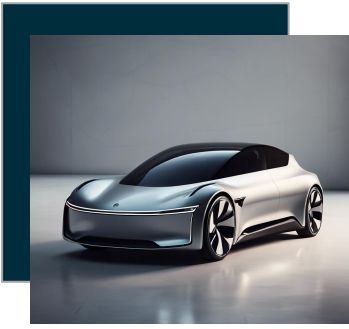


E-Mobility in ASEAN on the Rise

Discover the opportunities in the emerging ASEAN E-Mobility Market



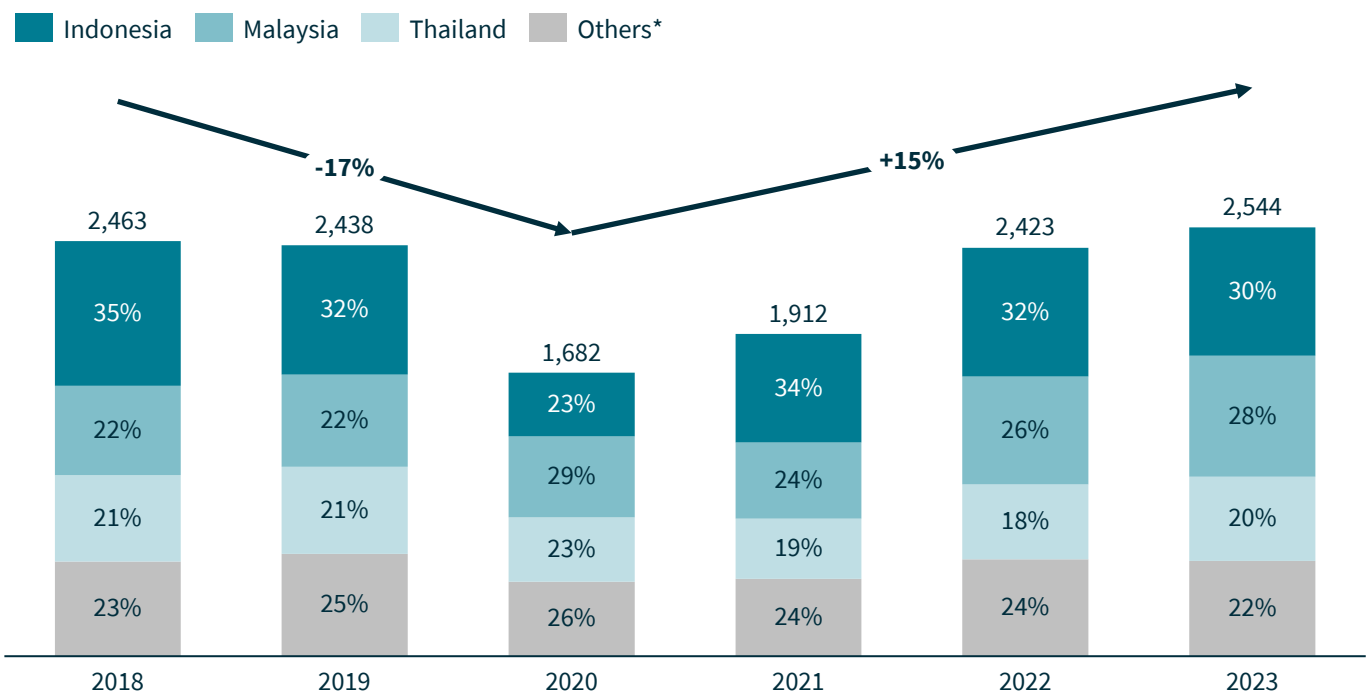
 ASEAN's electric vehicle market is on the rise , fueled by the increasing availability and affordability of EV models. This burgeoning market underscores the region's dedication to sustainable transportation and economic development. With supportive government policies, investments in infrastructure, and a growing consumer base, ASEAN is poised to become a key player in the transition to e-mobility.



ASEAN's E-Mobility Value Perception Insight Overview of the Passenger Car Market in ASEAN

The overall annual sales of passenger cars in ASEAN totalled 2.5 million units in 2023. Indonesia, Malaysia, and Thailand have long occupied the top three positions in ASEAN car sales. Indonesia is the largest passenger car market in ASEAN, with a relatively complete automotive parts supply chain. Thailand is the largest automobile exporter in the ASEAN region, and Malaysia has strong local brands.

PASSENGER CAR SALES IN ASEAN COUNTRIES (K UNITS)



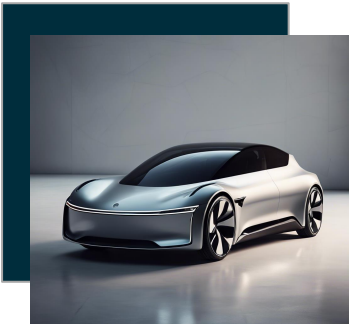
Source: Marklines, EAC research

* Others includes Singapore, Vietnam, Philippines, and Myanmar

Post-pandemic, the ASEAN passenger car market saw a 15% annual growth. By 2023, sales hit 2.54 million vehicles, with **78% coming from Indonesia, Malaysia, and Thailand**

- ❖ **Indonesia remains the largest market in ASEAN**, focusing on automotive manufacturing and electric vehicles. It produces over 1.40 million vehicles¹⁾ annually and exports around 470,000. The strong Japanese-led parts supply chain and benefits from the ASEAN Free Trade Area enhance Indonesia's potential as a leading auto parts market.
- ❖ **Thailand, the second-largest market**, boasts a robust automotive industry employing 10% of its workforce. It produces 1.84 million vehicles¹⁾ annually through 33 manufacturers, such as Toyota and Honda, and exports over 900,000 vehicles, making it ASEAN's largest vehicle exporter.
- ❖ **Malaysia, the third-largest market**, sees its automotive sector contributing 4% to its GDP and focuses on developing its new energy vehicle supply chain. Its car market is led by local brands, and the country's strong chip industry, the 7th largest in the world, supports automotive electrification and development.

1) incl. commercial vehicles



ASEAN's E-Mobility Growth Momentum

Electric Vehicle Market Potential in Selected ASEAN Countries

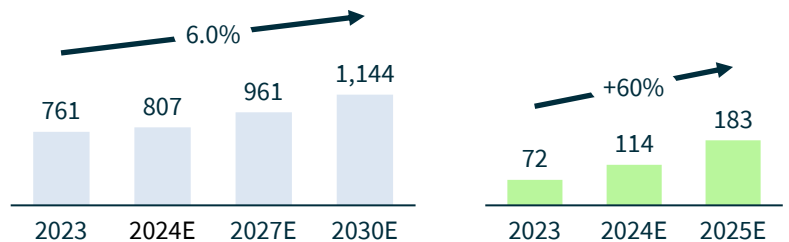
The market for EV in ASEAN is expected to grow alongside the overall passenger car market. Indonesia is expected to feature electric vehicle sales of 180,000 units by 2025, followed by Thailand which is expected to reach sales of 177,000 units.

OUTLOOK PASSENGER AND EV SALES IN ASEAN (K UNITS)



Indonesia

GDP '23: USD 1.3 trillion
Population : 276 million
Per Capita GDP : USD 4,248
82 vehicles per 1,000 people

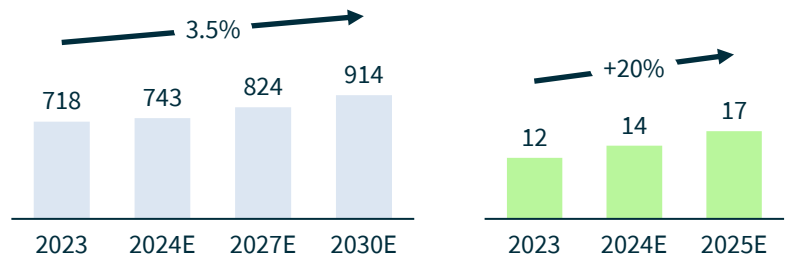


- Significant demographic dividend expected in the future, with larger number of children per family.
- There is an emphasis on online consumption, and consumers are quite price-sensitive.
- Cash subsidies for new energy vehicles are relatively weak, with a preference for reflecting benefits through road rights subsidies.



Malaysia

GDP '23: USD 344 billion
Population : 33.7 million
Per Capita GDP : USD 12,104
430 vehicles per 1,000 people

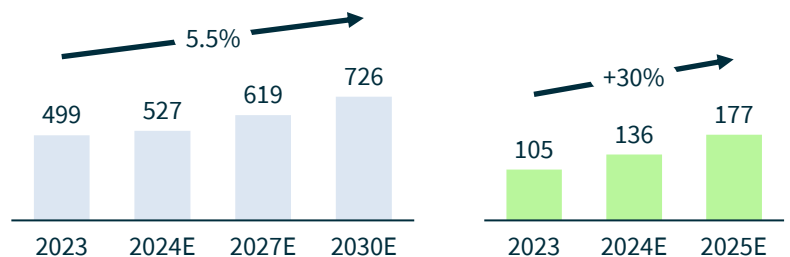


- Decrease in willingness to have children among families, and consumers are more price-sensitive. Each family already owns an average of 2 cars, fuel prices relatively low, making EV less attractive.
- Tendency towards local protectionism; government has a duty-free policy for electric vehicles, and policies focus on developing the domestic new energy vehicle industry chain.

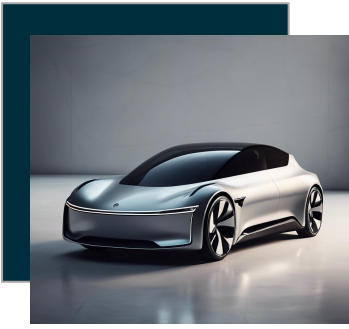


Thailand

GDP '23: USD 513 billion
Population: 67.9 million
Per Capita GDP: USD 7,189
269 vehicles per 1,000 people



- Facing social issues such as overall high household debt and reduced willingness to have children.
- The cost difference between refuelling and recharging is quite large, fuel is around 150% higher.
- The government has a comprehensive plan called EV3.5 to develop new energy vehicles, but the support policies are gradually weakening compared to EV3.0.



ASEAN's E-Mobility Consumer Perception Overview of Respondents in User Value Perception Survey

EAC'S ASEAN CONSUMER INSIGHTS STUDY (1,000 RESPONDENTS)

Recent consumer research¹⁾ conducted by EAC revealed that 17% to 30% of car owners have or intended to purchase an electric vehicle. In Thailand and Indonesia, majority of potential electric vehicle consumers are females, whereas in Malaysia, the gender distribution is more balanced.

Thailand



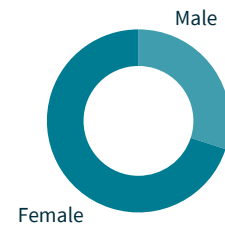
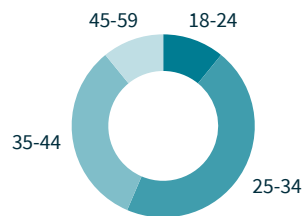
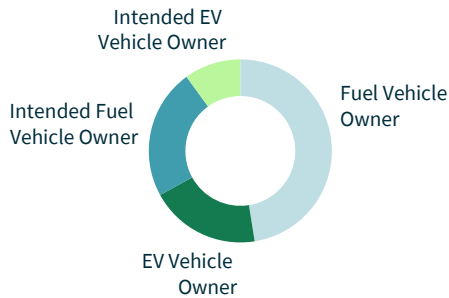
30% have or intend to purchase an EV



Age group 25-34 = 46%



70% are Females



Malaysia



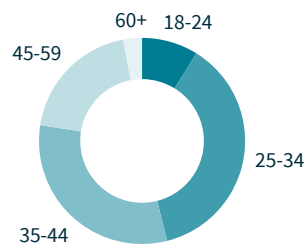
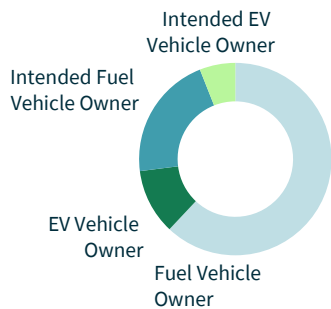
17% have or intend to purchase an EV



Age of 25-34 = 37%



Equal gender ratio



Indonesia



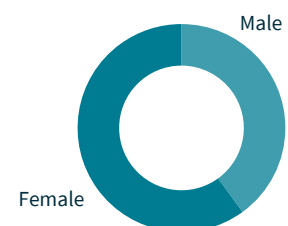
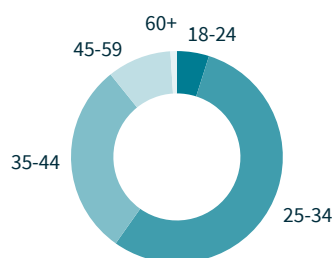
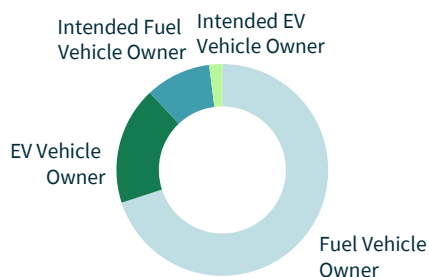
20% have or intend to purchase an EV



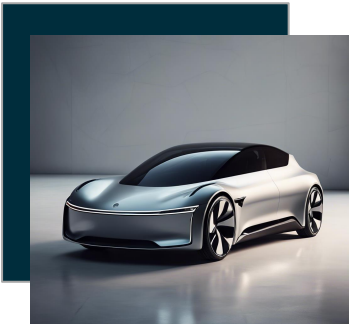
Age of 25-34 = 55%



60% are Females



1) Survey focus on compact vehicles



ASEAN's E-Mobility Opportunity Mapping

Valuable experiences and support from EAC

OPPORTUNITIES

- ❖ **Government Incentives:** strong policy support, subsidies and tax breaks, is driving EV adoption
- ❖ **Growing consumer demand:** rising middle-class and eco-conscious consumers pushing demand
- ❖ **Manufacturing hub:** strategic location and cost advantages offer opportunity for production and exports
- ❖ **Urban mobility solutions:** electric cars will help to combat pollution and congestion in rapidly growing cities
- ❖ **Charging infrastructure growth:** expanding EV charging networks make electric cars more viable

CHALLENGES

- ❖ **Policy inconsistencies:** varying regulations and standards across ASEAN countries create barriers
- ❖ **Consumer awareness:** lack of understanding and confidence in EV technology hampers adoption
 - ❖ **Increasing competition:** creating profit pressure for both OEMs and components suppliers
- ❖ **Limited charging infrastructure:** insufficient charging networks across ASEAN nations restrict EV usage
- ❖ **Battery supply chain constraints:** reliance on imported batteries and raw materials poses supply chain risks
 - ❖ **After-sales support:** limited availability of EV maintenance services and spare parts availability



EAC SUPPORT OPTIONS



International OEMs

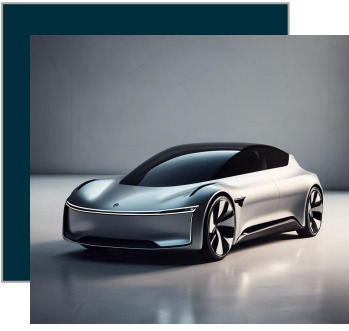


Component suppliers



Battery & charging

- ❖ **Market and competition dynamics** (ICE vs. EV) and **regulatory and policy transparency**
- ❖ **Consumer insights** and value perception surveys
- ❖ **Product planning** and pricing strategy
- ❖ **Sales & marketing strategy** and after-sales service set-up
- ❖ **Consumer journey handbook** and training videos
- ❖ **Production feasibility** study and planning
- ❖ **Transparency OEM production** roadmap ASEAN
- ❖ **Technical and commercial supply requirements**
- ❖ **Regional & local partnering concepts** (M&A, JVs)
- ❖ **Build-up of local value chain** and sub-suppliers
- ❖ **Ideal manufacturing location** search
- ❖ **Mapping of customer universe** (OEMs, tiers, property developers)
- ❖ **Supply chain set-up and raw material access**
- ❖ **Manufacturing planning and location screening**
- ❖ **Local eco-system build-up** (government, utilities)
- ❖ **Recycling strategy** and waste reduction concepts



ASEAN's E-Mobility Value Perception Insight
Benefit from our project experiences and local network

Contact our experts directly to explore growth opportunities for your business



Daniel Berger  
Partner
EAC Shanghai



Addie Wei  
Management Consultant
EAC Shanghai



Johan Zainal  
Senior Consultant
EAC Kuala Lumpur

EAC – YOUR PARTNER OF CHOICE in ASIA

YEARS OF EXPERIENCE	IN OVER COUNTRIES AROUND THE GLOBE	MORE THAN PROJECTS IN GROWTH MARKETS
30	50	2,500



For four years in a row, EAC has been one of the best management consultancies in Germany.

Our mobility clients in the ASEAN region



Partners: Dietmar Kusch / Daniela Bartscher-Herold / Daniel Berger / Uwe Haizmann / Ashish Kumar / Anna Ahlborn / John Deng / Eric Luo / Ketan Jadhav

EAC MUNICH
EAC - Euro Asia Consulting PartG
Widenmayerstraße 29
80538 München

Phone +49 89 92 29 93-0
eac-muc@eac-consulting.de

EAC SHANGHAI
EAC - Euro Asia Consulting
Ascendas Plaza, Rm. 1902
333 Tian Yao Qiao Road
200030 Shanghai | China

Phone +86 21 63 50 81 50
eac-sha@eac-consulting.de

EAC MUMBAI
EAC - Euro Asia Consulting Pvt. Ltd.
704, Leela Business Park,
Andheri Kurla Road, Andheri (East),
Mumbai -400 059/ India

Phone +91 77 18 96 71 26/ 27
eac-mum@eac-consulting.de

EAC KUALA LUMPUR
EAC - South East Asia Sdn Bhd
GBC Menara Hap Seng 2
Plaza Hap Seng, No. 1 Jalan P.
Ramlee 50250 Kuala Lumpur

Phone +60 3 9235 1800
eac-sea@eac-consulting.de

EAC USA
EAC Int. Consulting Inc.
300 East 59th Street
New York, New York 10022
USA

Phone +1 917 345-6365
eac-usa@eac-consulting.de