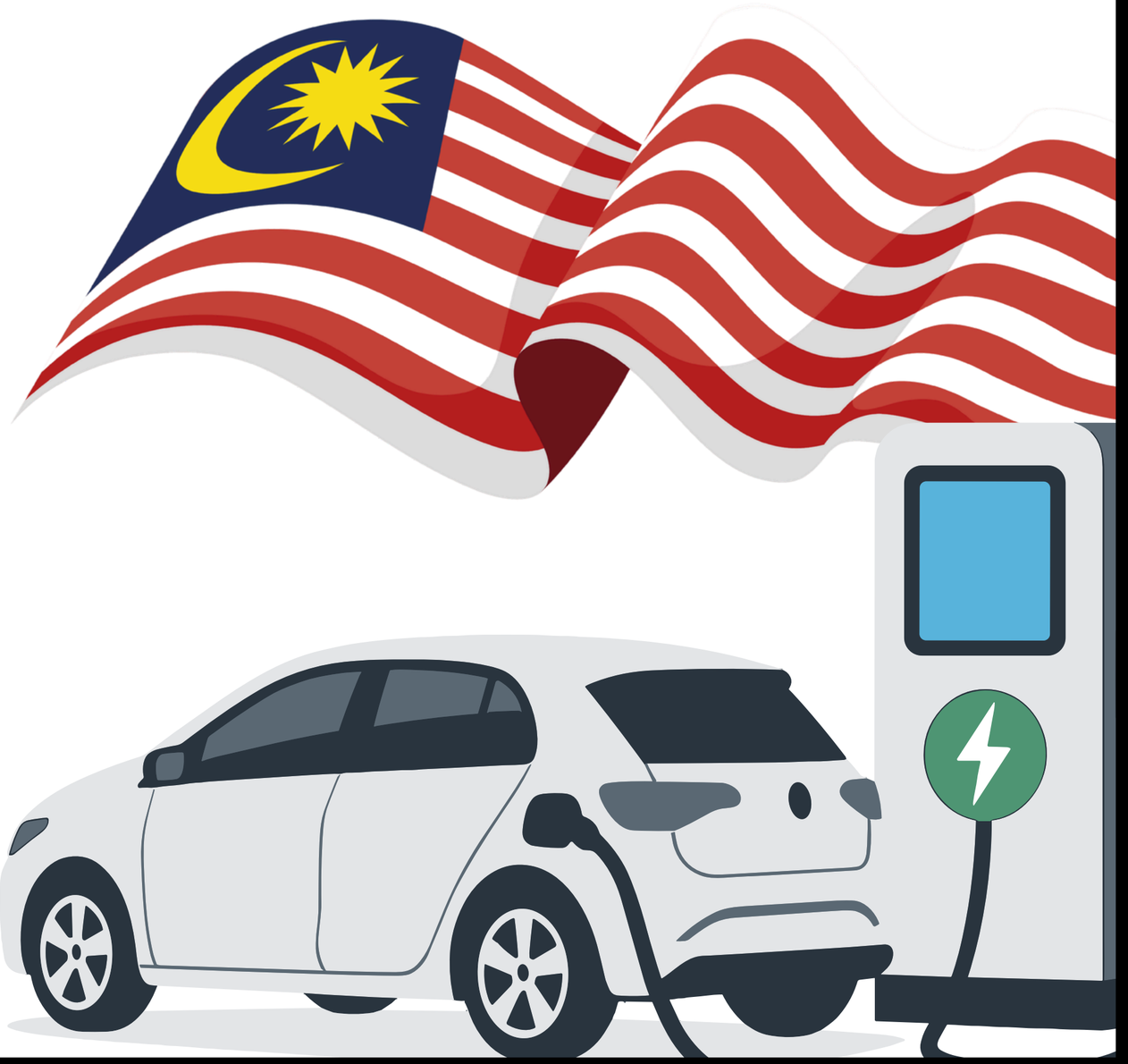
2026 SNAPSHOT OF MALAYSIA EV ADOPTION & USED MARKET



WHAT'S INSIDE:

1. Current State of EV
2. EV Policy Trends
3. Adoption Trajectory
4. Barriers to Adoption
5. EV Outlook

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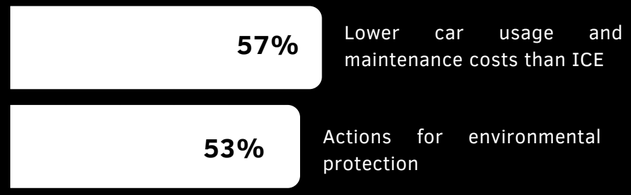
01 CURRENT STATE OF EV IN MALAYSIA

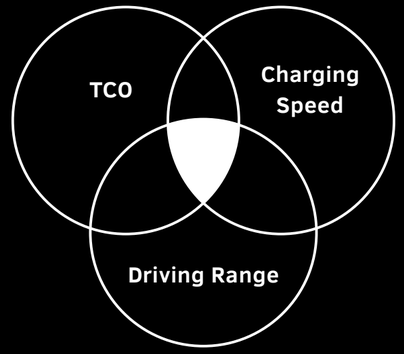
As Malaysia advances toward its net-zero carbon emissions target by 2050, sustainability has shifted from being a long-term aspiration to a national strategic priority. The transportation sector, which represents one of the largest sources of carbon emissions, has therefore become a critical area for decarbonisation efforts.

WHAT WERE THE KEY REASONS THAT INFLUENCED MALAYSIAN TO BUY OR LEASE EV?



Source: (Potloc, Roland Berger EV Charging Index survey 2025)

With improvements across the three core technology pillars that define EV competitiveness: driving range, charging speed and total cost of ownership (TCO), adoption for EV is poised to pick up.



1 Total Cost of Ownership

Between 2020 and 2025, Malaysia's electric vehicle total cost of ownership shifted from a prohibitive luxury premium to near-parity with traditional vehicles. High initial acquisition costs and penalising taxes in 2020 were significantly reduced by Budget 2022 duty exemptions. By 2025, the entry of national models lowered purchase prices to RM 56,800. Maintenance costs decreased by 50%, making electric vehicles a more financially sound investment than petrol alternatives. Source: (iMoney.my, World Scientific Publishing 2024; Motorist Malaysia, 2026)

2 Charging Speed

Between 2020 and 2025, Malaysian EV charging transitioned from slow AC units to ultra-fast DC hubs. In 2020, limited 50 kW DC stations made recharging a multi-hour ordeal for most owners. By 2025, the 350 kW benchmark reduced charge times to a 15–20 minute "coffee break" convenience. Centralised highway hubs now support multiple vehicles simultaneously, prioritising charging speed over quantity to enable seamless, long-distance national travel across the country. Source: (Potloc, Roland Berger EV Charing Index survey 2025)

3 Driving Range

Between 2020 and 2025, Malaysian EV driving ranges evolved from restrictive urban limits to robust national coverage. In 2020, ranges averaged just 230–270 km, making inter-city travel a "range anxiety" ordeal. By 2025, leaps in battery chemistry and aerodynamics pushed benchmarks to 500–700+ km. Enhanced thermal management also minimised the performance penalty of Malaysia's tropical climate, allowing EV to finally match the utility of high-efficiency diesel engines. Source: (MIDA, 2024 ;Ken Research , 2025)

Since 2020, EV are now:

These changes should be used as a benchmark not an accurate representation

62% **Cheaper** *price*

Comparing Nissan Leaf (primary benchmark for EV in 2020) vs Proton e.Mas 5

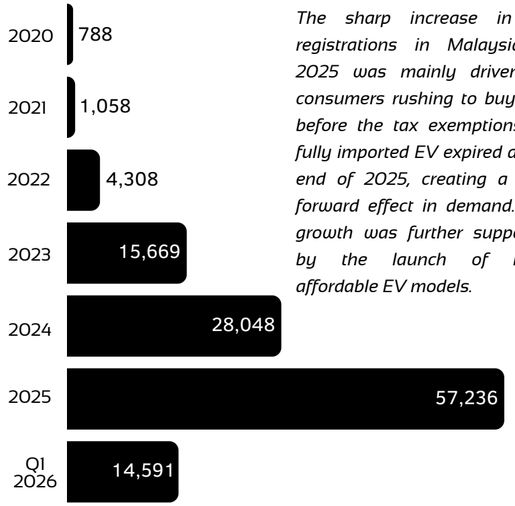
58% **Faster** *charging*

Comparing Nissan Leaf (primary benchmark for EV in 2020) vs Kia EV6 and Hyundai Ioniq 5

159% **Longer** *driving range*

Comparing Nissan Leaf standard range in 2020 against Volvo EX90(and the Mercedes-Benz EQS SUV

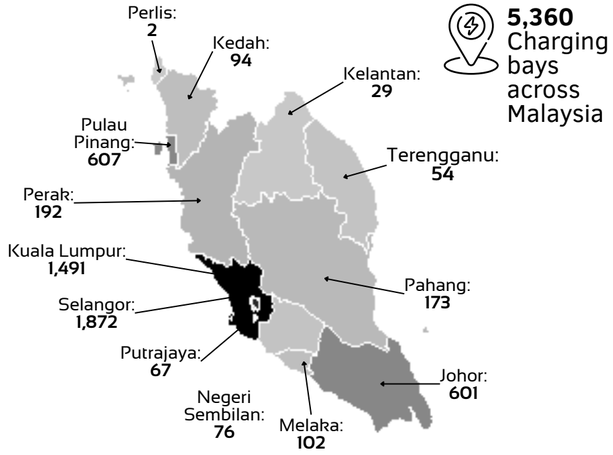
EV REGISTRATION



The sharp increase in EV registrations in Malaysia in 2025 was mainly driven by consumers rushing to buy EVs before the tax exemptions for fully imported EV expired at the end of 2025, creating a pull-forward effect in demand. The growth was further supported by the launch of more affordable EV models.

Source: (data.gov.my, 2026)

EV CHARGING BAYS



Data as of Nov 2025, charging bays include AC Bay and DC Bay

Source: (Energy Commission's (ST), 2025)

BEST-SELLING EV

MARCH 2026

Proton e.Mas 5: **2,071 units**

BYD Atto 3: **441 units**

Proton e.Mas 7: **306 units**

FEBRUARY 2026

Proton e.Mas 5: **1,562 units**

Proton e.Mas 7: **240 units**

Chery iCAR V23 **179 units**

JAN - DEC 2025

Proton e.Mas 7: **8,693 units**

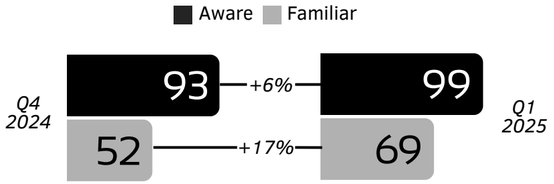
BYD Sealion **4,473 units**

Tesla Model Y: **4,412 units**

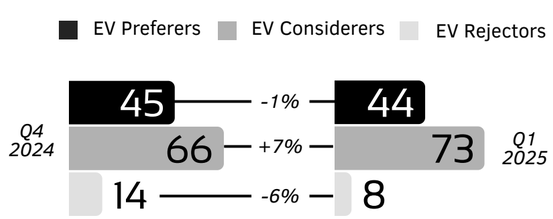
Source: (data.gov.my 2025; MyZeva 2025, 2026)

SENTIMENT CHANGE

AWARENESS & FAMILIARITY TOWARDS EV (%)



ATTITUDES TOWARDS EV ADOPTION (%)



Source: (Oppotus, 2025)

02 POLICY AND REGULATORY TRENDS

Policy and regulatory support plays a critical role in accelerating the transition to electric vehicles in Malaysia because the ecosystem faces a classic "chicken-and-egg" problem. Without sufficient EV adoption, investment in charging infrastructure and manufacturing remains limited, yet without these enablers consumers are less willing to adopt EV.

POLICY TYPE

- **Announced Targets:** announced government targets, for example those incorporated into legislation, budgetary commitments, national climate plans, or electric vehicle strategies.
- **Legislation:** legally binding commitments such as regulations and standards.
- **Objective**: government goals or objectives as set out in a policy document such as a deployment roadmap or strategy, sometimes without specific quantitative targets.

POLICY CATEGORY

- **Taxation:** policies affecting duties, incentives, or tax exemptions.
- **Manufacturing:** policies related to EV production or component supply chains.
- **Vehicle Segment:** policies targeting specific vehicle types (LDV, buses, motorcycles, trucks).
- **Infrastructure:** charging network and EV supply equipment.

# POLICY TYPE	Announced Target	Legislation	Objective	# CATEGORY	Taxation	Manufacturing	Vehicle Segment	Infrastructure
	6	3	1		3	2	3	1
	0	4	3		3	0	4	1
	1	2	4		1	1	5	1
	0	4	6		2	2	4	1
	1	1	2		0	1	3	1
	0	3	3		2	1	5	0

EV POLICY TIMELINE IN MALAYSIA

February 2020
National Automotive Policy 2020
Introduced the foundation for EV by prioritising next-generation vehicles, technology, and local supply chain development.

Mid-2021
Low Carbon Mobility Blueprint (2021–2030)
Set national EV adoption and infrastructure targets, including 10,000 chargers and 15% xEV share by 2030.

October 2021
Budget 2022 EV Incentives
Launched tax exemptions and road tax relief to reduce EV costs and accelerate early adoption.

October 2022
EV Charging & Industry Incentives (2022–2023)
Provided tax incentives and support to scale EV charging infrastructure and ecosystem development.

March 2023
BEV Global Leaders Program (2023)
Attracted global EV players to Malaysia while enforcing local investment and capability-building requirements.

July 2023
National Energy Transition Roadmap (2023–2024)
Positioned EV as a core pillar of energy transition with a target of 80% EV share by 2050.

February 2025
EV Charging Guidelines (ST Regulation)
Established safety standards and licensing requirements to ensure reliable charging infrastructure.

December 2025
National EV Launches + Mid-term Review (2025)
Marked the entry of local EV models and a strategic push toward mass-market adoption and localisation.

March 2026
New Investment Incentive Framework (NIIF) (2026)
Introduced outcome-based incentives to attract high-value EV investments and deepen the ecosystem.

Effective July 2026
Policy Pivot (Import CBU CIF Reform)
Tighten EV import CBU policies to carry a minimum RM 200,000 Cost, Insurance, Freight Value.

Notes Policy dates vary, some were formally launched, some announced in Parliament, one gazetted, one took effect automatically, and one had separate announcement and effective dates.

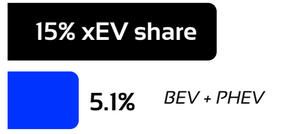
SELECTED MALAYSIA EV POLICY PROGRESS

National Automotive Policy 2020

NEW VEHICLE MARKET SHARE

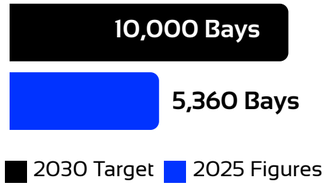
Low Carbon Mobility Blueprint

XEV MARKET SHARE



Low Carbon Mobility Blueprint

CHARGING INFRASTRUCTURE



Source: MITI, MIDA, MOF, Zigwheels, Bernama

03 ADOPTION TRAJECTORY

1 Malaysia's National Energy Transition Roadmap (NETR) outlines a clear path for EV adoption, targeting 20% of new vehicle sales by 2030 and 80% by 2050, signalling the country's long-term commitment to electrifying its transport sector.

2 xEV adoption reached approximately 5.1% of new car sales in 2025, reflecting rising consumer acceptance and marking an important early milestone in the transition toward electrified vehicles.

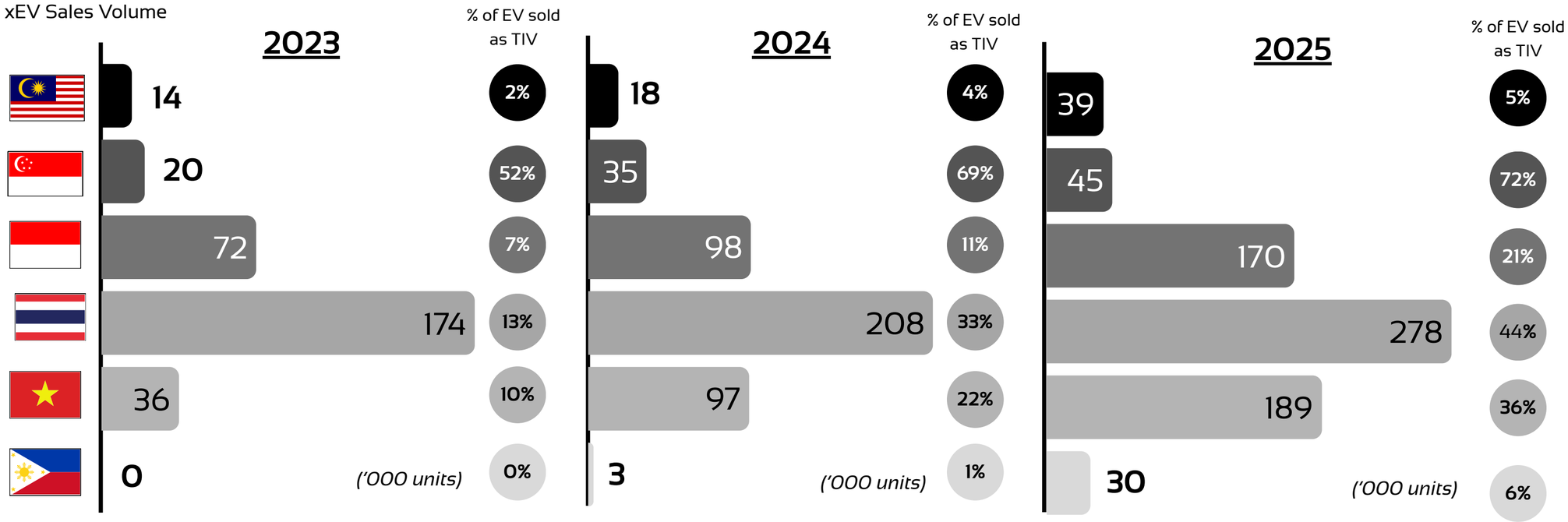
3 Crossing the 5% "tipping point" is a key milestone. According to Bloomberg Green analysis, more than 24 countries experienced rapid acceleration in EV adoption after surpassing this early-adopter threshold.

4 Affordable mass-market EVs are expected to drive adoption, with models like the Proton e.MAS priced at around RM 56,800-RM 69,800, further supported by CKD EV tax incentives available through 2027.

5 New Chinese automakers are entering the market with a wider range of xEV models and expanding CKD operations (e.g., GWM, Chery, BYD), which is expected to increase model variety, enhance affordability, and accelerate broader EV adoption.

xEVs = Includes PHEV and BEV *PHEV = Plug-in hybrid electric vehicle* *BEV = Battery electric vehicle*

TIV = Total Industry Volume



Malaysia's EV adoption is accelerating from a low base, market share rising to 5% in 3 years, placing it ahead of early-stage markets like the Philippines but still behind regional leaders such as Thailand, Vietnam and Singapore which have achieved higher adoption penetration.

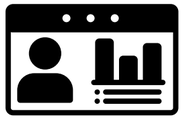
Source: (Overview of the ASEAN-6 automotive market 5th market snapshot, PwC Automotive ASEAN Centre of Excellence)

04 BARRIERS TO ADOPTION

Barriers to EV adoption fall into six main categories: vehicle-related, battery-related, charging infrastructure, energy supply, personal and behavioural factors, and governance and policy.

1 Vehicle-related

2 Behavioural Factors

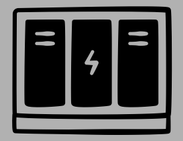


Focus Area

3 Battery-related

4 Charging Infrastructure

5 Energy Supply



6 Governance & Policy

Categories for barriers to adoption is adopted from Mesquita, A. R., Hugo, V., Nunes, P. C., & Santos, A. S. (2025)

ICE = Internal combustion engine

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1 Vehicle-related

- Uncertainty around battery degradation and replacement cost creates hesitation in buying used EV.
- Limited model variety and price points in the secondary market reduces buyer choice.
- Concerns over total cost of ownership, driving range and performance vs ICE alternatives.
- Lack of standardised assessment of EV condition (battery health, warranty transferability).

2 Behavioural Factors

- Buyers are more familiar and comfortable with ICE vehicle ownership and resale dynamics.
- Perception that EV are harder to resell and depreciate faster.
- Preference for proven reliability and established servicing ecosystem.
- Range anxiety and charging habits influence second-hand purchase decisions even more than new.

"Do these perceptions hold true in the market? And if so what is the current reality?"

- "Used EV have significantly fewer units available for sale compared to ICE cars."
- "Demand for used EV is weaker and not keeping pace with ICE cars."
- "Used EV take longer to sell than ICE cars."
- "Used EV have lower retained value compared to ICE cars."

"USED EV ARE SIGNIFICANTLY UNDERREPRESENTED IN LISTINGS COMPARED TO ICE CARS."

TRUE -

But driven by early-stage market dynamics rather than structural weakness; supply is scaling

1 **EV listings remain a small share (2–4%) vs ICE (96–98%), confirming underrepresentation.**

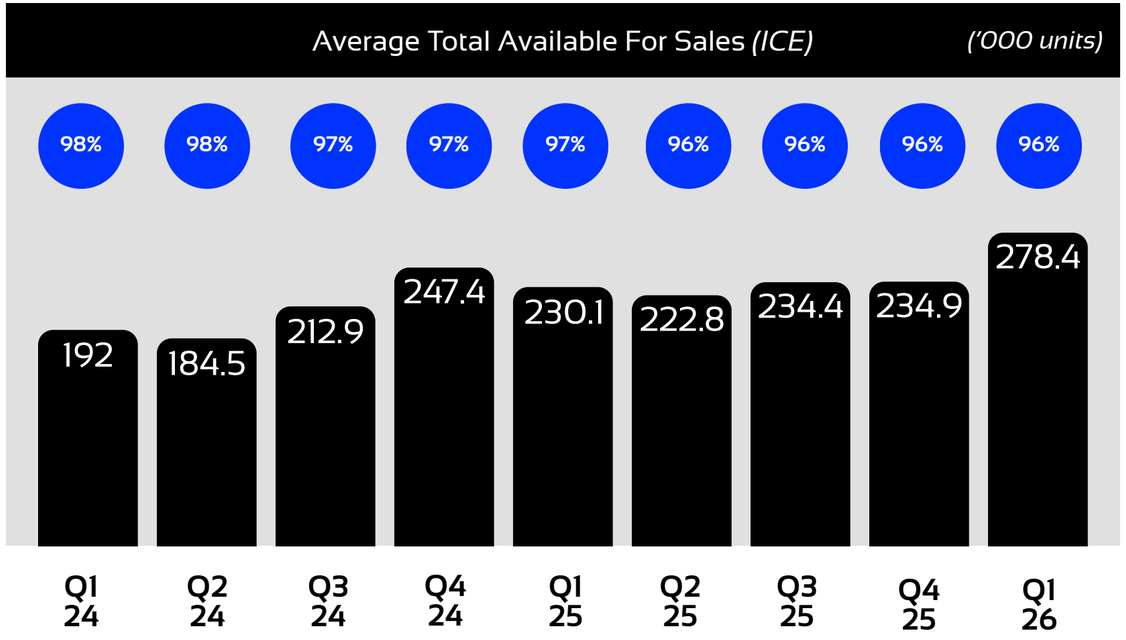
2 **However, EV listings are growing steadily (2.9x from 3.5k → 10.3k), showing supply is scaling quickly off a low base.**

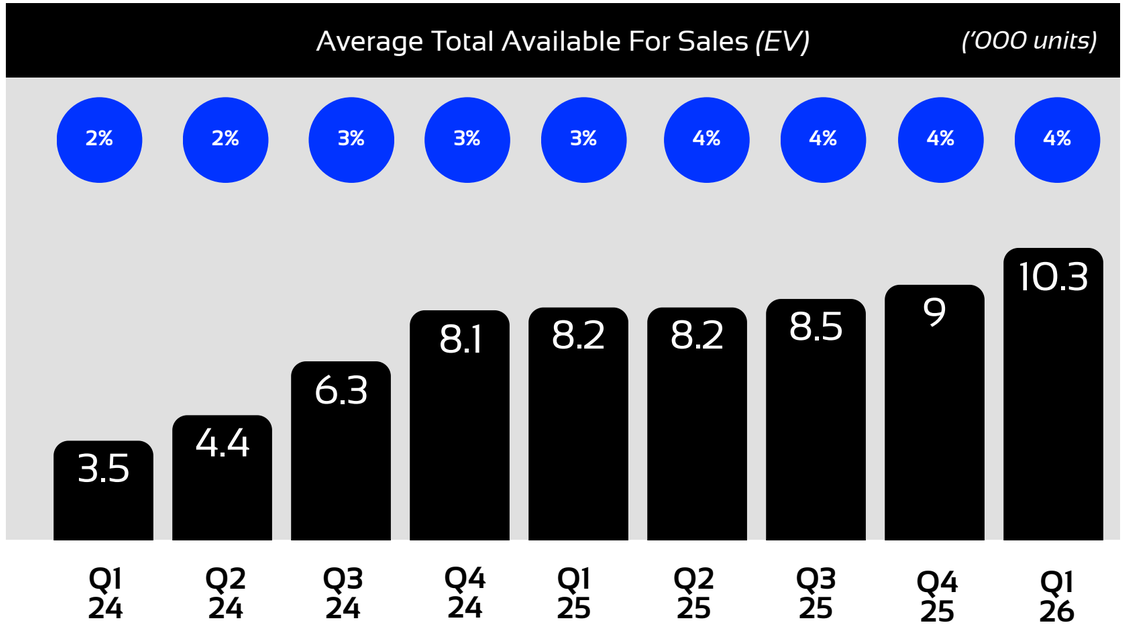
3 **Both listing segments are increasing overtime indicating overall market expansion.**

Source: AutoTek *ICE = Petrol + Diesel* *EV = PHEV + BEV*

Listing by fuel type as % of Total Listing

May not =100% as hybrid is included in total listing





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Note: Data represents level of available used and demo cars listed online by dealers and private sellers nationally at the time of reporting. AutoTek processes and deduplicates listings to identify and eliminate repetitions, ensuring that vehicles listed across multiple platforms are counted only once

"DEMAND FOR USED EV IS WEAKER AND NOT KEEPING PACE WITH ICE CARS."

TRUE -

But gap is narrowing and largely reflects early-stage buyer hesitation rather than lack of underlying demand

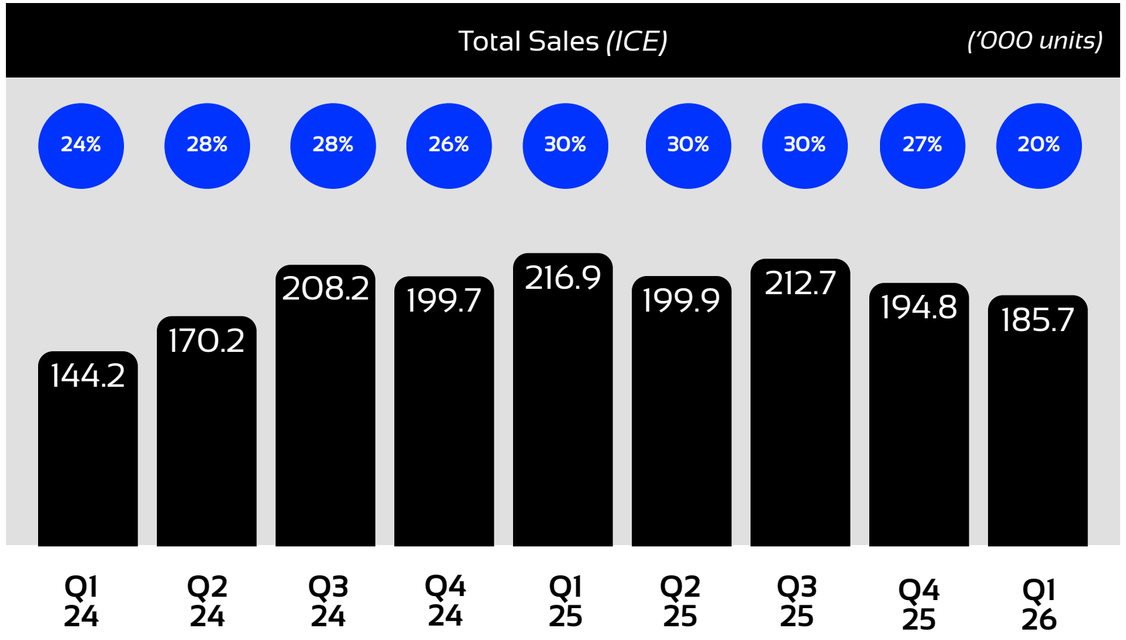
1 **EV sell-through rates (15–23%) are consistently below ICE (20–30%), indicating relatively weaker demand.**

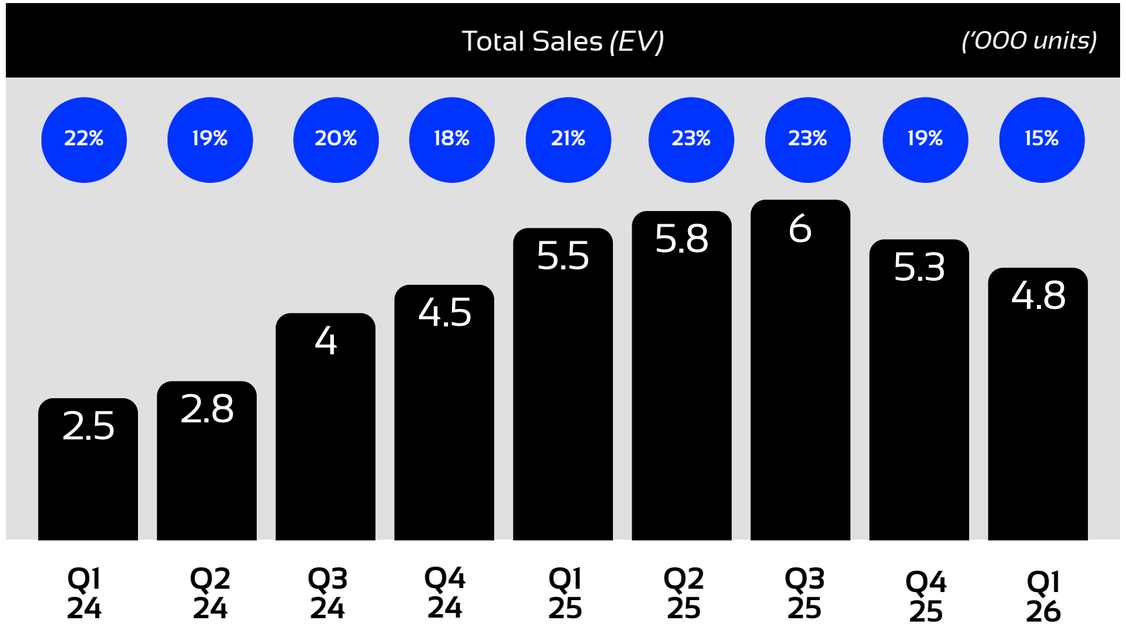
2 **EV demand showed initial improvement (peaking 23%) but has declined recently to 15%, suggesting volatility.**

3 **ICE demand remains more stable and resilient, consistently clearing a higher proportion of listings.**

Sales as % of each segment listing

Source: AutoTek *ICE = Petrol + Diesel* *EV = PHEV + BEV*





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Note: Data represents total vehicles delisted from online marketplaces, serving as a close proxy to actual sales and recorded monthly. The delisting count also reflects unique vehicles, as AutoTek processes and deduplicates listings to identify and eliminate repetitions, ensuring that vehicles listed across multiple platforms are counted only once

“USED EV TAKE LONGER TO SELL THAN ICE CARS.”

TRUE -

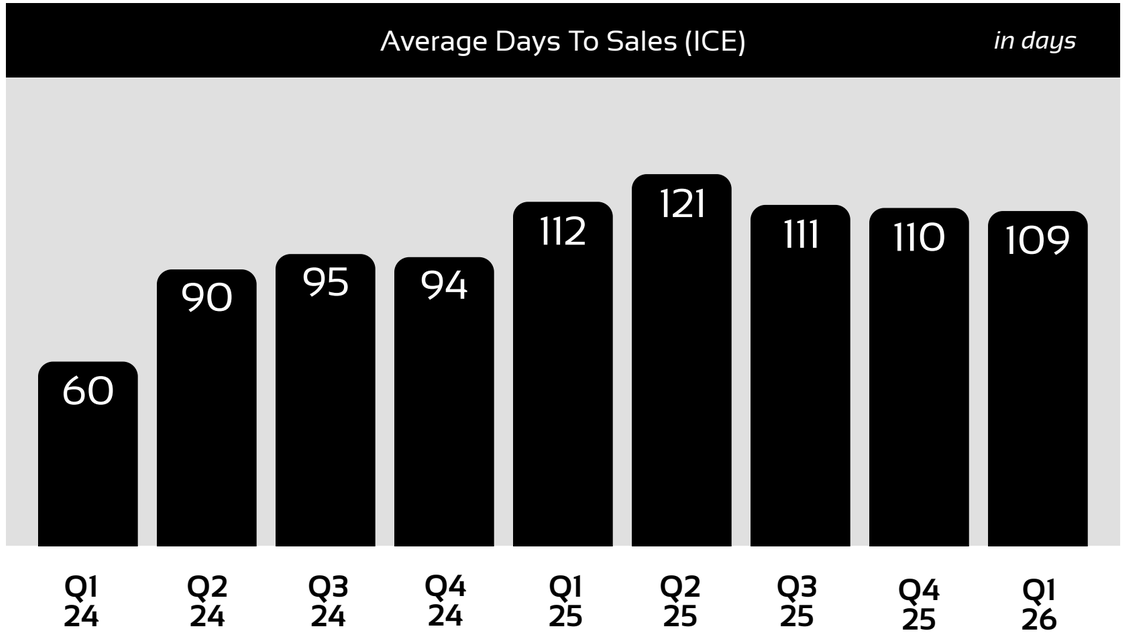
But driven by price discovery and buyer uncertainty in an early-stage market, not lack of interest

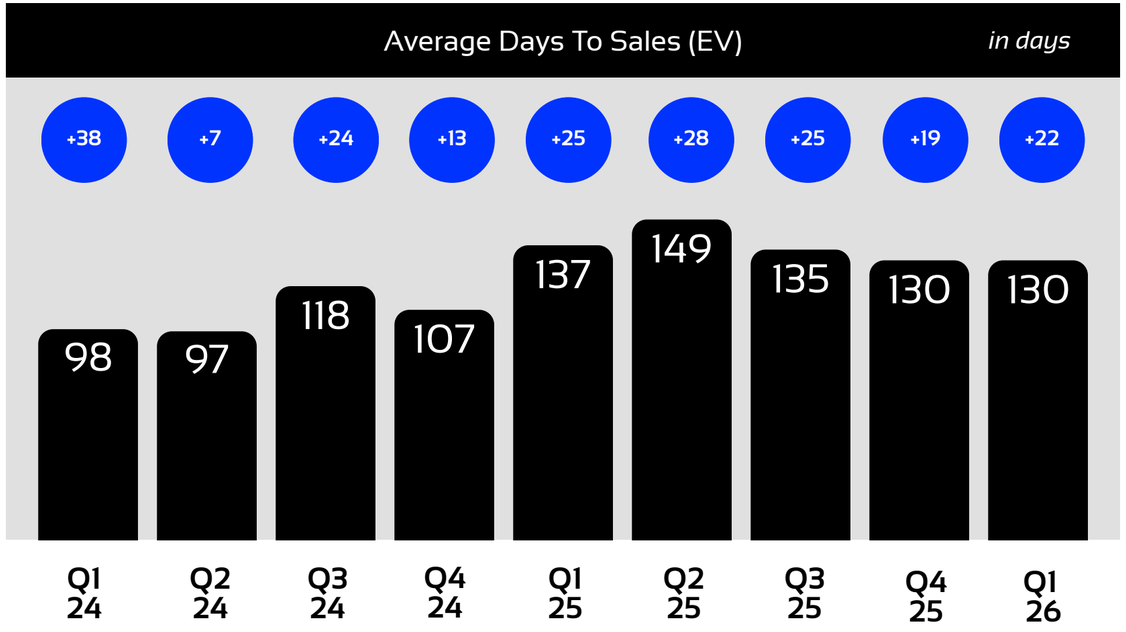
1. **EV consistently take longer to sell (97–149 days) vs ICE (60–121 days), confirming slower liquidity.**
2. **The gap persists across all periods (+7 to +38 days), indicating a structural difference rather than a one-off trend.**
3. **EV selling time shows higher volatility, suggesting demand uncertainty and pricing discovery still evolving.**

ICEs days to sell - EVs days to sell

Source: AutoTek *ICE = Petrol + Diesel* *EV = PHEV + BEV*

May not =100% as hybrid is included in total listing





Note: Data represents the duration (in days) between when a vehicle was first listed online to when it was delisted

“USED EV HAVE LOWER RETAINED VALUE COMPARED TO ICE CARS.”

TRUE -

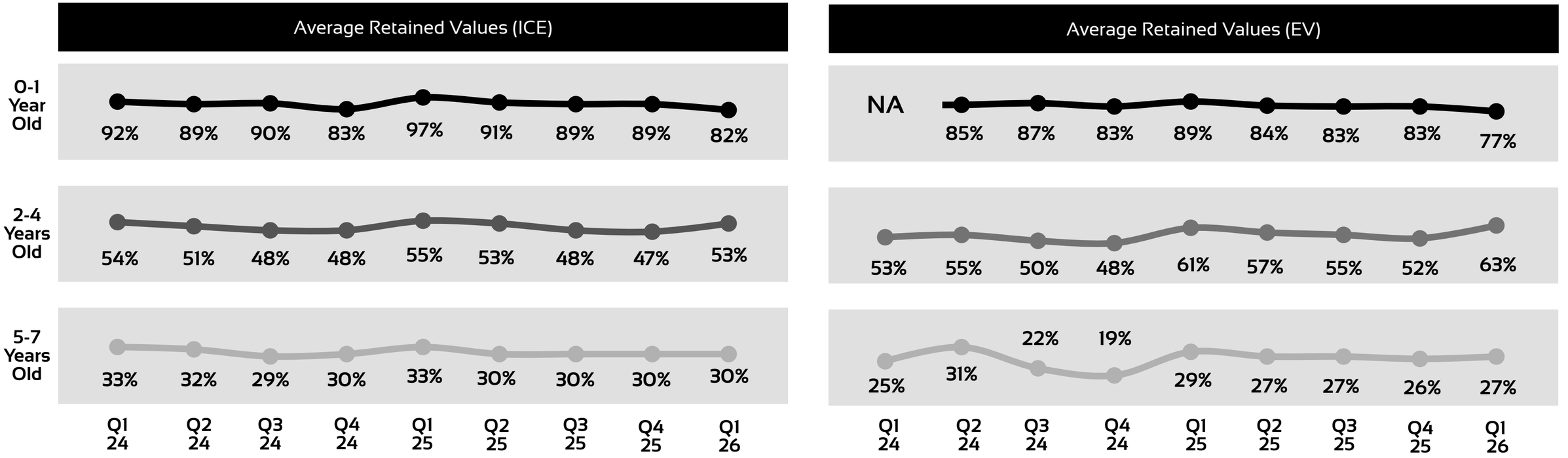
But depreciation is stabilising, suggesting the market is beginning to find a pricing floor

1 EV retained values are 8–12% lower than ICE in newer vehicles (0–1 year: 77–89% vs 82–97%), confirming an early depreciation gap.

2 Gap remains in mid-age vehicles (2–4 years: 52%–63% vs ~47%–55%), but with periods of EV having higher RV than ICE.

3 In older vehicles (5–7 years), EV are still lower (19%–31% vs 30%–33%%), but differences narrow to <10%, suggesting stabilisation.

Source: AutoTek *ICE = Petrol + Diesel* *EV = PHEV + BEV*



Note: Data represents how well a vehicle holds its value against the original Recommended Retail Price (RRP) when the vehicle was purchased brand new. Retained value of 30% represents that the vehicle was sold at 30% of its original RRP. This figure is reported as a weighted average by vehicle segment and age group at each reporting period and provides a stable pricing trend movement

AS A SECONDARY MARKET, USED EV GROWTH IS CONTINGENT ON THE PACE AND SCALE OF PRIMARY EV ADOPTION

NOTE -

Used EV market weakness is temporarily driven by limited supply, not structural demand issues.

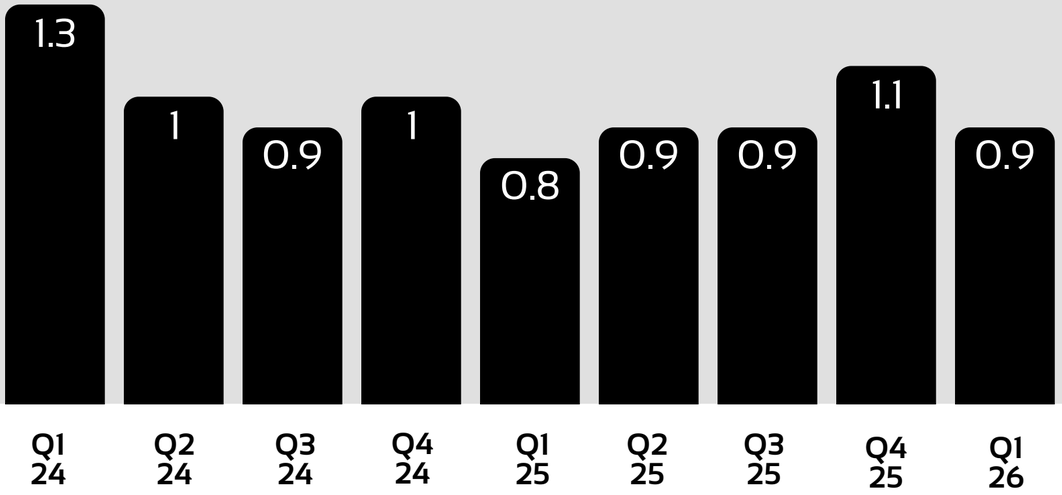
1 While the data supports the current perception of a weaker used EV market, the actual difference in each metric between ICE and EV is not as wide as commonly assumed.

2 The used EV market is downstream, relying on primary EV adoption, as limited new EV sales restrict supply, transaction volume, and price discovery.

3 Looking ahead, there are favourable tailwinds supporting stronger traction in the used EV market as primary adoption continues to scale.

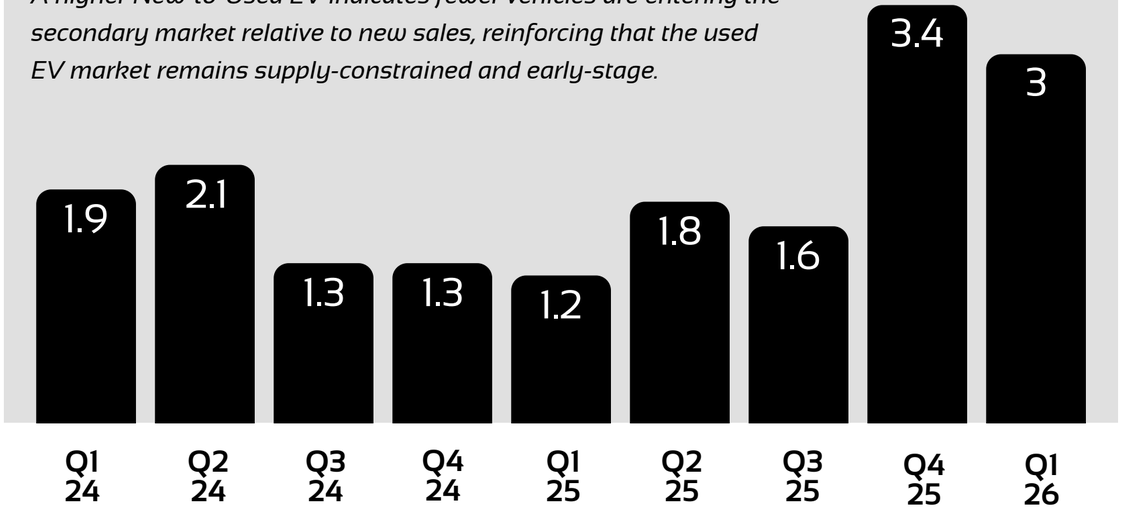
Source: AutoTek for used market data, data.gov.my for vehicle registrations

New-to-Used ICE



New-to-Used EV

A higher New-to-Used EV indicates fewer vehicles are entering the secondary market relative to new sales, reinforcing that the used EV market remains supply-constrained and early-stage.



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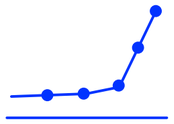
05 EV OUTLOOK IN MALAYSIA

	What's Happening	What's Next
1 Current State of EV	Malaysia's EV market is at an inflection point , driven by lower TCO, faster charging, and longer range.	With the three core EV pillars maturing, the question shifts to whether market confidence and infrastructure can keep pace with rising adoption demand.
2 EV Policy Trends	Malaysia's EV policy has matured from incentive-led demand creation to localisation and ecosystem deepening.	Policy is shifting from subsidising buyers to building a local supply chain, the next phase of growth depends on whether CKD production and homegrown brands can meet mass-market demand.
3 Adoption Trajectory 	Malaysia has crossed the 5% EV adoption threshold a proven tipping point for market acceleration based on Bloomberg Green.	Look into the value chain of EV so that stakeholders can identify where the most strategic opportunities and vulnerabilities lie
4 Barriers to Adoption	The used EV market is now a key friction point, four common market perceptions are tested and found to be largely true, but driven by early-stage dynamics.	Addressing transparency (battery health, standardised valuation) will unlock for used EV confidence.

05 EV OUTLOOK IN MALAYSIA

The convergence of adoption data, regulatory shifts, and secondary market trends indicates that Malaysia is transitioning from an "early adopter" phase to a "mass-market expansion" era. This evolution is defined by four big catalysts:

1 Localization Push To Remain Competitve In Pricing

EV launches, hybrid expansion, and CKD localization are driving more price-competitive EV and accelerating mass-market adoption in Malaysia.

October 2025

Proton e.MAS 5 Official Launch

Positioned as Malaysia's most affordable EV at the time, it quickly became a best-seller, amassing over 10,000 bookings within its first few months.

November 2025

The Perodua QV-E "National Agenda"

Designated as a "National Agenda," the QV-E introduced the innovative "Battery-as-a-Service" (BaaS) model, where the battery is leased separately for 9 years to reduce the upfront purchase price for consumers.

January 2026

Proton Secures EV Market Leadership

By January 2026, the success of the e.MAS series allowed Proton to secure a dominant 33% share of the total EV market in Malaysia. The e.MAS 5 alone became the No. 1 EV model in the country by sales volume during this period.

February 2026

Expansion into Plug-in Hybrids (e.MAS 7 PHEV)

With a combined range of 1,065 km and an EV-only range of up to 170 km, it addressed the "range anxiety" often cited by long-distance travellers in Malaysia.

March 2026

Localization Push (e.MAS 5 CKD)

As the government shifted from import incentives to local manufacturing, Proton opened bookings for the locally assembled (CKD) MG S5 BEV and updated e.MAS 5 variants to ensure national EVs remained price-competitive following the end of CBU tax exemptions.

Source: MITI, MIDA, MOF, Zigwheels, Bernama

2 The 5% tipping point, when markets accelerate adoption

Malaysia's EV adoption is accelerating from a low base, market share rising to 5% in 2025. Bloomberg's analysis of technology adoption (comparing EVs to historical shifts like color TVs and smartwatches) suggests that once 5% of new cars sold in a country are fully electric, the market moves from "early adopters" to "mass adoption." At this stage, the barriers such as high costs, lack of charging infrastructure, and consumer skepticism begin to flatten.

Based on other countries that has reach the 5% tipping point, sales tend to accelerate rapidly. History shows that many of these countries surged from 5% to 25% market share in less than four years.

Key Signals to Watch

If 2026 EV registrations hold above 57,000 units (more than 5% market share) without tax exemptions, Malaysia's tipping point is structural not a tax-driven spike. That's the number that validates the growth trajectory.

If 2026 EV registrations drop materially below 57,000 units, the 2025 surge was likely front-loaded demand not structural adoption. That decline would invalidate the growth thesis, and adoption may stall.

Source: Bloomberg

05 EV OUTLOOK IN MALAYSIA

The convergence of adoption data, regulatory shifts, and secondary market trends indicates that Malaysia is transitioning from an "early adopter" phase to a "mass-market expansion" era. This evolution is defined by four big catalysts:

3 Fuel Price Rising

Global geopolitical tensions, particularly the Iran conflict and Middle East instability, are disrupting oil supply chains and pushing crude prices higher, weakening the case for ICEs vehicles in Malaysia.

February 2026

US-Israel Strikes Iran

Coordinated strikes triggered Iran's IRGC to block the Strait of Hormuz, through which ~20% of global oil flows. Brent crude surged 10–13% to around $80–82 per barrel within days.

Early-March 2026

Malaysia Feels the Bite

Monthly quota for subsidised petrol is cut as the crisis began feeding directly into Malaysia's fuel bill, food supply chain and inflation outlook.

Mid-March 2026

Oil Tops $95–$100

Oil futures closed at $95, with strikes on Ras Tanura in Saudi Arabia, Ras Laffan in Qatar, and Ruwais in the UAE combining with Hormuz's blockage to drop Gulf oil production by 10 million barrels per day versus March 2025.

Ongoing 2026

EV Case Strengthens

With crude at US$113.53 per barrel, the conflict has exposed vulnerabilities in traditional fuel supply networks while simultaneously highlighting the relative resilience of EV infrastructure.

Outlook

Malaysia's cheap petrol was never a market reality; it was a political commitment the government is now visibly losing the ability to keep. Consumers should read this not just as a cost squeeze but as a structural signal: the subsidy floor is cracking permanently making EV ownership less a lifestyle choice and more of a rational choice.

Source: (IEA, 2026; South China Morning Post, 2026; CFR, 2026; Supply Chain Magazine, 2026)

Notes: While oil prices and electricity tariffs are correlated, electricity tariffs adjust more gradually remaining more resilient as ~80% of power generation relies on domestic gas capped via market reference price (MRP) limiting price spikes , with <20% oil-linked imports and regulated pass-through, despite rising coal costs (100% imported)

4 EV Supply Chain Disruption

The Iran conflict has hit the global EV supply chain from multiple angles, shipping routes blocked, petrochemical feedstocks disrupted, semiconductor inputs choked, and automotive production costs spiking.

February 2026

Hormuz Blocks Auto Shipping

Within hours of the strikes, Iran's IRGC warned vessels passage was "not allowed." Hapag-Lloyd, Maersk, CMA CGM and MSC issued formal suspensions of Hormuz transits, trapping ~170 containerships carrying 450,000 TEUs.

Early-March 2026

Semiconductor Crisis Hits EV Production

Iranian missile strikes on Qatar's Ras Laffan complex removed roughly 30% of global semiconductor-grade helium supply within days, with spot prices surging 40–100%, directly threatening EV chip and battery management system production.

March 2026

Automakers Adjust EV Output

BMW, Porsche, Rolls-Royce, Ford and Mercedes are among manufacturers who have adjusted their EV production between January and March 2026 as the conflict added another layer of complexity to manufacturing decisions.

Ongoing 2026

Malaysia's Chip Activities Threatened

A prolonged shutdown of Qatari LNG production "could test Taiwanese and South Korean resilience, and by extension, Malaysia's chip testing activities," even though alternative sourcing is in the works.

Outlook

The disruption is a live stress test of whether Malaysia's EV ambitions have manufacturing depth or are just an import business in green packaging. CBU-dependent European models are stalling, BMS chip costs are spiking, and shipping lanes are disrupted all punishing a country that assembles little domestically. This will determine whether Malaysia exits the transition as a manufacturer or just a market.

Source: (Automotive Manufacturing Solutions, 2026; Tim Harper, 2026; Supply Chain Magazine, 2026; The Edge, 2026)

ABOUT US

Vynn Capital

Vynn Capital is a Southeast Asia-focused venture capital firm investing in early stage tech startups. As an industry focused investor, Vynn Capital practices an ecosystem investing approach, where investments are done with consideration of synergy and value creation across portfolio companies. The firm is currently focusing on Supply Chain and Mobility industries, as well as sectors that are ancillaries to them.

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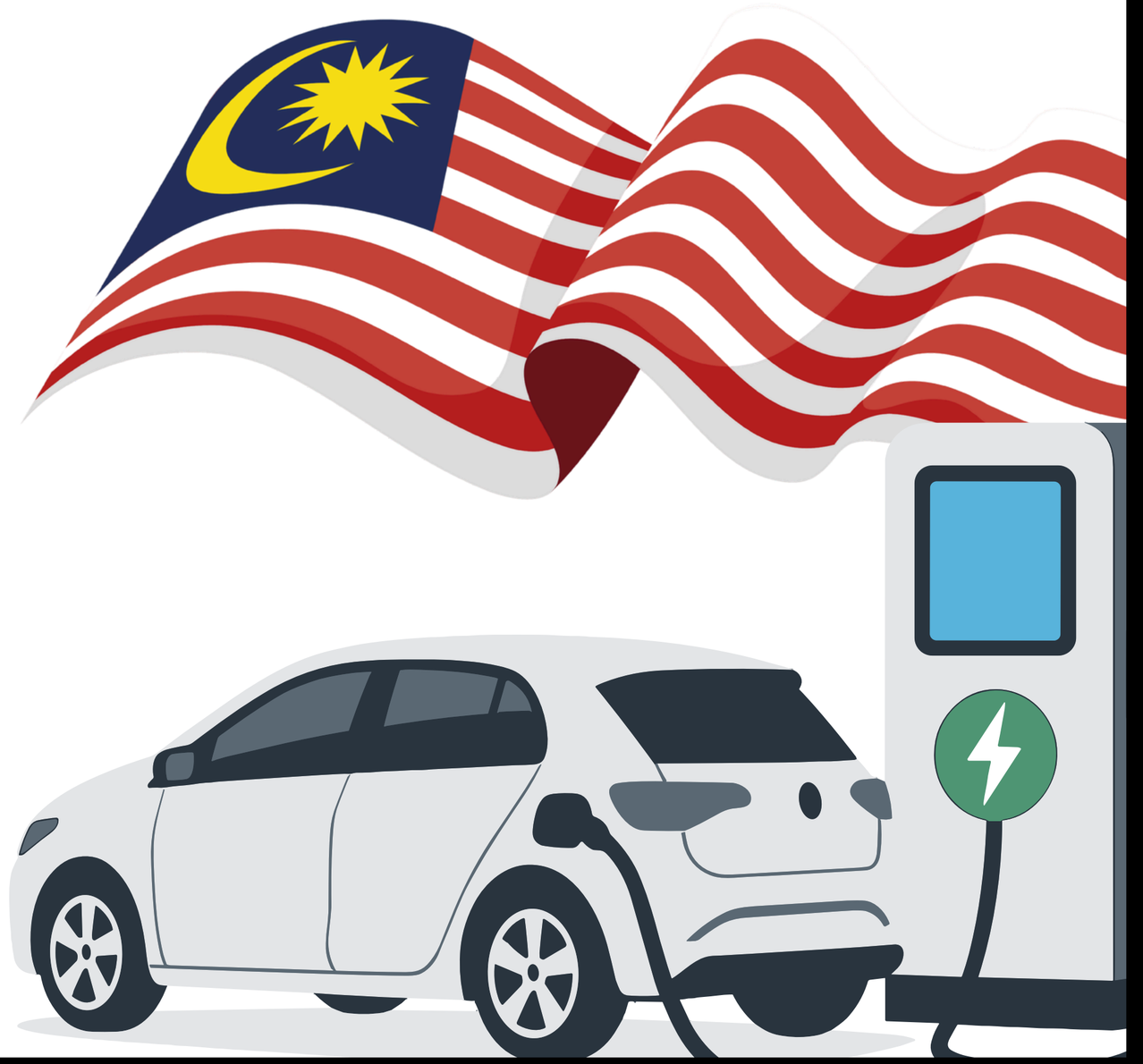
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