

EV Charging
83wh 7kwh

80%

剖析東協電動車市場

An Analysis of ASEAN Electric Vehicles Market

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Why is EV Necessary for ASEAN?¹

The energy demand in the transportation sector is increasing and the transportation sector currently emits a high amount of greenhouse gases. Electric vehicles (EVs) were introduced to mitigate these emissions of greenhouse gases. EVs are well-deployed in leading countries/regions such as China, Europe, and the United States due to EV-friendly policies and well-planned EV charging infrastructure. Association of Southeast Asian Nations (ASEAN) follows these leading countries and aims to become the next EV hub. Effective deployment of EVs requires involvement from governments and willing consumers that push EVs into communities. A survey was carried out among policymakers, manufacturers, and academia to determine suitable policies and financial incentives to increase the deployment of EVs in the market. The survey also included the hurdles and issues faced by the community to adopt EVs and identified that high purchase cost and charging issues are hampering EV deployment in ASEAN. EV-friendly policies and financial incentives were suggested in the survey and will be a good reference material for EV manufacturers and policymakers in ASEAN.

► Association of Southeast Asian Nations (ASEAN) aims to become the next EV hub.

ASEAN Countries and the EV Market

Thailand

Thai auto market remained in a state of contraction in 2021, with the FTI forecasting its total annual car sales to be 750,000 units, a drop from 792,000 units in 2020, largely due to a weak economic outlook caused by the ongoing pandemic.

Thai auto market was refreshed in late 2021, with December vehicle sales likely to see a boost after Chinese automaker Great Wall Motor launched a 100% electric vehicle at a competitive price (Ora Good Cat, priced from \$29,300 to \$35,200). The pressure on Japanese manufacturers in the markets that have so far dominated the entire vehicle market is likely to intensify; hence Japan responded:²

- Toyota launched its Cross Hybrid model, priced at \$35,600,
- Mitsubishi debuted a plug-in hybrid, the Outlander PHEV, at \$51,800.

► Thailand plans to attract 400 billion baht (US\$12.08 billion) in investments over the coming years and support the production of 1.2 million EVs and 690 charging stations by 2036.³

Singapore

Singaporean electric vehicle (EV) population was more than doubled last year, growing from 1,397 vehicles at the end of 2020 to 3,713 vehicles at the end of 2021.⁴ Tesla EV sales boom in Singapore, pushing rivals' models off the streets. Tesla's most basic Model 3 costs nearly \$148,300 in Singapore, largely due to an ownership levy, compared with less than \$40,000 in the United States.⁵

Singapore made a great push for electric vehicle (EV) adoption in 2021 with the Government unveiling several schemes to encourage consumers make the switch.

► *Singapore will set aside \$30 million over the next five years for EV-related initiatives, such as measures to improve charging provision at private premises. EV sales are expected to continue to grow at an average annual rate of 40% YoY from 2022-2030 to reach an annual sales volume high of just under 7,000 units and an EV-penetration rate of around 9.6% of total vehicle sales.*⁶

Indonesia

According to Gaikindo's report on EV sales in Indonesia in 2019-2021, only 705 total sales were recorded in 2019, with hybrid sales recorded at 685 units and PHEV (Plug-in Hybrid Electric Vehicle) sales at 20. As of June 2021, the number of electric vehicle sales in Indonesia totalled 1,900 units. This total includes 1,378 (72.5%) hybrid models, 34 (1.8%) PHEV units, and 488 (25.7%) BEV units. When viewed from the total sales of cars in Indonesia in the first semester of 2021, the interest in the electric vehicle market is at 0.5% of total cars sold. These figures show that the Indonesian EV sector is still in its infancy. However, it also shows that the market interest has grown significantly. Considering the country's rapid pace of urbanization and the significant share of youths in the country's demographic, there is no question that the interest in EV will only rise as the Indonesian society moves towards a more sustainable lifestyle.⁷ The Indonesian electric vehicle market is highly concentrated at its early growth stage. The main reasons include limited selectivity, high price barriers, and the dependence of internal combustion engines. Major market contributors include GESITS (a local electric two-wheeler motorcycle start-up), Mitsubishi (a leader in the electric passenger vehicle market), and BYD (a leader in both electric public buses and electric public taxis).⁸

► *Indonesia has an ambitious plan to become a major player in the global EV market, and it has developed a US\$17 billion roadmap for this specific sector. This roadmap aims to reach an adoption of 2.1 million electric motorcycle and 400,000 electric cars – of which 20% are locally manufactured by 2025. Indonesia EV projects require much foreign investment support⁹, and therefore, global electric vehicle companies should invest in Indonesia's EV sector for huge opportunities.*

Malaysia

The size of Malaysian electric vehicle market was valued at USD 13.82 million. In 2020 the total revenue is expected to grow at 12.46 % through 2021 to 2027, Malaysian electric vehicle market value is reaching nearly USD 31.44 million. Malaysia's new vehicle sales or total industry volume (TIV) eased 3.9 percent (or 20,603 units) to 508,911 units in 2021 from 529,514 units registered in 2020. Of this, passenger vehicles (PV) accounted for 452,663 units and commercial vehicles (CV) comprised 56,248 units, according to the latest data by the Malaysian Automotive Association (MAA).¹⁰

► *The government had planned to fully exempt import and excise duties as well as sales tax for EVs with a road tax exemption of up to 100 percent, individual income tax relief of up to RM2,500 on the cost of purchase, installation, rent, hire purchase as well as subscription fees for EV charging facilities.*

Overlook to ASEAN EV Market

The ASEAN electric vehicle market was valued at USD 498.93 million in 2021 and is expected to reach USD 2,665.3 million by 2027, registering a CAGR of 32.73% during the forecast period (2022 - 2027).¹¹ ■

¹ <https://aseanenergy.org/electric-vehicle-adoption-in-asean-prospect-and-challenges/>

² <https://asia.nikkei.com/Business/Automobiles/Thai-EV-market-heats-up-as-Chinese-player-enters-with-low-prices>

³ <https://www.aseanbriefing.com/news/thailand-issues-new-incentive-package-for-electric-vehicle-industry/>

⁴ <https://www.straitstimes.com/singapore/growing-interest-in-electric-vehicles-whats-next-for-singapore>

⁵ <https://www.reuters.com/business/autos-transportation/tesla-ev-sales-boom-singapore-pushing-rivals-models-off-streets-2021-10-28/>

⁶ <https://sbr.com.sg/transport-logistics/news/electric-vehicle-sales-boom-imminent-in-singapore-fitc>

⁷ <https://indonesien.ahk.de/infoteh/news/news-details/indonesian-electric-vehicles-industry-development-gains-momentum>

⁸ <https://www.globenewswire.com/news-release/2020/09/18/2095767/28124/en/Indonesian-Electric-Vehicle-EV-Market-Analysis-Growth-Opportunities-Fuel-the-Growth-Pipeline-Engine.html>

⁹ <https://www.cekindo.com/blog/investing-indonesia-battery-electric-vehicle>

¹⁰ <https://www.nst.com.my/business/2022/01/764463/malysias-2021-new-vehicle-sales-slip-39pct-508911-units-maa>

¹¹ [https://www.mordorintelligence.com/industry-reports/asean-electric-vehicle-market#:~:text=Market%20Overview,period%20\(2022%20-%202027\).](https://www.mordorintelligence.com/industry-reports/asean-electric-vehicle-market#:~:text=Market%20Overview,period%20(2022%20-%202027).)