OUTLOOK ON AUTOMOTIVE ELECTRIFICATION IN SOUTHEAST ASIA

— THE NEED TO PREPARE FOR ESCALATING EV SUPPLY —

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SUMMARY

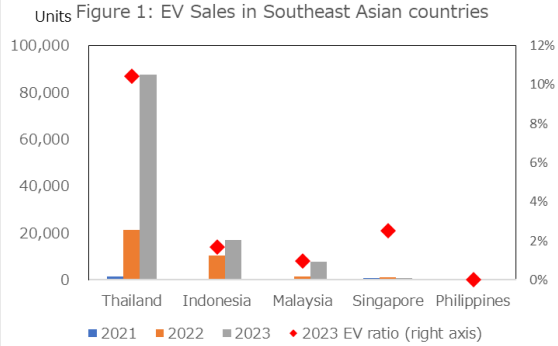
- In Southeast Asia, the expansion of EV sales primarily by Chinese companies is being driven by subsidies and tax incentives, particularly in Thailand and Indonesia.
- Strategies for EV adoption in Thailand and Indonesia focus on establishing the countries as production and export bases for EVs and batteries. While there has been rapid progress in building production capacities by Chinese companies, policies to promote domestic EV adoption remain limited.
- With intense competition among Chinese companies entering the Southeast Asia market—a region where Japanese companies have historically dominated—there is a possibility that EVs may be adopted more quickly than expected. Japanese companies should carefully monitor market trends and prepare appropriate responses.

1. EV MARKET TRENDS IN SOUTHEAST ASIAN COUNTRIES

1-1. Sales trends by country

Sales of EVs[1] are beginning to increase across Southeast Asia. In Thailand, the number of units sold in 2023 exceeded 87,000, accounting for more than 10% of new vehicle sales (see Figure 1). Although this figure is lower than that of China and Europe at 30% and 18%, respectively, it is higher than the 8% for the US. Indonesia followed with 17,000 units, accounting for 1.7% of new vehicle sales. Sales are limited in other countries in the region, and the move toward electrification appears to be centered on these two countries.

Figure 1: EV Sales in Southeast Asian countries



Source: Compiled by MGSSI based on MarkLines data

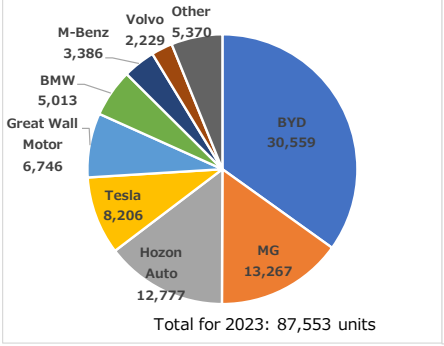
[1] Here, "EVs" refers to battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).

1-2. Market share by company

Looking at market share by company, BYD, which began full sales in 2023, has a strong lead over others in Thailand. It is followed by MG (SAIC Motor), Hozon Auto (Neta), Tesla, and Great Wall Motor (Figure 2). Four of the top five companies in terms of sales volume in 2023 were Chinese, with a combined market share of 72%.

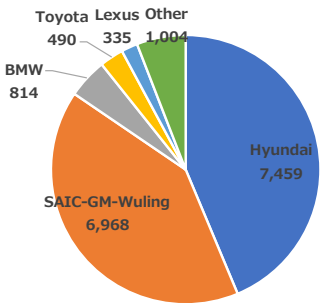
In Indonesia, the market is split between Hyundai Motor of South Korea and SAIC-GM-Wuling Automobile, both of which are already producing locally, with shares of 44% and 41%, respectively (Figure 3). However, this power structure could soon be transformed, as BYD and several other companies have started sales in 2024.

Figure 2: Composition of EV sales by manufacturer in Thailand



Total for 2023: 87,553 units

Figure 3: Composition of EV sales by manufacturer in Indonesia



2023 total: 17,070 units

Source: Compiled by MGSSI based on MarkLines data

2. POLICIES FOR EV INTRODUCTION IN EACH COUNTRY

2-1. Thailand

Thailand has long been the largest automotive manufacturing base in Southeast Asia. Now, amid the global shift to electrification, it is pursuing policies to make itself a production hub for EVs within and beyond the ASEAN region.

The Thailand EV committee[2] has set forth a "30@30" policy that calls for EVs to account for 30% of domestic vehicle production by 2030, with the goal of increasing the share of EVs in sales to 50% in the same year. To promote the adoption of EVs, the government is providing subsidies for EV purchases and commodity tax reductions on the sales side. On the production side, there are reductions and exemptions in import tariffs on EVs and their components, along with corporate tax exemptions ranging from 5 to 13 years for companies investing in EV production facilities and charging infrastructure (Figure 4).

However, it should be noted that many of these policies are for a limited time. Companies that import and sell EVs between 2022 and 2025 and receive subsidies will be required to produce in Thailand according to accumulated sales volumes from 2024 onward. This will incentivize companies to start production early, with the required production volumes increasing by production year. After 2026, imports of finished vehicles will no longer be allowed, and domestic production of key components such as vehicle batteries will be mandatory.

[2] The National Electric Vehicle Policy Committee (NEVPC), chaired by Prime Minister Srettha Thavisin.

Figure 4: Thai government's policies to promote EV adoption and investment

EV introduction target				30% of domestic production (725,000 units) and 50% of domestic sales (440,000 units) to be EVs by 2030.							
	Vehicle model	Battery capacity	Policy scheme	2022	2023		2024	2025		2026	2027
Purchase subsidies	Passenger vehicle (2 million THB or less only)	<30kWh	EV 3.0	70,000 THB							
		30kWh≦		150,000 THB							
		<50kWh	EV 3.5				50,000 THB	35,000 THB		25,000 THB	
		50kWh≦					100,000 THB	75,000 THB		50,000 THB	
	Pickup (2 million THB or less only)	30kWh≦	EV 3.0	150,000 THB							
		50kWh≦	EV 3.5				100,000 THB				
Commodity tax reduction	Passenger vehicle (7 million THB or less)		Both	Tax reduction from normal 8% to 2%							
	Pickup (2 million THB or less)			Tax exemption (normally at 3–12%; domestically produced vehicles only)							
Reduction or exemption of import duties on finished vehicles	Sales price 2 million THB or less		Both	Up to 40% reduction			Up to 40% reduction				
	Sales price 2–7 million THB and battery capacity ≤ 30			20% reduction			Excluded				
Mandatory domestic production (condition for receiving subsidies and tax incentives)		Finished vehicle production	EV 3.0	Import and registration of finished vehicles			Obligation to produce the same number as imports in 2022 to 2023				
								Obligation to produce 1.5 times the number of imports in 2022 to 2023			
			EV 3.5				Import and registration of finished vehicles			Obligation to produce 2 times the number of imports in 2024 to 2025	
											Obligation to produce 3 times the number of imports in 2024 to 2025
		Parts production	EV 3.0		Exemption from import tariffs on 9 EV parts					Domestic production of batteries	
Corporate tax reduction or exemption		Finished vehicle production	BEV	Investment of 5 billion THB or more: Up to 13-year exemption, under 5 billion THB: Up to 11-year exemption							
			PHEV	3-year exemption							
		Parts production	Main parts	8-year exemption							
			Battery capacity	Battery pack assembly: 5-year exemption, Module production, cell production: 8-year exemption							
			Charger	5-year exemption							

Note: EV 3.0 refers to the investment incentive scheme from 2022 to 2025; EV 3.5 refers to the investment incentive scheme from 2024 to 2027

2-2. Indonesia

Indonesia has set a goal of having 30% of four million units of four-wheeled vehicles produced in the country be LCEV[3]s by 2035. Of these, one million are to be solely BEVs[4]. To stimulate EV production, the government offers tax exemptions at the time of purchase, contingent on local vehicle assembly and a certain rate of raw materials and components being sourced locally (a policy known as "TKDN").[5] In addition, companies domestically producing EVs or their parts benefit from corporate tax exemptions lasting between 5 to 20 years.

Indonesia's focus on domestic production and procurement in EV-related targets and measures is even greater than that of Thailand. However, from the end of 2023, the government began to ease the condition of local procurement of parts, allowing for the import of finished vehicles and equipment under favorable conditions to facilitate early market entry for companies investing in domestic BEV production (Figure 5).

Meanwhile, policies aimed at domestically promoting and utilizing EVs remain limited. For instance, purchase subsidies are granted to two-wheel EVs but not to four-wheel EVs, and incentives for the installation of charging stations are limited.

Figure 5: Indonesian government's policies to promote EV usage and investment

EV introduction target	Of the 4 million units targeted for production in 2035, 1.2 million are LCEVs and 1 million are BEVs. No engine cars to be sold after 2050
Luxury tax exemption	BEVs and fuel cell vehicles that meet the required local procurement rate (TKDN) for certain raw materials and components are subject to an effective tax rate of zero
Value added tax reduction	Value added tax rate for purchase of BEVs exceeding 40% TKDN is reduced from the normal 11% to 1%
TKDN condition	Domestic production rate is set at 40% until the end of 2026, with an increase planned from 2027
Corporate tax reduction or exemption	Tax breaks for corporations manufacturing EV vehicles and components domestically Subject: EVs, batteries, motors, power control units, etc. Minimum investment: 100 billion IDR (approximately 1 billion JPY) Reduction/exemption period/rate: 5 to 20 years from the start of commercial production, with a reduction of 50% to 100%, depending on the investment amount
Incentives for EV-related investment enterprises (Presidential Decree No. 79 of 2023)	Until 2025, companies that construct BEV production facilities, invest in equipment, and invest to enhance production capacity for new products will be allowed to import a certain amount of complete built-up (CBU) vehicles, with import tax breaks at vehicle importation, preferential import tariffs for raw materials and components used in production and machinery and facilities for factories, and luxury tax incentives at point of sale

Source: Compiled by MGSSI based on JETRO and other data

[3] Low Cabon Emission Vehicle including BEV, PHV and Hybrid Electric Vehicle

[4] It is set in the Automotive Industry Roadmap by the Indonesian Ministry of Industry.

[5] Established by Presidential Decree No. 55 of 2019 and relaxed by Presidential Decree No. 79 of 2023.

2-3. Policy similarities between Thailand and Indonesia and their differences from other regions

Both Thailand and Indonesia have been focused on building production capacities for EVs and their components, such as vehicle batteries, with an emphasis on turning these into export industries. However, neither country has fuel efficiency[6] or zero-emission vehicle (ZEV) regulations[7] that could drive EV adoption within their borders. In regions like Europe and China, where EV adoption is more advanced, subsidies and such regulations serve as both a carrot and a stick. Without such regulations, there is no driver of domestic EV adoption, and the relatively low amounts of subsidies available may be insufficient to significantly boost demand.

3. TRENDS IN CORPORATE EXPANSION

3-1. Thailand

Chinese companies are increasingly announcing production expansions, taking advantage of subsidies and various tax incentives (Figure 6). BYD, a leading EV manufacturer, plans to bring its first production base outside China online in the first half of 2024, while Changan Automobile and others are planning to start EV production. By 2030, production capacity is expected to exceed 600,000 units annually, significantly surpassing the domestic sales target.

In contrast, Japanese companies, which have long-established production bases in Thailand and historically held over 80% of the local market share, have been cautious and are maintaining a wait-and-see approach. Honda has started some production,[8] but no other specific plans for local production have been revealed.[9]

3-2. Indonesia

Following Thailand, Indonesia is seeing a rush of entries: South Korea's Hyundai Motor, SAIC-GM-Wuling Automobile, Dongfeng Sokon Automobile (DFSK), and Chery Automobile have already begun production. From 2024 onwards, BYD, MG (SAIC Motor), Ora (Great Wall Motor), Hozon Auto (Neta), and Vietnam's Vinfast have announced start of production.

In addition, focusing on battery production—a priority for the Indonesian government—Hyundai Motor has commenced the country's first production of battery cells in collaboration with South Korea's LG Energy Solution and IBC[10]. Chinese companies are also leading the surge in entries into the battery market: SAIC-GM-Wuling Automobile is conducting joint development with Gotion High-Tech. China's CATL is advancing plans to establish a supply chain incorporating nickel ore mining to battery manufacturing and recycling in collaboration with local enterprises such as IBC.

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[6] Corporate average fuel economy (CAFE) regulations govern the average fuel economy of vehicles sold by a company over a year. In Europe, there are CO_2 emission regulations.

[7] A certain percentage of the vehicles sold annually by a company must be zero-emission vehicles (ZEVs), which include BEVs, PHEVs, and fuel cell vehicles. In China, these are covered by New Energy Vehicle (NEV) regulations.

[8] Production has begun on the e:N1 line at a Thai factory, though production capacity is not disclosed.

[9] In December 2023, a spokesperson for the Thai government announced that four Japanese automakers are expected to invest approximately 150 billion THB in local EV production over the next five years.

[10] Indonesia Battery Corporation, a state-owned enterprise established to promote battery production in the country.

Figure 6: State of production base establishment by companies in Thailand and Indonesia

Destination of expansion	Business		Country of origin	Details	Operation start date
Thailand	EV vehicles	SAIC Motor	China	Joint production with the CP Group since 2017. BEV production started at the end of 2023. Investment of 2.5 billion THB to build a battery plant in conjunction with BEV production.	2023
		BYD	China	Investment of 17.9 billion THB to establish a plant with an annual capacity of 150,000 units. Investment of 3.9 billion THB through a subsidiary to produce batteries for EVs/PHEVs.	2024
		Great Wall Motor	China	Acquisition of a GM's plant and investment of 22.6 billion THB in renovation, in addition to existing production. Production of batteries for HEVs and BEVs at battery subsidiary SVOLT.	2024
		Changan Automobile	China	Investment of 8.8 billion THB to build a plant with an annual capacity of 100,000 units. Also manufacturing of onboard batteries.	2025
		Foxconn	Taiwan	Establishment of an EV plant with an annual capacity of 50,000 units in a joint venture with a subsidiary of PTT Public Company Limited. Increase in annual production to 150,000 units by 2030.	2024
		Hozon Auto	China	Outsourcing production to local company BGAC. Annual production capacity of 20,000 units.	2024
		Chery Automobile	China	Outsourcing to Foxconn/PTT joint venture for knockdown production. First phase: 18,000 units per year, second phase: 50,000 units, third phase: 60,000 units.	2024
		Guangzhou Automobile (AION)	China	Investment of 6 billion THB. Planned production volume of 20,000 units in 2024.	2024
		Honda	Japan	Production of e:N1 launched on Thai factory line. Production capacity not disclosed.	2023
Indonesia	EV vehicles	Hyundai	South Korea	First production of EVs in Indonesia at their production facility with an annual capacity of 150,000 units. Production of battery cells in collaboration with LG (South Korea) and IBC (Indonesia).	2022 2024
		SAIC-GM-Wuling Automobile	China	Production of small EVs. Development of vehicle batteries for the Indonesian market with Gotion High-Tech.	2022
		Dongfeng Sokon Automobile	China	Production of small commercial EVs.	2023
		Chery Automobile	China	Start of CKD production of the SUV Omoda 5 at Handal Indonesia Motor.	2023
		MG (SAIC Motor)	China	Start of production of the subsidiary brand Maxus in first half of 2024.	2024
		Great Wall Motor	China	Start of production of the subsidiary brand Ora EV in second quarter.	2024
		Hozon Auto	China	CKD production of Neta V in partnership with Handal Indonesia Motor. Annual production capacity of 27,000 units.	2024
	Vehicle batteries	CATL	China	Establishment of an industrial chain of nickel ore mining, refining, battery manufacturing, and recycling with two state-owned companies. Investment of up to 6 billion USD in battery plants.	2022
		LG Energy Solution	South Korea	Construction of an integrated battery production capacity with a consortium with Antam (Indonesia) and IBC.	2022
		Foxconn	Taiwan	Establishment of an EV battery production company for commercial vehicles with MMG (Indonesia).	2022
		SK On	South Korea	Construction of a plant to produce nickel intermediate raw materials with EcoPro (South Korea) and GEM (China). Supply to start in 2024.	2022

Note: In December 2023, a spokesperson for the Thai government announced that four Japanese automakers are expected to invest approximately 150 billion THB in local EV production over the next five years.
Source: Compiled by MGSSI based on JETRO, MarkLines, Nikkei Sangyo Shimbun, Yomiuri Shimbun, Toyo Keizai, and other data

4. OUTLOOK ON AUTOMOTIVE ELECTRIFICATION IN SOUTHEAST ASIA

4-1. Thailand

The rapid increase in EV sales in 2023 can be attributed to a surge of Chinese companies entering the market, combined with a rush to purchase before the reduction of subsidies and other preferential policies from 2024. While some EVs have become available at prices comparable to those of Japanese hybrid vehicles due to these preferential policies, buyers are primarily limited to urban youths and early adopters, due to cost-performance and charging convenience. Furthermore, pickup trucks, which account for nearly half of the market in Thailand, are unsuitable for electrification as carrying more batteries onboard reduces the cargo capacity, making commercialization difficult.

Additionally, Chinese companies are currently taking advantage of temporary tax exemptions to push imported finished vehicles,[11] but when mandatory local production starts in 2026, production costs are likely to increase significantly. As subsidies are reduced, it could become increasingly difficult to compete with gasoline and hybrid vehicles on price.

If production capacity expands and exceeds domestic demand, the surplus is likely to be exported. However,

[11] The FTA between China and ASEAN countries reduces the usual 80% tariff on imported finished vehicles to zero.

differentiating these locally produced EVs from those made in mainland China and already exported around the world will be a challenge.

4-2. Indonesia

Indonesia is immature as an EV market more than Thailand. The main demand comes from individuals seeking a second vehicle or those affected by license plate regulations[12] in urban areas. The price difference between popular small MPV[13] gasoline vehicles and EVs is substantial, at two to three times higher, making this also a segment that poses challenges for electrification. Luxury and value-added tax reductions alone are not enough to significantly boost adoption, making a considerable expansion of the EV market unlikely in the near term.

However, similar to Thailand, allowing imported finished vehicles to enter the market before the start of local production is expected to result in an intensification of sales efforts by Chinese manufacturers.

4-3. Implications for Japanese Companies

As a result of the aggressive entry of Chinese companies into Thailand and Indonesia on the back of local EV promotion policies, EV sales surged and took market share from Japanese-branded automobiles. This came as a surprise to many, although it seems unlikely that this trend will continue at the same pace. However, an increase in supply pressure due to build-up of EV production capacity will be inevitable, and the introduction of competition between Chinese firms from mainland China may drive down EV prices, potentially accelerating adoption faster than expected.

Hybrid vehicles continue to perform well in the local market, with Japanese manufacturers maintaining a watchful stance. However, even if EVs do not become the majority, they are anticipated to comprise a certain share of the market, necessitating strategic consideration by Japanese companies on how to protect their key markets from further erosion.

[12] In Jakarta, vehicles allowed into the city center alternate daily based on whether their license plate numbers end in an odd or even number. However, EVs are exempt from this regulation.

[13] MPV: Multi-purpose vehicle—A small minivan with three rows of seats, such as the Toyota Innova.