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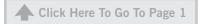
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Alternative Power Report

By Guy Youngs, Forecast & Adoption Lead

EV Sales Are Headed for Long-Term Growth



Guy Youngs

EV sales will continue to grow despite the mixed near-term outlook, according to BloombergNEF's Long-Term Electric Vehicle Outlook (EVO) which indicates that rapidly falling battery prices, advancements in next-gen battery technology, and improving relative economics of EVs with ICE counterparts continue to underpin long-term EV growth globally.

Global passenger EV sales are expected continue to grow, but at a slower pace in the next few years.

Source: Electrek Read The Article

PSR Analysis: We have seen articles incorrectly claiming that the EV market is in decline, so it's a welcome article that lays out clearly why the market is expected to slow but not decline while ICE engines peaked in 2017 and have started a long term decline. **PSR**

Research Offers Efficient, Environmentally Friendly Lithium

As the electric vehicle market booms, the demand for lithium has also soared, with global lithium production more than tripling in the last decade. Current methods of extracting lithium from rock ores or brines are slow and come with high energy demands and environmental costs. They also require sources of lithium which are incredibly concentrated to begin with and are only found in a few countries.

Researchers at the University of Chicago Pritzker School of Molecular Engineering (PME) have optimized a new method for extracting lithium from more dilute (and widespread) sources of lithium, including seawater, groundwater, and "flowback water" left behind from fracking and offshore oil drilling.

Source: CleanTechnica Read The Article

PSR Analysis: The key to this process is how well it can be commercialized -if they can succeed in that, then the lithium crisis can be solved (as lower lithium concentrates are much more widely found), but that's a big "if" at the moment, so we will have to wait and see. **PSR**

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EU Tariffs Hit Chinese EVs, Draw Stern Words from Beijing

The European Commission told automakers (July 11, 2024) it would impose extra duties of up to 38.1% on imported Chinese electric cars starting in July 2024, risking retaliation from Beijing, which called the move protectionist. Less than a month after Washington announced plans to quadruple duties for Chinese EVs to





Alternative Power Report Continued from page 2

100%, Brussels said it would set additional tariffs ranging from 17.4% for BYD to 38.1% for SAIC, on top of the standard 10% car duty. It said this was to combat excessive subsidies

it's worth noting that commercial EV sales are soaring.

Source: Reuters (via MSN) Read The Article

PSR Analysis: On the face of it, this seems like the start of a trade war with Chinese automakers demanding retaliatory tariffs on European cars, however several EU member states have already started to back track (led by Germany) so it remains to be seen as to what the eventual outcome will be. **PSR**

Canada Considers Tariffs on Chinese EVs Similar To US and EU Moves

The Canadian government is preparing tariffs on Chinese-made EVs to align with the US and European Union, which have already proposed heavy duties to deter "unfair" competition imported from overseas

The country holds strong ties with the US and EU and looks to align with its trade partners in solidarity while blocking a potential loophole China could use to enter North America.

Source: Electrek Read The Article

PSR Analysis: Canada is still in the early stages of these tariffs, with discussion ongoing. Prime Minister Trudeau has not publicly committed Canada to imposing tariffs on Chinese EVs, stating the cabinet is monitoring the situation closely. **PSR**

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Global Report

2024 MHCV Production Expected To Decline by 1.6%



By Chris Fisher, Senior Commercial Vehicle Analyst

In 2024, Medium and heavy commercial vehicle production in Europe South Asia and North America is expected to decline modestly while production in China, South America, Japan and Korea is expected to improve over last year.

Chris Fisher

Globally, medium and heavy commercial vehicle production is expected to decline by 1.6% this year over 2023. Moving into

2024, much of the focus on demand is centered around slowing global economic conditions that will likely impact overall freight demand.

North America. Medium and heavy commercial vehicle production is expected to decline by 4.3% this year over 2023 after strong class 8 truck production last





Global Report Continued from page 3

After relatively strong commercial vehicle demand in Europe last year, MHCV production is expected to decline by 11.3% this year compared with 2023.

year was driven by on-going pent-up demand. While class 8 demand is expected to decline this year, it will still be at a relatively high level, especially during the first part of the year.

Europe. After relatively strong commercial vehicle demand in Europe last year, MHCV production is expected to decline by 11.3% this year compared with 2023. The pent-up demand for heavy trucks has mostly ended and the market is indicative of replacement demand rather than expansion. Power Systems Research expects truck production to slow throughout the remainder of the year, primarily due to re-balanced truck capacity and a slower economy, in part due to on-going inflation and higher interest rates.

South Asia. After a strong level of vehicle replacement during the past few years, commercial vehicle production is expected to decline by 5.9% this year compared with 2023. This will be primarily due to a re-balanced truck capacity along will a forecasted slowdown in freight demand in India.

South America: South America is being affected due the low vehicle demand volumes in Colombia and Argentina. Since Brazil is the largest volume in the region, TPI is not strongly impacted.

Japan/Korea. Medium and heavy commercial vehicle production in Japan and South Korea is increase by 7.8% this year over 2023. Commercial vehicle production is expected to increase by 5.8% in Japan and 5.5% in South Korea this year. The supply chain has shown relatively good improvement which led to stronger than expected production levels last year especially in South Korea.

Greater China. Medium and heavy commercial vehicle production is expected to increase by 5.3% this year over 2023. Vehicle demand was up sharply last year as the market recovered from a dismal 2022. While truck demand is expected to increase this year, the Chinese economy will continue to face economic headwinds during the next few years. **PSR**

2024 Global Motorcycle Market Estimated at \$144 Billion



Michael Aistrup

By Michael Aistrup, Senior Analyst

The global motorcycles market size is estimated to be valued at \$144.1 billion in 2024 and is estimated to rise at a compound annual growth rate (CAGR) of 8.1% from 2024 to 2033 and to be valued at \$288.46 billion in 2033, according to research by Power Systems Research (PSR).

The unit sales of Motorcycles market are expected to reach 61.62 million by 2029 according to PSR. In the United States,

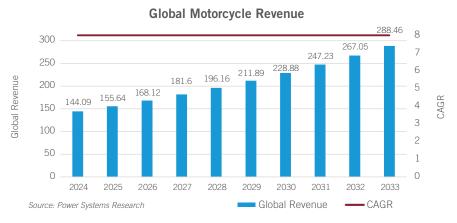
the trend in the motorcycle market is shifting towards electric bikes, as consumers become more environmentally conscious.





Global Report Continued from page 4





Drivers of Demand. One of the key factors driving the growth of the Motorcycles market is the increasing demand for affordable and efficient transportation options.

- **Motorcycles** offer a cost-effective alternative to cars, especially in densely populated areas where traffic congestion is a major issue.
- **Motorcycles** are often preferred by younger consumers who are looking for a more adventurous and exciting mode of transportation.
- **Rising urbanization** and increasing disposable incomes in emerging economies have resulted in a larger middle-class population that can afford motorcycles.
- **The growing** middle-class population around the world is raising demand for inexpensive modes of transportation.
- **Improvements** in infrastructure and road networks have made motorcycles a more viable mode of transportation in many regions.
- Accessible motorcycle loans increase the purchases and expansion of the
 market. There are numerous banks and corporations that offer loans. These
 loans are simple to obtain, and the low-down payment increases the likelihood
 that young people and members of the middle caste will buy a motorcycle.

Trends in the Motorcycle Market. Several important trends are developing within the Motorcycle segment.

- Increasing popularity of electric motorcycles. With the growing concern for the
 environment and the need to reduce carbon emissions, many consumers are
 opting for electric motorcycles as a greener alternative to traditional gasolinepowered bikes. Electric motorcycles offer the advantages of lower maintenance
 costs, reduced noise pollution, and zero emissions.
- The rise of premium and luxury motorcycles. As the disposable income of consumers increases, there is a growing demand for high-end motorcycles

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Global Report

Continued from page 5

The market value of motorcycles is strongly correlated with the increasing preference of young people for motorcycles.

that offer superior performance, advanced technology, and luxurious features. This trend is particularly prevalent in developed countries where consumers are willing to spend more on premium products.

 Cutting-edge technologies. The adaptability of AI for every rider, Vehicle-to-Vehicle communication and changes in ergonomic designs are changing the motorcycle market. Motorbikes have evolved into more sophisticated vehicles with a focus on safety, comfort, and luxury.

Motorcycle Market Restraint. The motorcycle market is constrained by the higher risk of accidents for riders.

Analysis. The market value of motorcycles is strongly correlated with the increasing preference of young people for motorcycles. Younger working adults and frequent travelers favor modern, cutting-edge two-wheelers. Modern technology is being incorporated into motorcycles, which has led to an increase in popularity and the growth of motorcycle events in developed economies. **PSR**

DATAPOINT: North America Scooter Production 175,300

By Carol Turner, Senior Analyst, Global Operations

175,300 units is the estimate by Power Systems Research of the number of Scooters expected to be produced in North America in 2024.

Scooters/Minibikes/Mopeds are motorized 2-wheeled vehicles used primarily for recreation, although they are used for primary transportation in many cases.

It's important to note that Go-Ped manufactures stand-on scooters.

This product information comes from industry interviews and from two proprietary databases maintained by Power Systems Research: **EnginLinkTM**, which provides information on engines, and **OE LinkTM**, a database of equipment manufacturers.

Market Share: Mexico facilities dominate the scooter market with 51% produced by Italika. In second position is Honda with 49%. Third, is US based Go-Ped with 271 units.

Trends. In 2023, production of Scooters in North America decreased 14%. Expect production to gain 4% in 2024 over 2023. The decline in production can be attributed to saturation in the marketplace and weakened demand for scooters.

Overall, demand for efficient and eco-friendly models will boost the electric scooter market along with the threat of rising gas prices. Not only are scooters convenient and offer independence, but they also make for faster commutes as opposed to using other modes of transportation; electric models are also extremely popular.





DataPoint Report
Continued from page 6



Expect production of scooters to increase 15% by 2030.

Electric Units

2022: 4,034 (Go-Ped: 56 units Z Electric: 3,978) 2023: 354 (Go-Ped: 75 units Z Electric: 279)

2024: 68 (Go-Ped: 68 units)

In 2023, production of Electric Scooters in North America decreased 91%. Production is expected to drop 81% in 2024. Production decreased dramatically in 2023 primarily due to Z Electric Vehicle temporarily ceasing production to the US federal imposed tariffs on imports from China that includes battery imports.

New tariffs on Chinese electric vehicles and batteries, solar cells, medical equipment and other goods are **intended to protect U.S. jobs and manufacturers**. Under the White House action, tariffs on EVs from China will quadruple, from 25% to 100% in 2024. **PSR**

Europe Report

Belgium Risks Losing Audi Car Production in Brussels

By Natasa Mulahalilovic, Marine Product Manager



Natasa Mulahalilovic

Audi said it intends to "restructure" its Forest production site in Brussels, a move that clearly could end with the site closing by 2027. Production of the model Q8 e-tron, the only model produced in Forest, will end sooner than was expected. Audi Brussels manufactured about 53,000 cars in 2023, but the sale of the large Q8 car with a high price tag (the catalog price starts at 86,000 EUR) does not meet market demand in Europe.

The possible closure could put more than 1500 employees out of work. The full production of the electric SUV Q8 e-tron will be relocated to Mexico and China where production costs will be lower than in Europe.

This is not the first time that the passenger car manufacturers closed their factories in Belgium. Even though the country has had an excellent reputation in the industry since General Motors inaugurated its second factory outside of the United States in Antwerp in 1925, Renaut shut down its site in Vilvord in 1997, Opel closed its factory in Antwerp in 2010 and Ford ended their car production in Genk in 2014. If Audi's intention to shut down the site in Forest comes true, the only car manufacturer remaining in Belgum would be Volvo Car in Gand. The facility produces three models: XC40, laeC40 and V60. More than 230,000 cars were produced last year by 7,000 workers.





Europe ReportContinued from page 7

Annual assembly of cars in Belgium has dropped from more than a million to 300,000 units in the last 30 years.

The industry experts say that the Audi management decision is not surprising. The sale of electric SUVs is continuously dropping in Europe due to the inflation and unstable economic and political situation. The foreign competition is growing. Reducing the production costs and the pricing are mandatory to stay competitive in the market.

Electric and Hybrid Marine Exhibition Demonstrates New Technologies

By Natasa Mulahalilovic, Marine Product Manager

AMSTERDAM--The Tenth Annual Electric and Hybrid Marine Exhibition in Amsterdam's RAI June 18-20 attracted more than 200 exhibitors and provided an opportunity for shipowners and operators to review the latest solutions to speed marine electrification, decarbonization, hybridization.

Reaching the objective to reduce greenhouse gas by 70% in maritime industry by 2050 looks realistic but the new technologies developers, equipment manufacturers and end users need more clarity and support from the regulatory and governmental bodies to accelerate the process. Creation of reliable and safe storage and fueling infrastructure will ensure the shipbuilders and ship owners trust the transition.

The three-day event presented the latest innovations and achievements in efficient decarbonization of the maritime industry. New technologies from companies in Europe, North America, China and other regions designed to support and accelerate the transition from high polluting fossil combustion to zero emission solutions in maritime industry were exhibited at the event. The exhibition was visited by thousands of industry professionals.

Full electric systems were incorporated in small soft waters ferries, taxis and day boats, but the challenge is the integration into other applications and long-distance shipping. Electric foiling boats are showing good results in silent, clean and fast boating. The first European electro-hydrogen catamaran will be launched soon and is developed in a partnership between Seco Marine and Green Navy.

The next edition of the Electric and Hybrid Marine exhibition will be held in Long Beach, CA, April 8-10, 2025.

Educational conferences were devoted to the challenges and responsibilities of equipment manufacturers and ship constructors, battery safety, development in hydro foiling propulsion, alternative fuels and energy sources, fueling and charging infrastructure.

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Europe ReportContinued from page 8

Although hydrogen fuel cells are gaining ground as the most adequate solution for long distance shipping and passenger transportation, hydrogen production, storage and filling are still subjects of a deep reflection.

A significative number of innovative products and systems already in use were presented at the exhibition, including batteries, battery energy systems, electric motors, hybrid engines and propulsion systems, hydrogen fuel cells, management and controlling systems, alternators, generators and others.

Many projects are in different stages of development or in a testing phase. The equipment manufacturers, project developers and systems integrators, ship builders and others are jointly looking for the most effective and the safest solutions while keeping an eye on the cost side of the projects. There seemed to be a number of investors at the event looking for business opportunities.

Although hydrogen fuel cells are gaining ground as the most adequate solution for long distance shipping and passenger transportation, hydrogen production, storage and filling are still subjects of a deep reflection. The battery industry is continuously looking for the best formula chemistry, higher density and safety and lower pricing. **PSR**

Brazil/South America Report

By Fabio Ferraresi, Director Business Development South America



Brazil Truck Production Grows Significantly

Brazil truck production reached almost 64,40 units in the first half of this year, an increase of 36.5% over the same period in 2023

Fabio Ferraresi In June, 12,200 trucks were manufactured, a 74.1% increase compared to the same period last year.

Heavy truck sales also grew. In the first six months of this year, 56,800 trucks were sold, an increase of 8%. Last month, 10,000 trucks were sold, a 26.6% increase compared to June 2023.

Source: Automotive Business Read The Article

PSR Analysis: The production growth was expected due to the pre-production effect with P8 introduction in 2023. The good news is the 26% sales increase in June compared to the same period in 2023, which reinforces the confidence in the Truck Market in the region. PSR

Brazil's Frasle Mobility To Buy Mexican Kuo's Dacomsa for \$389 Million

Brazilian auto parts producer Frasle Mobility said (July 8, 20240) it has agreed to buy Mexican auto spare parts distributor Dacomsa from Mexico's Grupo Kuo S.A.B de C.V. for 2.1 billion reais (\$389.5 million).





South America Report Continued from page 9



With the deal, Frasle Mobility, formerly known as Fras-le, said it would also acquire the Dacomsa-owned Kuo Motor and Fritec firms, as well as some tangible and intangibles assets related to those companies, according to a securities filing.

Frasle Mobility also expects to earn some 300 million reals with synergies to be generated from the deal - as measured by earnings before interest, taxes, depreciation and amortization (EBITDA) - in a five-year period, a presentation by the firm showed.

Source: Market Screener Read The Article

PSR Analysis. The acquisition is part of the company's strategy of internationalizing its business in the spare parts sector, through product diversification and brand expansion in its portfolio. Frasle is already in North America, strongly in USA with agreement with Meritor and with Distribution center in Mexico. With the acquisition, Frasle will be able to penetrate in the Mexican distribution, strongly controlled by a small number of distributors.

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Far East: Japan Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia



Akihiro Komuro

Hitachi Demonstrates Ultra-Large Electric Dump Truck

Hitachi Construction Machinery said it is demonstrating a rechargeable all-electric dump truck at a mine in Zambia. It's the world's first demonstration of an ultra-large machine with a payload capacity of 200 tons.

Komuro Operating conditions and battery life will be verified over a oneyear period. The original plan was to have the system in operation by the end of 2024, but the company now plans to launch it in 2025 or later.





Far East Report Continued from page 9

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The overhead wires will be installed along the mine's route and the battery will be recharged as it travels along the route. This system allows for more efficient operation than recharging at stops. The batteries mounted on the vehicle body will also be lighter, increasing the payload capacity of the dump truck.

It is estimated that half of a mining company's CO2 emissions come from transportation and mining operations at the mine site. Hitachi Construction Machinery estimates that by replacing conventional diesel-powered dump trucks with all-electric dump trucks, the annual CO2 emissions per truck (approximately 3,000 tons) can be reduced to zero.

Source: The Nikkei

PSR Analysis: Electric models are also being developed in the field of mining equipment, where high output power is required. Power supply by overhead wires is the best solution at this point. I forecast that electric mining equipment will continue to be powered primarily by overhead power lines. Batteries themselves are heavy, and if they eat up the loading capacity of trucks, they will greatly affect efficiency. In addition, considering the time required to recharge large-capacity batteries, it is desirable to be able to supply power while the machine is in operation. **PSR**

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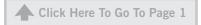
日立建機、超大型の電動ダンプトラックをザンビアで実証運転

日立建機はザンビアの鉱山で架線充電式のフル電動ダンプトラックの運用実証を6月から始めたと発表した。積載量200トンの超大型機の実証は世界初。走行状況やバッテリーの寿命などを1年間かけて検証する。発売時期は当初2024年中を目指していたが、2025年以降にする計画だ。架線は鉱山の走行経路に設置しており、移動しながら充電する仕組み。停車を伴う充電に比べて効率的な運用が可能になる。車体に搭載するバッテリーの軽量化にもつながり、その分、ダンプの積載量が増える。鉱山会社のCO2排出量のうち、半分が鉱山現場の運搬や採掘などの作業で占めるとされる。日立建機はディーゼルエンジンで発電する従来型のダンプからフル電動に置き換われば、1台あたりが年間排出するCO2 (約3000トン)をゼロにできるとしている。

参考: 日経 (一部筆者により元記事内容を改編しました)

PSR 分析: 大出力が必要とされる鉱山機械の分野においても電動モデルの開発が進められている。 架線による給電は現時点では最適解と言えるだろう。 特に鉱山機械における電動化は今後も架線を設置しそこから給電するタイプが主流となっていくものと私は予測している。 バッテリー自体が重く、 積載量が限られてしまうと効率に大きく影響する。 また、 大容量のバッテリーを充電する時間などを考慮すると、 運用しながら給電できることが望ましいからだ。 PSR





Far East Report Continued from page 11

South Korean
battery giants LG
Energy Solutions
and Hyundai Motor
have opened their
first battery plant in
Indonesia. The plant
will produce batteries
for electric vehicles
to be sold locally
and in neighboring
countries.

Far East: South Korea Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia

LG, Hyundai Open Indonesia EV Battery Plant

South Korean battery giants LG Energy Solutions and Hyundai Motor have opened their first battery plant in Indonesia. The plant will produce batteries for electric vehicles to be sold locally and in neighboring countries. Indonesian President Joko made the announcement at a ceremony held July 3 in the Karawang region near the capital, Jakarta, to mark the opening of the new plant.

The investment is \$1.2 billion, split 50-50 between LG Energy and Hyundai Motor. The annual battery production capacity is 10 GWh, which is equivalent to 150,000 electric vehicles. The plan is to invest an additional \$2 billion in the second phase to increase the capacity to 20 GWh.

The company will produce lithium-ion batteries using a cathode material called NCMA. The high nickel content increases battery performance and range. The new plant will be LG Energy's fifth production site in Southeast Asia, following those in South Korea, Poland, China and the U.S.

LG Energy has already supplied NCMA to Tesla, among others. In addition to Indonesia, the new plant will also serve as an export base for batteries used in electric vehicles sold by Hyundai Motor in neighboring countries in Southeast Asia, India, South Korea and elsewhere.

Source: The Nikkei

PSR Analysis: South Korea, which is positioning its battery industry as a key national industry, is moving very fast. The fact that it was able to get its battery plant up and running before its competitors may give it an advantage in its future business development in the region. But China's CATL, the world's largest EV battery manufacturer, plans to build new factories for batteries, battery materials and battery recycling in Indonesia in cooperation with local companies. The investment is about \$6 billion. The news of the new plant in Indonesia is good news for South Korea's automotive industry, but whether South Korea will be able to maintain a stable supply of EV battery materials in the future remains to be seen yet. **PSR**

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LGと現代自、EV電池原料確保のためにインドネシアに工場 開業

韓国の電池大手LGエネルギーソリューションと現代自動車が、インドネシアで初の電池工場を開業した。現地や周辺国で販売するEV用の電池を生産する。インドネシアのジョコ大統領は、7月3日に首都ジャカルタ近郊のカラワン地域で開かれた新工場の開業式典で宣言した。投資額は12億ドルで、LGエネと現代自が折半する。電池の年間の生産能力はEV15万台分に相当する10GWhだ。第2期として20億ドルを追加で投じ、20GWh分を増強する構想もある。

「NCMA」と呼ぶ正極材を使ったリチウムイオン電池を生産する。ニッケルの含有量が多いため電池の出力が高まり、航続距離が伸びることが特徴だ。まず現代自がインドネシアで6月に予約を始めた新型EV「コナ・エレクトリック」に採用する。NCMAはすでに米テスラなどへの供給実績もある。LGエネにとって今回の新工場は、韓国とポーランド、中国、米国に次ぐ5カ国目の製造拠点となる。インドネシアだけでなく、東南アジアの周辺国やインド、韓国などで現代自が販売するEVに搭載する電池の輸出拠点としても活用する。

参考: 日経 (一部筆者により元記事内容を改編しました)

PSR 分析: 電池産業を国の基幹産業と位置付けている韓国の動きはとても速い。競合に先行して電池工場の稼働を果たしたことで、今後の現地での事業展開に有利になる可能性がある。ただCATLを筆頭とする中国企業もインドネシア政府への働きかけを強め、ニッケルの権益の獲得に躍起だ。EV用電池の世界最大手である中国のCATLも、インドネシアの現地企業と共同で電池や電池材料、電池リサイクルの工場などを新設する計画を掲げている。投資額は約60億ドルに上る。韓国がEV電池材料の安定調達を今後もしていけるかどうかはまだ流動的な面がある。PSR

Southeast Asia: Thailand Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia

Honda To Reduce Thailand Car Production Capacity by 50%

Honda said it plans to integrate its two automotive manufacturing plants in Thailand by 2025. The move will cut annual production capacity in Thailand by 50% to 270,000 units.

Production at the Ayutthaya plant will be discontinued and consolidated at the Prachinburi plant in central Thailand. The Ayutthaya plant has an annual



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The region has reserves of rare metals needed for EV batteries, and each country has positioned EV manufacturing as a growth driver for its national manufacturing industry.

production capacity of 150,000 units. Honda's total production capacity in Thailand is 270,000 units, but there was a surplus of 147,000 units in 2011. The company will improve the profitability of its four-wheel business by reducing fixed costs. The Ayutthaya plant will continue to be used as an auto parts plant.

Source: The Nikkei

PSR Analysis: Just last month in *PowerTALK*, I reported on Suzuki's withdrawal from four-wheel production in Thailand, and now it is clear that Honda is also struggling in the Thai market due to the rapid growth of EVs, with the Japanese brand's share falling 8% year-on-year to 78% in 2023. By 2024, the share is expected to fall even further.

While some in Europe and the U.S. are discussing a review of BEVs, the debate is not as active in Southeast Asia. The region has reserves of rare metals needed for EV batteries, and each country has positioned EV manufacturing as a growth driver for its national manufacturing industry. Since it is difficult to change policy, EVs will continue to be promoted in the future. **PSR**

東南アジア > タイレポート:

小室 明大 - 極東及び東南アジア リサーチアナリスト

スズキ、タイ四輪生産から撤退 中国EV攻勢で苦戦

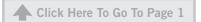
ホンダはタイに2カ所ある自動車生産工場を2025年までに統合する方針を明らかにした。タイの年産能力は27万台から5割以下に減る見通しだ。

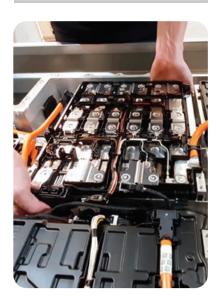
アユタヤ工場での生産を終了し、タイ中部にあるプラチンブリ工場に一本化する。 アユタヤ工場は年産15万台の能力がある。タイ全体で見るとのホンダの生産能力 は27万台あるが、23年の生産台数が14万7000台と余剰気味となっていた。固定費 の削減を進めることで四輪事業の収益体質を改善する。アユタヤ工場は車の部品 工場として引き続き活用する。

出典: 日経 (一部筆者により元記事内容を改編しました)

PSR 分析: 先月のPowerTALKでスズキがタイでの四輪生産からの撤退を紹介したばかりだが、ホンダもまたタイ市場で苦戦している様子が明らかになった。EV が急速に伸びているためで、日本ブランドのシェアは2023年の時点で前年比8%減の78%だった。2024年通年ではもっとシェアを落とすことになるだろう。欧州や米国の一部ではBEVに対する見直しが論じられているが、東南アジアにおいてはその議論は欧米ほど活発ではない。BEVの方がさまざまな面で東南アジアにとっては優位だからだ。東南アジア域内には電池に必要なレアメタルの埋蔵があり、各国ともにEV製造を国の製造業の成長ドライバーとして位置づけている。なかなか方針を転換しづらい状況にあるため、今後もEVが推進されていくことになるだろう。PSR







China Report

By Jack Hao, Senior Research Manager - China

Chinese Joint Venture Begins Battery Plant in Mississippi



Jack Hao ACT Company (AMPLIFY CELL TECHNOLOGIES (LLC), a Chinese joint venture company, has broken ground for a battery production plant in Mississippi.

ACT Company was established by EVE Energy's wholly owned subsidiary EVE Energy US, Cummins, Daimler Trucks, and Paccar. The joint venture will produce prismatic lithium iron phosphate batteries, mainly for designated North American commercial vehicle applications. It will have an annual

production capacity of about 21GWh and will provide more than 2,000 local jobs.

The project is expected to start shipping in 2026, and the three foreign enterprises and their affiliates will become the main customers, purchasing most of the products from the factory.

ACT Company is the first project of EVE Energy's CLS model, aiming to enhance the flexibility and competitiveness in the global cooperation process, and to work with more partners to jointly promote sustainable development. The successful beginning of this project marks the entry of EVE Energy into a new stage of global development.

EVE Energy, a global all-scenario lithium battery platform company, is working to create a cross-border network through the CLS global cooperation business model to strengthen the global industrial chain and promote technological innovation.

Source: Sohu Read The Article

PSR Analysis: The joint venture composed of EVE, Daimler, Cummins, and PACCAR, may create a win-win situation for all parties involved. The backgrounds and business fields of the investing companies cover the entire industrial chain of commercial vehicles, ensuring that the products produced in the new plant can be quickly introduced to the North American market. The batteries produced by ACT Company will be built mainly for the North American commercial vehicle sector.

The strategic cooperation between the parties is expected to yield multiple benefits, including reducing product development and production costs. At the same time, the partners (and their affiliates) will become the main customers of the joint venture and will purchase all or most of the products.

The CLS model, which stands for "Cooperation" (joint research and development), "License" (technology licensing), and "Service" (service support), has become

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the fifth major strategic sector of EVE Energy. It complements the existing battery business and industrial collaboration while also offering significant flexibility, providing room for further cooperation.

EVE Energy is the first Chinese battery company to build a battery factory in the United States through a joint venture. Previously, CATL (Contemporary Amperex Technology Co. Limited) cooperated with Ford Motor Company through a technology licensing agreement, while Gotion High-Tech is planning to invest in the construction of a battery material factory in Michigan through its subsidiary. This will further promote the progress of electric vehicles in North America. **PSR**

India Report

By Aditya Kondejkar, Research Analyst - South Asia Operations

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Aditya Kondejkar

Bajaj, TVS Enter CNG Two-Wheeler Market

Bajaj Auto has recently launched the Freedom 125, the world's first CNG-powered two-wheeler, generating significant buzz in the Indian market. This innovative move has boosted Bajaj's market position and also inspired other manufacturers, like TVS, to explore CNG options.

The Freedom 125, priced between Rs 95,000 and Rs 1.10 lakh, offers an impressive CNG mileage of 102 km/kg, which appeals

to environmentally conscious consumers and those looking for cost-effective fuel alternatives.

Source: CNBCTV18 Read The Article

TVS Motor Company is set to follow Bajaj's lead by developing the Jupiter 125, which will be the first scooter to feature a factory-fitted CNG (compressed natural gas) kit. Slated for launch early next year, the Jupiter 125 is aimed to compete directly with Bajaj's Freedom 125, offering similar pricing and dual fuel options.

TVS's commitment to alternative fuel technologies demonstrates its strategic vision and responsiveness to market trends, although integrating the CNG tank into the scooter's design poses a significant engineering challenge.

The introduction of CNG-powered two-wheelers by both Bajaj and TVS marks a pivotal shift in the Indian two-wheeler market, emphasizing sustainability and innovation. This move positions these companies as pioneers in the alternative fuel segment at the same time it sets a new industry standard.

As both brands vie for market leadership, their success will likely hinge on consumer acceptance infrastructure development for CNG refueling. **PSR**





Russia Report

By Maxim Sakov, Market Consultant, Russia Operations

Editor's Note: Power Systems Research has paused all research and business development activities in Russia. We maintained an important presence in Russia from 2013-2022 to bring important updates to our clients about the powered equipment markets within Russia. We are continuing to monitor the current situation and hope to again establish this presence when the conflict with Ukraine is resolved. Please contact us at info@powersys.com if you have questions regarding business conditions in Russia. Thank you. PSR

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