Asia's Automotive Industry 2025 Opportunities and Challenges

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Contents

1. Introduction

Asia has become one of the most critical markets for the automotive industry. Both in terms of production and innovation. At the moment, the region finds itself midway through a seismic shift. Demand for internal combustion engine vehicles is declining while purchases of both battery electric vehicles (BEV) and hybrid electric vehicles (HEV) rise.

There are opportunities for both, but these are just the tip of the iceberg in terms of what is available. Interest in battery-powered two- and three-wheel vehicles is surging. Production of parts will remain. There is a real need for infrastructure and technology advancements to support Asia's increasingly electrified automotive industry. Several countries have included hydrogen in their mobility plans and are seeking solutions. Autonomous driving technology is of increasing interest.

For European automotive manufacturers and industry-focused organisations, Asia has significant untapped potential. With trade uncertainty lingering over other global markets, a pivot here makes a lot of sense.

That being said, the automotive industry in Asia has been and will continue to be fragmented. Each country is at a different stage of its transition to clean energy mobility. Incentives for foreign investment vary as well. The key is finding the right fit in terms of market and partners.

Having assisted several companies in the automotive sector with their Asia market entrance or expansion, we here at Asian Insiders know the road to success. If you're ready to start the journey, our team of in-country experts can show you the way forward.

This overview from Asian Insiders explores some of the automotive industry opportunities that exist for European entities, offers information on challenges, spotlights a few key markets, and goes over what it takes to win in Asia.

From all of our partners and associate partners, we hope you find it informative. Should you wish to know more, please reach out.

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2. Opportunities in Asia's Automotive

The Asian automotive sector is changing and fast. Battery electric vehicles (BEV) and hybrid electric vehicles (HEV) are surging in popularity. The number of EVs sold in 2023 nearly doubled from the year previous. Growth is predicted to continue throughout the rest of the decade.

Projections vary, but some believe EV sales in Asia could grow by as much as 22 percent annually over the next few years. This would see them make up almost 40 percent of new car sales in 2028. Research from the International Renewable Energy Agency found 20 percent of all vehicles in Southeast Asia will be electric by 2025.

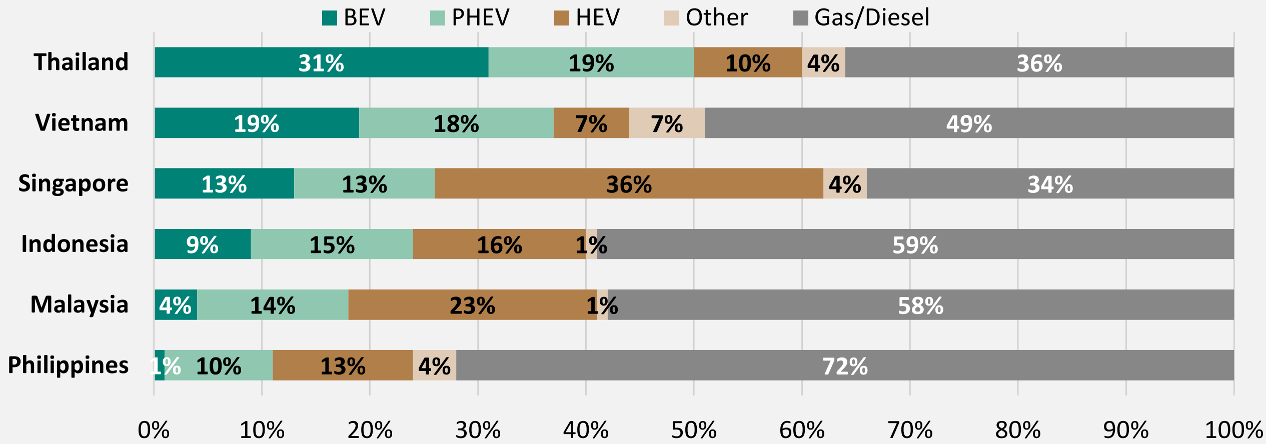

Figure 1: Almost one-third of respondents in Thailand would like a BEV as their next vehicle, the highest proportion among six Southeast Asian countries surveyed by Deloitte in July 2023. Source: China-led EV boom in Thailand threatens Japan's grip on key market | Reuters

That region, alongside India, is where many opportunities can be found for European companies as it relates to EVs. Japan is an interesting market as well but for different reasons. To understand why, it is important to understand what is happening.

China has become the global leader in EVs with more than 11 million cars sold in 2024. Given the country's expertise, many Chinese manufacturers have expanded into Asia and are recording some success.

Japanese carmakers have long been popular in many Asian markets, but a lack of investment in BEVs has led to them falling behind. They hold a distinct advantage in HEVs, although demand for these is uncertain across the region. Firms in the country continue to focus on innovations to improve offerings, such as lightweight parts and autonomous driving.

Similarly, South Korean firms have struggled to make inroads with their EV offerings both at home and elsewhere in Asia. This has allowed Chinese firms to take the lead in Asia, but room remains for other players to enter the fray.

Ultimately, the Asian automotive sector is changing. The situation varies from country to country, but internal combustion engine vehicles are being phased out in favour of BEVs and HEVs. Excitingly, there is a desire to embrace innovation and technology across the board.

The trend is not simply limited to passenger vehicles. A number of countries have implemented policies to transition public transportation from gas-powered to electric or hydrogen-powered. There is a strong push to replace large emitting trucks with electrified models.

EV manufacturing and supply chain
Developing EV manufacturing capabilities and the supply chain supporting these efforts is seen as a priority for many countries. This includes passenger cars as well as commercial buses and trucks. Meanwhile, local automobile producers are seeking parts that will make their vehicles more efficient.

It should be noted that there is competition in this space. For European firms, the key will be to leverage strengths in quality and reliability alongside innovation. Several countries offer incentives for companies that set up domestic manufacturing plants.

Two and three-wheel EV production
Demand for two- and three-wheel electric vehicles is taking off due to skyrocketing interest from food delivery and e-commerce companies which are pervasive around Asia. While passenger EVs receive more headlines, this is a segment that will be just as important moving forward.

Battery manufacturing and recycling
With more EVs hitting the road, battery manufacturing and recycling demand will also increase. Many countries seek to build domestic production, especially ones that have reserves of nickel and other metals. Indonesia, Vietnam, and India are all encouraging foreign investment into this segment.

There is also a growing need for companies with experience in battery recycling. Many EV manufacturers are searching for ways to develop a circular economy for batteries and do not possess all the knowledge and technology to handle this process on their own.

EV charging infrastructure
Almost every Asian country faces a race against the clock to scale EV charging infrastructure. Outside of China, approximately three million charging points are needed by 2030 to support various sales estimates. That is more than double what was in operation at the end of last year. Most markets have made this a priority area.

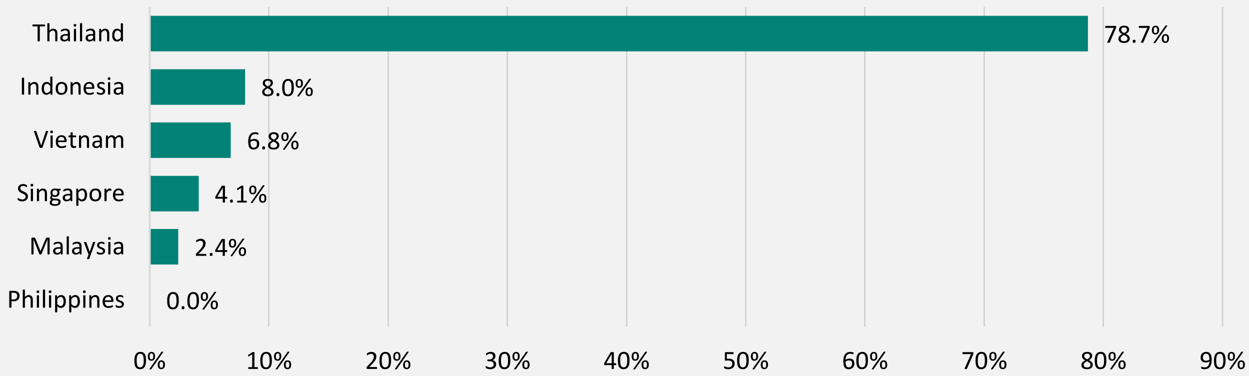

Figure 2: A snapshot from 2023/Q1 showing sales share of ASEAN countries of EV's (%). Sources: https://evat.or.th/ @ NABS 2023, https://www.counterpointresearch.com

Shared and commercial mobility
Electrification of transportation fleets for passengers and goods is creating opportunities in several markets. Many countries see transitioning commercial vehicles and buses from gas to environmentally friendly sources as an easy win. Ride-sharing services are expected to be incentivised to use EVs as well.

Aftersales service and maintenance
Specialised service centres are seeing an increase in interest as more EVs hit the road. These include areas such as battery servicing, tire changing, and maintenance services in addition to mechanic training.

3. Challenges in the Asian Automotive Industry

Bumps in the road are commonly found across Asia. Disruption from ICE vehicles to BEVs and HEVs was swift and left many countries unprepared. Many still find themselves playing catchup and needing help from overseas. However, market entrants may find themselves staring at their own set of challenges.

Infrastructure concerns in many Asian countries remain despite investment in the sector. Development has been uneven, which is holding back demand and creating some issues for manufacturers of vehicles and parts.

Governments continue to tackle the problem, but progress has not been as fast as some have hoped, especially considering climate targets in place. This compounds consumers' anxiety over battery range and lengthy charging times, possibly hindering EV adoption.

Growing pains will be felt for the foreseeable future as many countries do not have a strategy or national framework in place. The private sector will need to take the lead, and many firms are open to partnerships with overseas entities with experience scaling infrastructure.

There has also been a lack of progress and clarity in other areas of the automotive industry. Hydrogen is a prime example of this. A handful of countries have created plans to include hydrogen in mobility strategies. Some progress has been made. Yet, the pace of this has been slow.

The continued presence of hybrids in Asian markets adds a further wrinkle to a complex situation. While not a huge roadblock, HEVs may limit the upside of battery infrastructure and manufacturing in the near term. This is not a massive challenge. However, it is one to monitor, especially in markets where hybrid vehicles are popular.

Another challenge can be found in the form of competition from China which has had a significant head start and is now active across Asia. Not only are Chinese EV brands popular in Southeast Asian countries, but manufacturers are establishing parts factories and logistics facilities across the region.

The head start is not insurmountable as several countries, including those in Southeast Asia, are offering incentives to manufacturers. Meanwhile, developing infrastructure and other technologies is still relatively wide open.

Ultimately, challenges in the Asian automotive industry will be overcome. Those overseas firms present in countries and helping them remove said obstacles will have a massive advantage over late arrivals. The activity of Chinese companies is another important consideration. Waiting for markets to develop further will only allow them to consolidate their lead in the sector.

5. Market Spotlight: India

The automotive sector in India has attracted USD36 billion in Foreign Direct Investment over the past four years and it now contributes approximately six percent to India's national GDP. It is the fourth largest manufacturer of passenger vehicles and the largest manufacturer of two-wheelers and three-wheelers globally.

Domestic demand remains strong, with more than 20 million vehicles registered in 2023. The country is also advancing in sustainable mobility, with 4.4 million EVs registered as of August 2024, achieving a 6.6 percent market penetration rate.

The Indian government set a target of having 30 percent of all vehicles sold in the country by 2030 be electric. This would see approximately 13 million EVs hitting the road. The figure is higher than the total of what is projected to be sold in all of Europe during the same year and shows why the market is so promising.

Reaching the 13 million EVs sold target would mean the sector records a compound annual growth rate (CAGR) of more than 45 percent from 2023 to 2030. A combination of government policy support, technological advancements, and rising environmental awareness is leading to growth in the industry. The PM E-DRIVE scheme has set aside USD 1.3 billion to develop the production of electric two- and three-wheelers as well as public transport vehicles.

The Ministry of Commerce and Industry has also announced a new initiative to promote India as a hub for electric two- and three-wheelers. The plan will see incentives offered to manufacturers that begin exporting these.

In early 2024, the Indian government began encouraging state and local entities to include electric mobility solutions as part of smart city development plans. Various projects, such as the Smart Cities Mission, now include provisions for setting up EV charging stations, establishing EV fleets, and adopting clean mobility solutions for last-mile connectivity.

Another interesting trend, India is emerging as a global hub for auto component sourcing, and the industry exports over 25 percent of its production annually. By 2028, the Indian auto industry aims to invest USD7 billion to boost the localisation of advanced components like electric motors and automatic transmissions by reducing imports and leveraging the "China Plus One" trend.

At the moment, India does not have all the required technology, knowledge, and infrastructure to support its goals. Foreign investment will be needed, although this remains a challenging market to enter. One notable positive: the allowance of 100 percent FDI under the automatic route. Mercedes-Benz, Hyundai, and Toyota are a few of the international players to have announced substantial investments recently.

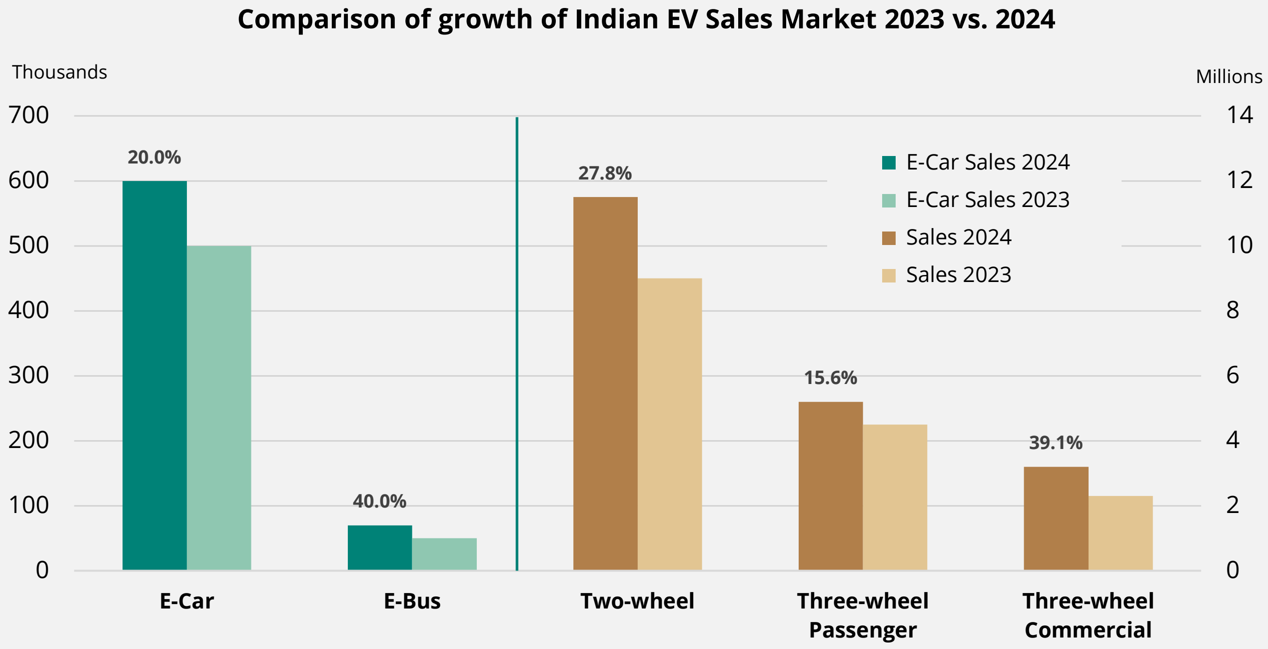

Figure 3: Comparison of Indian EV Sales and Growth Rate (2023 vs. 2024). Sources: Vahan Dashboard, Telangana State RTO, JMK Research

Know Before You Go: Insights from Pawan Bhatnagar, Asian Insiders Partner India

For international companies considering investment, partnerships, or expansion in India's automotive ecosystem, now is the time to make the move. The sector has been growing rapidly in recent years and many early issues are now a thing of the past. Overseas firms can come in and truly hit the ground running.

To understand why, it is important to look at some of the market dynamics. Firstly, India is the third largest automobile market and fourth largest auto component manufacturer globally. Domestic auto sales and automotive manufacturing output are both projected to increase in the years to come.

EVs are the country's fastest growing segment with strong government incentives under the FAME II and PLI schemes driving sales which have increased sixfold since 2020. Two-wheelers, three-wheelers, and fleet vehicles lead the surge. The rise of EVs has created immense opportunities for OEMs, battery manufacturers, and charging infrastructure providers in India.

Hydrogen is also an interesting segment as it relates to the country's automotive ambitions. India's National Green Hydrogen Mission is investing USD2.4 billion to develop hydrogen production and refuelling infrastructure. The government is also backing commercial deployment of hydrogen-powered, heavy-duty trucking and public transport.

With massive potential market growth and favourable government policies in place, India is uniquely positioned to be the automotive industry's next big destination.

6. Market Spotlight: Japan

Japan has long been a global automotive industry leader but has found itself in between a few different trends without a clear direction. From a BEV perspective, sales are the lowest among advanced economies. Meanwhile, no Japanese brand placed among the top 20 worldwide BEV makers by vehicles sold.

Domestically, infrastructure has been the most significant issue as consumers remain dubious in the viability of electric cars. This has seen hybrid electric vehicles preferred by consumers which has compounded issues. Unlike many other Asian countries, Japan is pursuing multiple paths.

There is also the presence of hydrogen fuel cell vehicles (FCV) which further complicates matters. These can be found in the passenger vehicle and commercial truck markets. Cities are starting to leverage FCVs as service vehicles.

The government is supporting the development of all three to a certain extent and seems content to continue doing so. A significant amount of infrastructure is required, and the country is open to working with companies that can assist with reaching decarbonisation targets for the automotive sector.

Innovation related to systems, software, and aftermarket products for vehicles and infrastructure is being sought. One interesting opportunity is for automotive components that can improve energy efficiency. Items such as lightweight materials are universal requirements for manufacturers regardless of if they make BEVs, HEVs, or FCSs.

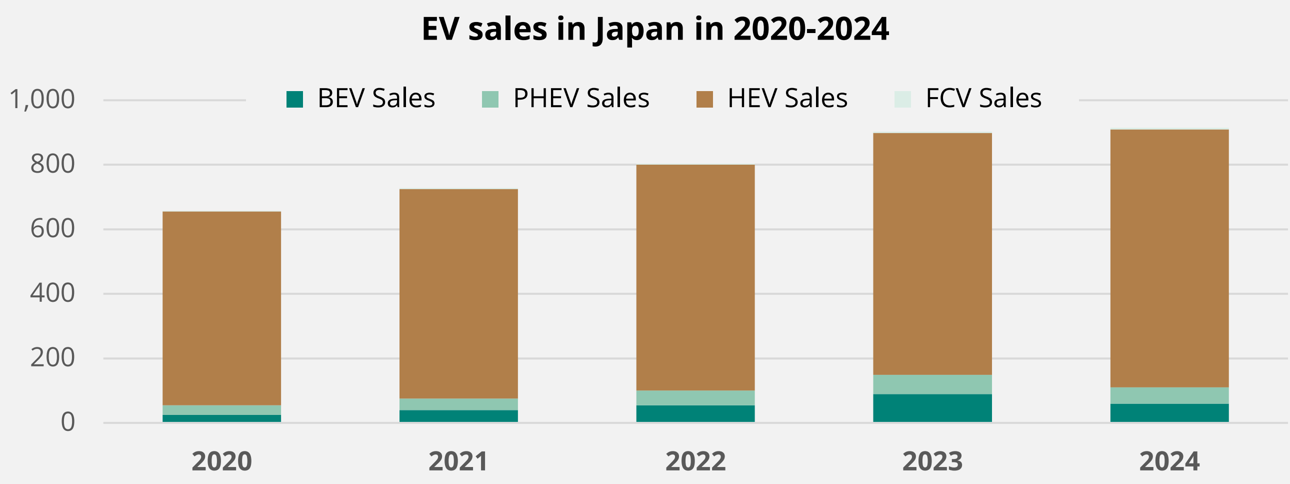

Figure 4: Japan EV Sales Statistics. Sources: https://roadgenius.com/cars/ev/statistics/japan/ Note: Please note that the above figures are approximate and based on the available data.

Speaking of FCVs, Japan is a particularly appealing market for those with hydrogen capabilities. It will not only be leveraged in the automotive industry but also has potential for other uses as part of the country's clean energy strategy.

Autonomous driving is an area where Japan is looking for technology and tools to help it build upon existing efforts. Interestingly, the country is more focused on utilising it for its rural areas where limited public transportation and a shrinking workforce have caused mobility issues.

Japan is extending 5G networks to cover these rural areas, making autonomous driving a realistic possibility. Opportunities remain in urban areas as well. This creates demand for autonomous driving technology, training, and skill development.

Know Before You Go: Insights from Haruna Shino, Asian Insiders Partner Japan

The Japanese automotive market is unique in that the focus here is on “electrified vehicles,” including BEVs and HEVs. That is a significant difference from most other countries in Asia which do not include hybrids in their own EV targets.

With the Japanese government having set a 2035 goal to have all new passenger vehicles sold domestically be “electrified, " HEVs will have a prominent role given their existing popularity among consumers.

There will also be continued focus on hydrogen fuel cell vehicles in the country. This has created a multi-pathway strategy where solutions for BEVs, HEVs, and hydrogen fuel cell vehicles are all needed. Many Japanese OEMs have already adopted this approach to ensure they aren’t left behind. If Japan is to reach decarbonisation, all three will be required.

Hydrogen is perhaps the most intriguing opportunity in Japan at the moment because its reach isn’t simply limited to passenger vehicles. It is being used in other modes of transportation which will give it staying power. This is creating demand for hydrogen fuelling stations as well as other facilities that are part of the value chain.

7. Market Spotlight: Thailand

Thailand has been a leading automotive market in Southeast Asia with many of the world's top carmakers alongside numerous parts manufacturers active in the Kingdom. The country has also been among the quickest in the region to pivot to EVs.

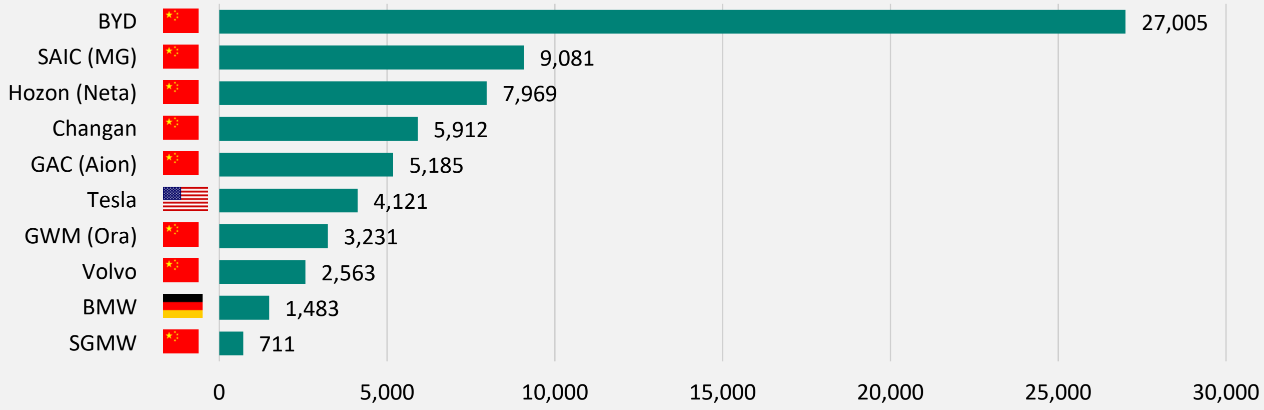

Figure 5: Thai Electric Vehicle Sales Ranking 2024. Source: BYD crowned Thailand's 2024 EV sales and surpassed Toyota in Singapore

The move was seen as necessary for Thailand to remain a major manufacturing hub. While internal combustion engines still have a role to play in the country, the segment is starting to shrink with a few overseas brands having either scaled down ICE operations or shuttered factories entirely.

This has been offset by what the Thai government has deemed "Next-Gen Automotive", one of the sectors included in the Thailand 4.0 strategy. Through the Board of Investment (BOI) a raft of incentives is available for overseas firms investing in BEVs, PHEVs, electric buses, electric trucks, two- and three-wheel EVs, parts and components, and charging stations.

Incentives should help Thailand reach its ambitious production targets. Approximately 30 percent of passenger vehicles made will be zero emissions by 2030 with the total number expected to surpass one million before 2035.

Current goals for zero emissions bus and truck manufacturing include having these make up nearly half of those produced by 2030, with this figure reaching more than 85 percent by 2035.

Short-term local demand for passenger EVs, electric buses, and electric commercial vehicles is predicted to grow as well. The BEV segment is one to watch as it recorded a nearly 400 percent increase in market value between 2021 and 2022 and is predicted to have a compound annual growth rate of more than 25 percent through 2027.

The country also aims to have all cars registered to be zero emissions by 2035. Notably, public perception of EVs in Thailand is increasingly positive. Concerns over the ability to charge and battery range are declining. Consumers are also placing a greater importance on the environment when purchasing a vehicle.

On the consumer side, opportunities remain for automobile manufacturers, but competition is quickly growing. Thailand is committed to the development of charging stations with fast charging of particular interest. Innovations in this space to reduce costs are in highest demand.

In terms of manufacturers, they are looking for EV-based supply chain solutions. OEM auto parts manufacturers need assistance with adopting the technology, manufacturing, management, and organisation that comes with the production of EV parts and components.

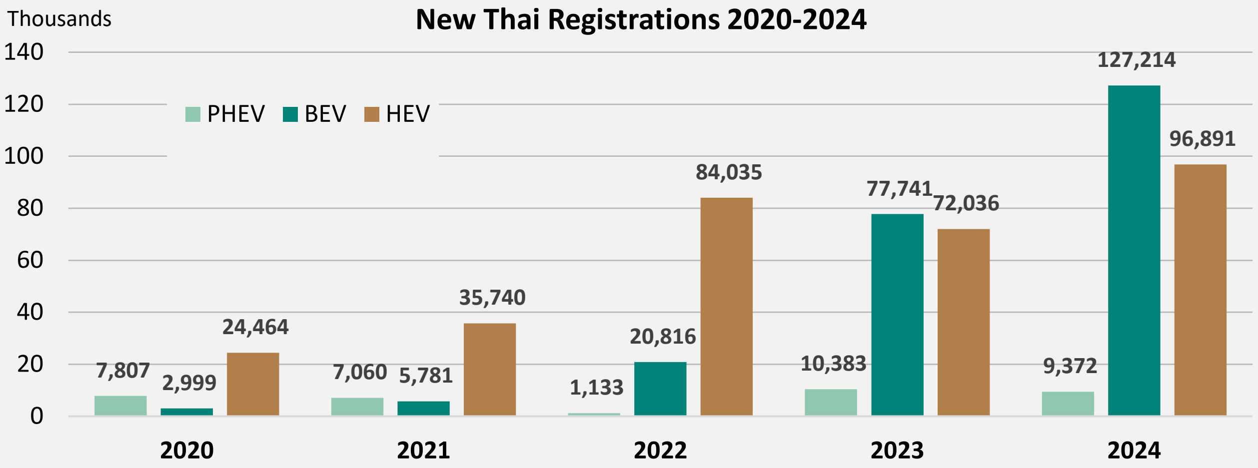

Figure 6: New Electrical Vehicle Registration in Thailand 2020-2024. Sources: https://evat.or.th/

Know Before You Go: Insights from Axel Blom, Asian Insiders Managing Partner Thailand

Thailand is leading the way in terms of EV adoption in Southeast Asia. People are often surprised to see so many electric cars, taxis, and buses on the roads of Bangkok. Surveys conducted in the past year show the public's confidence in EVs continues to grow.

That makes investing in infrastructure a priority. Emphasis has been placed on the adoption of EVs in Thailand but there remains a lack of charging points, maintenance centres, and other facilities. This is a segment where firms with the right technology and expertise can come in and hit the ground running. Elsewhere, the Thai auto part manufacturing segment continues to attract overseas investment. The development of industry-specific clusters and the country's status as the regional leader in automotive production make it an attractive destination.

The continuation of incentives from the Thailand Board of Investment for foreign companies investing in the sector are also worth highlighting. The most recent of these was the approval of an eight-year tax exemption for joint ventures between Thai and foreign companies to manufacture automotive parts.

A key for the country is moving away from ICE automotive part production to BEV manufacturing. Companies looking for a presence in Asia are advised to consider Thailand given incentives available, well developed industry clusters, and the market's long-term status as a leader in the automotive industry.

8. Three Keys to Win in Asia

Asia is home to diversity. You'll encounter a wide range of languages, cultures, economies, and business approaches. What works in one market may not work in a neighbouring market. What's needed can vary greatly from country to country.

This can derail foreign investors considering entering Asia or expanding to other countries in the region. It is easy to fall into the trap of preconceived notions. This can be in the form of seeing a competitor succeed in a market or simply believing an opportunity exists because it seems like it should exist.

For businesses, winning in Asia requires a lot more than casual observations or gut feelings. After all, these are not enough to make decisions in home markets. With that in mind, here are three keys to win in Asia.

Choose the best market
This sounds simple. To win in Asia, you must have an offering that has unique features capable of adding value for customers. But the reality is far more complex. You need to factor in need, pricing, and market sophistication.

The only way this can be accomplished is through market research, testing, and validation. Yet, too many companies place the cart before the horse and invest in entry before understanding the needs and expectations of potential customers. If you want to choose the best market, take the time to understand it. In other words, know before you go.

Develop your sales channel
After you have found the right market in Asia, the next step is to develop your sales channel. Understand the addressable market size and market behaviours. Create a detailed strategy to reach targeted customers in different business segments. Fine tune the product and value proposition so it is tailored for the market.

Select the right partner
Only when you have set expectations for a potential partner can you begin searching for the right one. Too often, businesses considering market entry in Asia focus so much on locating the "best" partner that they neglect to address how that partner will succeed.

You should know how potential partners will work with you and if they have the skills required to close deals via your sales channel. The right partner is one that shares similar business values, understands your product, knows the target market, and can ultimately help you win.

9. Further Reading

APAC has become the leading market for the automotive industry, with further growth potential. China, Japan, India, and South Korea account for more than 50 percent of global passenger car production. Asian automakers are continuously driving technological innovations in the industry. This is increasingly crucial as companies navigate fierce competition and the uncertainty brought about by trade policies from the U.S., the world's largest automotive importer.
https://www.statista.com/topics/3984/automotive-industry-in-the-asia-pacific-region/

Asian automobile market is expected to increase by 3.8% year-on-year to 830,000 units in 2024, setting a record high for the third consecutive year.
Asian Automotive Analysis - **per country projections for 2025** https://aaa.fourin.com/

Frost & Sullivan's ASEAN Automotive Market Outlook, 2024 identifies three major themes will define the ASEAN automotive market in 2024:

- accelerating vehicle electrification
- intensifying competition between Indonesia and Thailand in their quest to attract foreign investments and emerge as automotive production powerhouses in the region
- mounting challenge to Japanese automakers from Chinese and South Korean rivals.
  https://www.frost.com/growth-opportunity-news/asean-automotive-market/

Opportunities in Asia's automotive sector
Asia's diverse range of policy frameworks, infrastructure readiness and uneven wealth distribution mean the electrification of mobility will follow different paths in individual markets. Two- and three-wheelers and public transport will continue to lead in some markets; private cars and commercial fleets in others. Vietnam, for example, is the world's second-largest market for electric two-wheelers (E2Ws), according to HSBC Global Research, which projects annual combined E2Ws and electric car sales could rise from less than one million in 2024 to over 2.5 million by 2036.
https://www.business.hsbc.com/en-gb/insights/innovation-and-transformation/driving-new-opportunities-in-asias-auto-sector

Purpose-driven business models to power future growth
The automotive industry has been the primary driver of economic prosperity globally. Personal mobility, which has made automotive firms mature, is disrupting the industry today. Carmakers no longer enjoy exclusivity, and there is no more a high entry barrier for new entrants. This is eating into the profitability of industry players. While the demand for mobility is increasing, it cannot be capitalised with the old ways of demand fulfilment. Innovation in product and enterprise processes is not good enough to meet the ever-increasing untapped demands.

The companies that operate with a purpose-driven business model built around an innovative partner ecosystem will emerge as winners.
https://www.tcs.com/what-we-do/industries/manufacturing/white-paper/shared-mobility-asia-pacific-market

10. About Asian Insiders

Asian Insiders is an Asia-Wide Market Entry and Business Development network of in-country business experts providing the inside track to entering and succeeding in business in Asia. Each Asian Insiders' member partner has a long-standing record of engagement within their territory, allowing an extensive in-country network amongst local business leaders, industry experts and government officials. Collectively, Asian Insiders has completed 1,000+ projects for client companies ranging from start-ups to global conglomerates from all over the world.

Asian Insiders offers comprehensive, consistent advisory support across most Asian markets. Supporting market feasibility and investigation, strategy development and implementation, channel development and improving market penetration for sustainable business success.

11. About this Report

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