

State of e-mobility in Asia

Market Growth, Policy Momentum, and Investment Signals

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Clean Air Asia

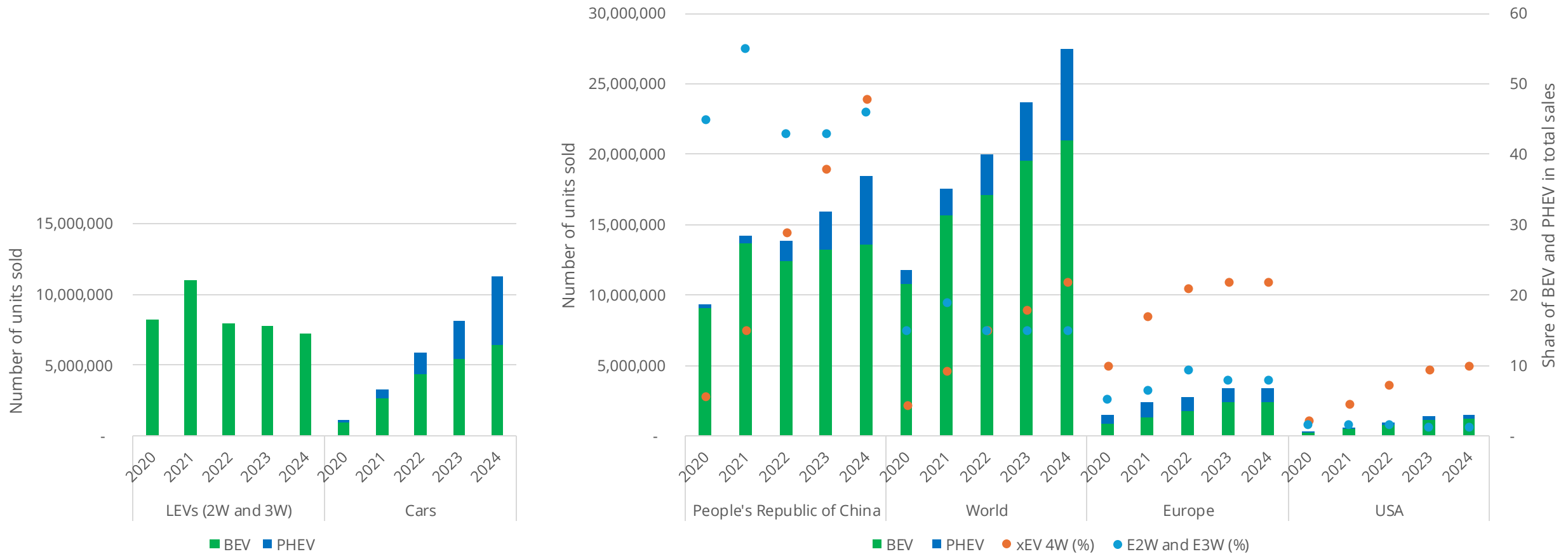
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Research conducted by Amanda Tolentino and Myron Alcanzare



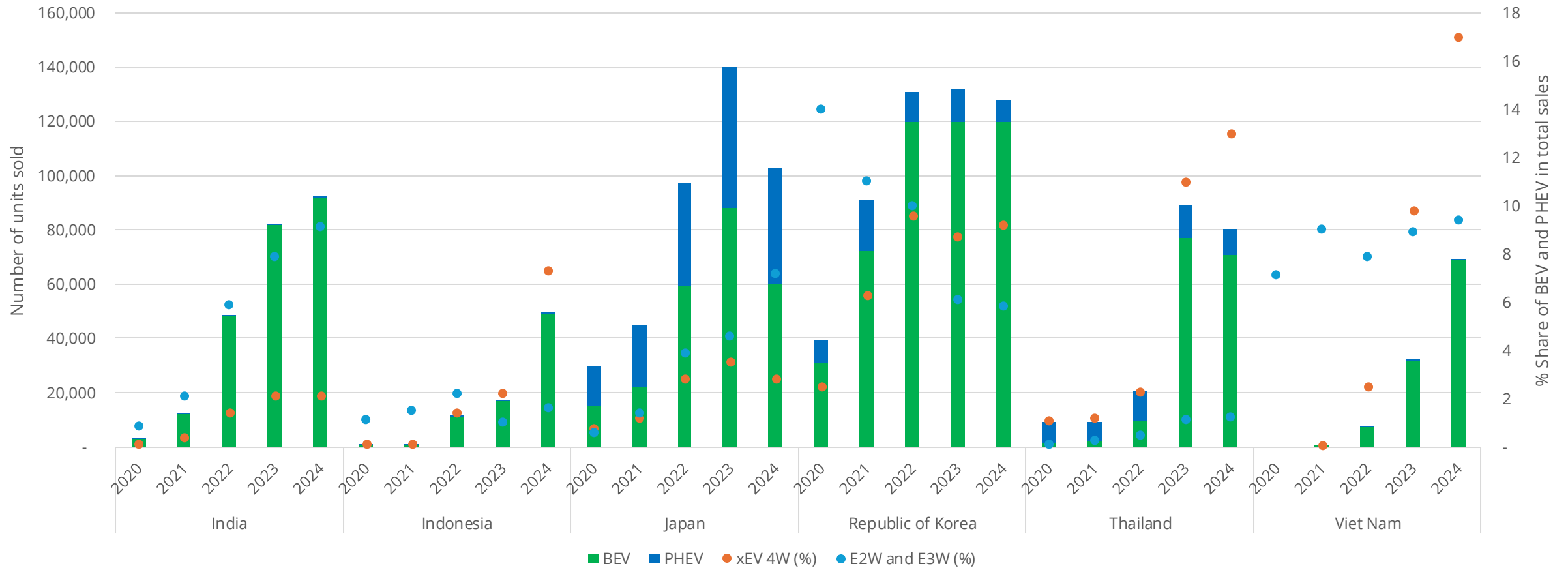
PRC Leads the Global EV Market Share



IEA (2025), *Global EV Data Explorer*, IEA, Paris <https://www.iea.org/data-and-statistics/data-tools/global-ev-data-explorer>, Licence: CC BY 4.0

- Strong government support for New Energy Vehicles in PRC resulted in the highest EV market share.

Asia as a Market Driver of EV Sales



- Countries that provide consumer subsidies have a higher plug-in EV 4W sales share

Enabling Policies for EV Adoption

	Supply Chain Tax Incentives	Charging Infrastructure Subsidies	Charging Infrastructure Tax Incentives	Demand & User Tax Incentives	Demand & User Subsidies/ Rebates	Demand & User Credit Subsidies
Cambodia	0			0		
China (PRC)		0	0	0	0	0
India			0			
Indonesia	0		0	0		
Japan	0	0		0		
Republic of Korea	0	0			0	
Lao PDR				0		
Malaysia	0		0	0		
Philippines	0			0		
Singapore	0				0	
Thailand	0	0		0	0	
Viet Nam	0			0		

Supply Chain

The most common enabling policies in Asian countries offer **excise tax reductions, corporate income tax holidays** or **duty-free importation** to importers, assemblers, and manufacturers.

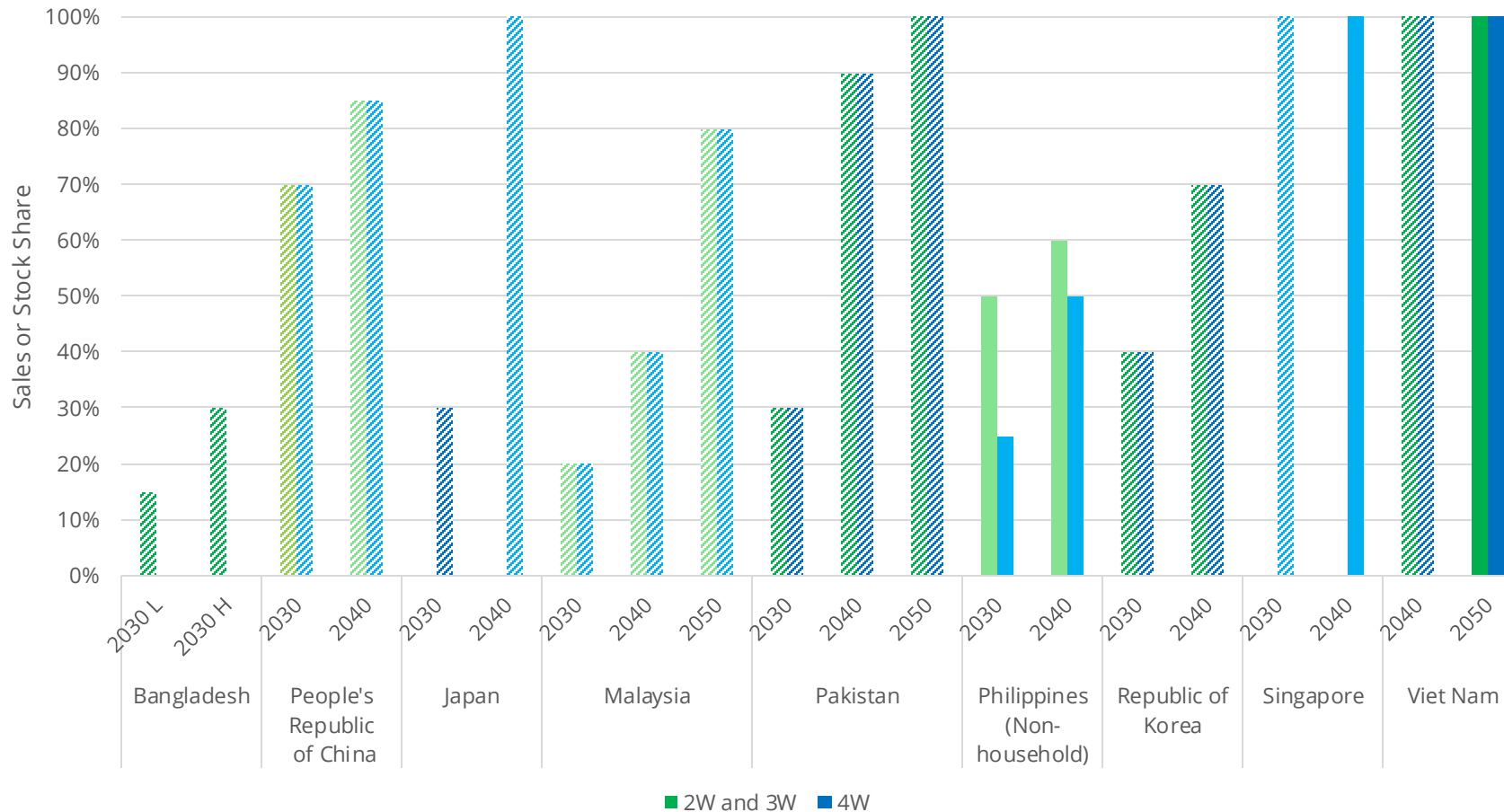
Demand and User Incentives

Most Asian countries offer **tax reduction** in value added tax, registration prioritization, fee exemptions, **rebates, purchase subsidies, parking incentives,** and a **crediting mechanism.**

Charging Infrastructure

Most Asian countries **offer subsidies** in EV charging infrastructure installations, **tax reductions or tax relief, pricing strategies,** and **private corporation support**

EV Targets from 2030 to 2050



Singapore sets the most ambitious target, aiming for 100% xEV sales share by 2030 and 100% xEV overall fleet share by 2040.

Viet Nam also shares ambitious targets 100% ZEV sales share by 2040 and 100% ZEV overall fleet share by 2050.

Japan and **Pakistan** also share 100% xEV sales targets for 2040 and 2050, respectively.

ZEV – zero emissions vehicle (BEVs and FCEVs)

xEV – HEVs, PHEVs, and BEVs

Lighter shades denote xEVs, which include hybrid electric vehicles (HEVs) and plug-in electric vehicles (PHEVs).

Banded bars denote sales targets while solid bars denote total fleet share.

Due to policy limitations, the Philippines can only mandate managed fleets and has a 10% xEV household share by 2040



Challenges and Opportunities

The Road Ahead

- 1) **Affordable range** – subsidies greatly promote EV adoption. There is a need for lower EV prices. Thus, **the sustained decline in the cost per kWh of EV batteries significantly fosters EV adoption**, driven by lower prices and longer range.
- 2) **Charge to experience** – charging station network expansion increases confidence in EV use. Further, higher EV adoption also increases the market for businesses that provide charging services, thereby **breaking the chicken-and-egg cycle**.
- 3) **Technology inertia** – increased EV adoption allows consumers to gain more information on how EVs work from day-to-day. Wait-and-see consumers will no longer have to wait because they can see how EVs perform.
- 4) **Electrification of the automotive industry** – existing supply chains would need to shift their production to stay afloat. Similarly, technicians would need to be trained in handling EV maintenance.

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Thank you for listening!

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