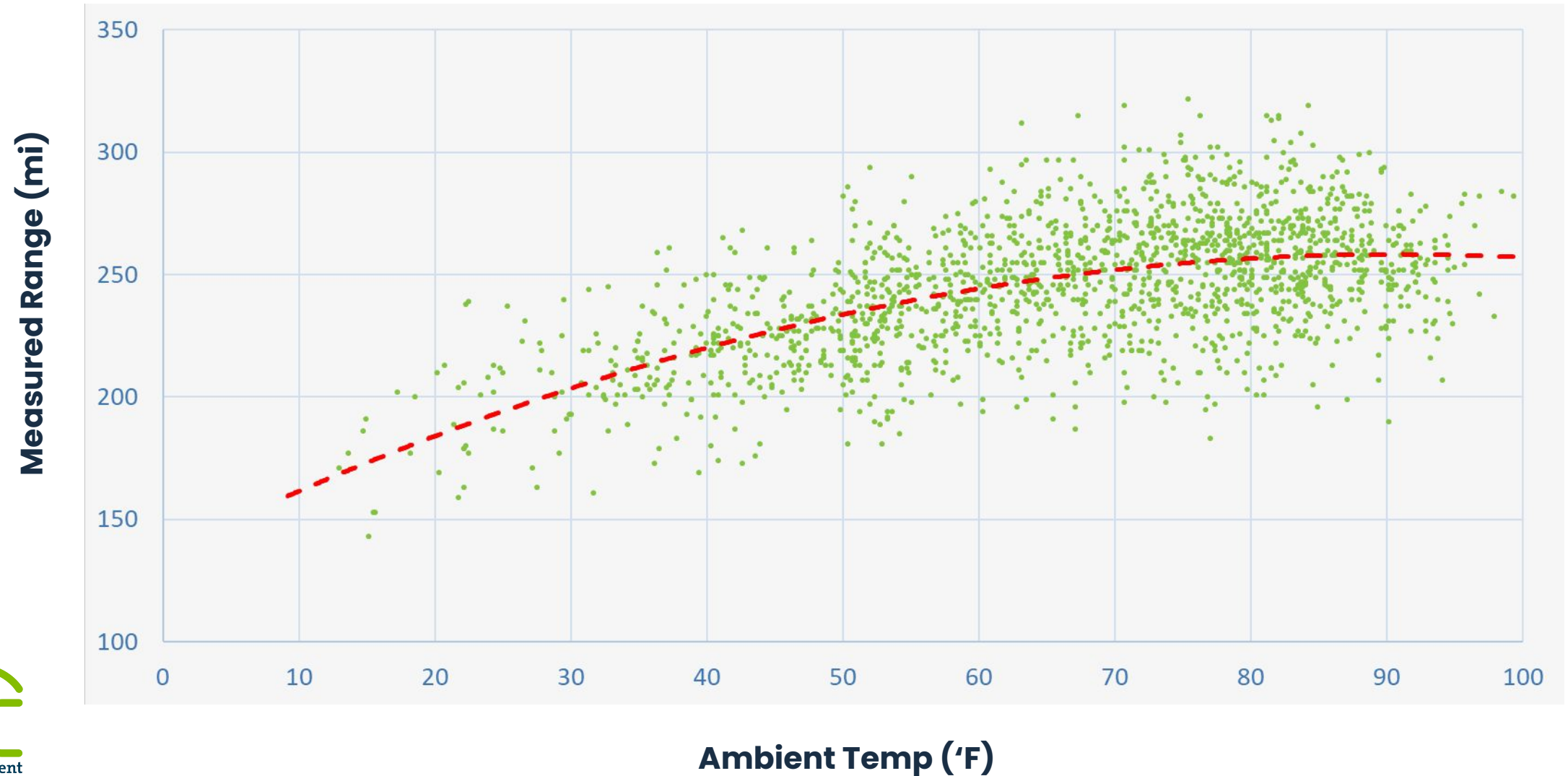
Residual: Battery Capacity vs Vehicle Odometer



3 Pillars of EV adoption for fleets

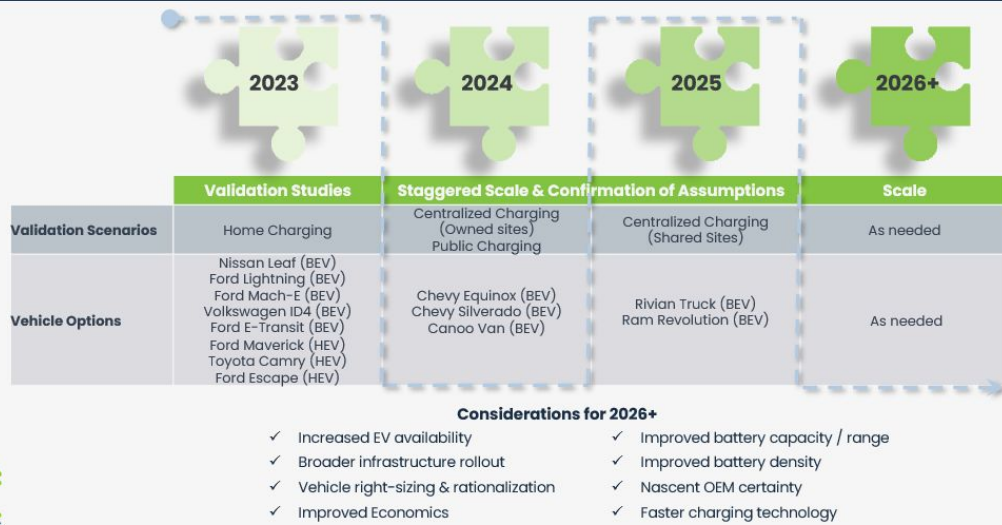
	Drivers	Vehicles	Charging Solutions
Selection & Planning	<ul style="list-style-type: none">• Willingness/interest• Route/range feasibility• Charging solution feasibility	<ul style="list-style-type: none">• Capital cost analysis• Use-case definition• Range constraints<ul style="list-style-type: none">• Driving style, weather, loading• Acquisition constraints• Services availability	<ul style="list-style-type: none">• Scenarios<ul style="list-style-type: none">• Home• Depot (many options)• Public (DCFC coverage)• Factors<ul style="list-style-type: none">• Cost• Feasibility/availability• Installation timeline
Coordinate vehicle delivery and charging solution availability			
Implementation & Operations	<ul style="list-style-type: none">• Training• Energy reimbursement• Costs sharing• Driver turnover• Exception management• Feedback capture• Ongoing policy updates	<ul style="list-style-type: none">• Performance monitoring• Data capture and management• Maintenance policy	<ul style="list-style-type: none">• Performance monitoring• Energy reporting• O&M• Vendor support/accountability

Operations: Realized Range vs Temperature



Sustainability roadmap: Pilot to scale

Example pilot roadmap



Sustainability Roadmap & Electrification Enablement



Validate

1. Vehicle performance
2. Charging solutions
3. Driver policy

Demonstrate

1. Feasible transition timeline
2. Multi-measure approach
3. Target achievement



Questions?

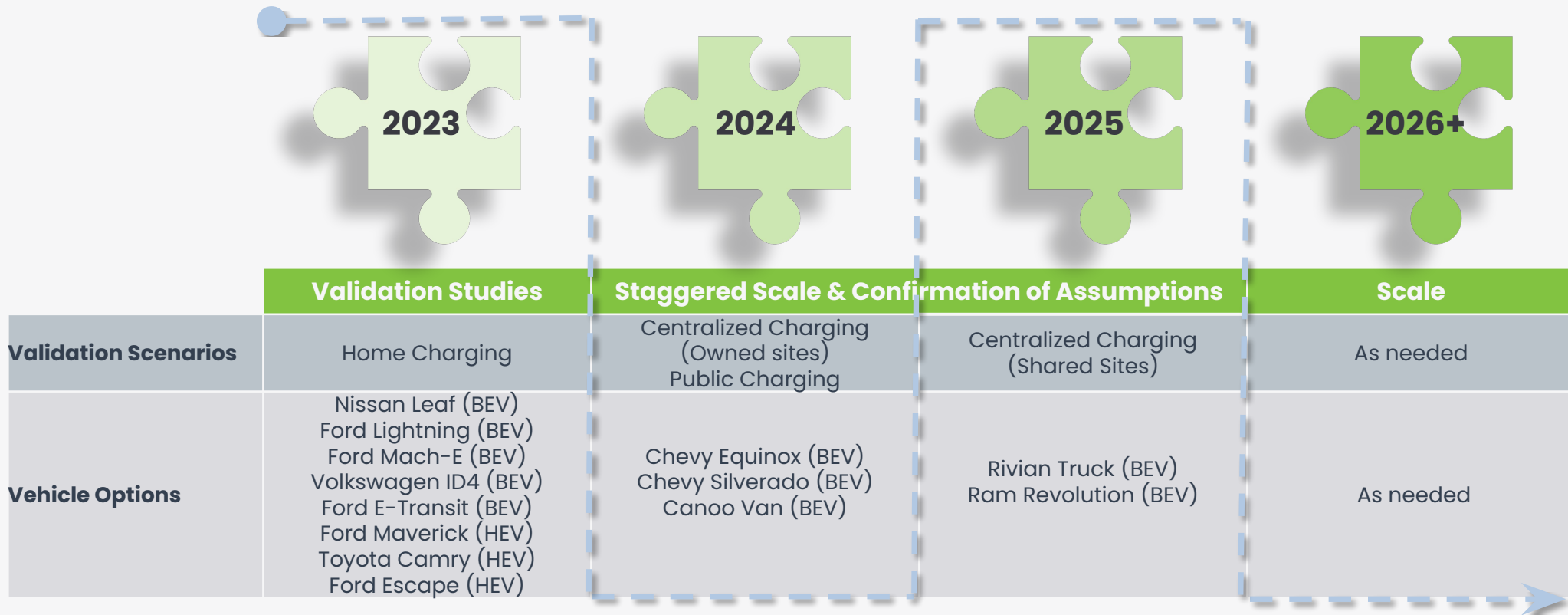
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Appendix

Example pilot roadmap



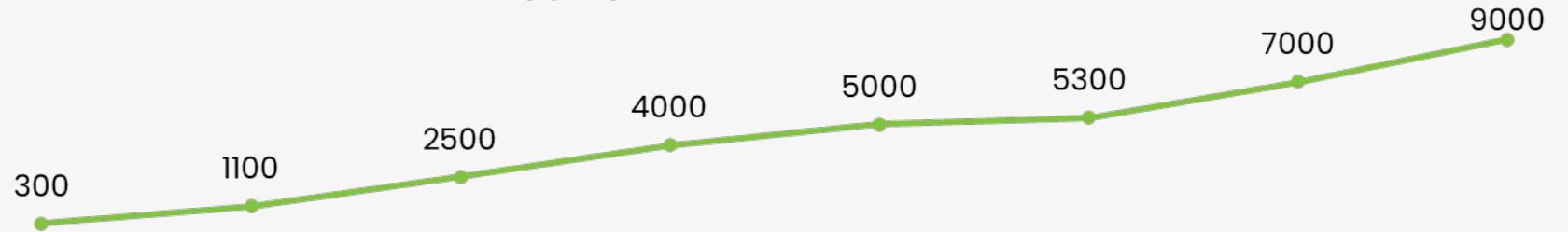
Considerations for 2026+

- ✓ Increased EV availability
- ✓ Broader infrastructure rollout
- ✓ Vehicle right-sizing & rationalization
- ✓ Improved Economics
- ✓ Improved battery capacity / range
- ✓ Improved battery density
- ✓ Nascent OEM certainty
- ✓ Faster charging technology

Sustainability Roadmap & Electrification Enablement

Adding sustainable vehicles to the fleet each year to reduce overall emissions to meet goal

Total Aggregate Sustainable Vehicles



	2023	2024	2025	2026	2027	2028	2029	2030
BEV Quantity (YoY)	150	477	453	729	586	353	1520	1829
HEV Quantity (YoY)	150	297	942	668	318	94	343	165
Total Aggregate BEV & HEV's	300	1100	2500	4000	5000	5300	7000	9000
% BEV Cumulative	1%	5%	15%	20%	27%	30%	40%	60%
% HEV Cumulative	2%	5%	15%	18%	22%	26%	27%	32%
% ICE Cumulative	97%	90%	70%	62%	51%	44%	33%	8%
GHG reduction (qty)	4,000	10,000	20,000	35,000	45,000	50,000	70,000	100,000
GHG reduction (%)	4%	10%	15%	20%	25%	30%	45%	70%