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Alternative Power Report

By *Guy Youngs*, Forecast & Adoption Lead

Unsold Chinese EVs Are Piling Up At European Ports



Guy
Youngs

The threat of masses of cheap EVs made in China has governments concerned in Europe and the US. The USA has introduced a bill that would raise the tariff on EVs from China to 100% to protect US auto workers “from the existential threat posed by China” but Europe has no such tariff protections. The lack of high import tariffs has encouraged Chinese manufacturers to look to Europe as a place where they can send boatloads (literally) of electric cars.

A report by the Financial Times claims that Chinese manufacturers are sending more EVs to Europe than they can sell, which has led to thousands of EVs being parked at port facilities. The port operators are displeased because the glut of cars is interfering with other port activities. Some now say they are no longer ports but rather car parks for newly arrived Chinese EVs.

Source: *CleanTechnica* [Read The Article](#)

PSR Analysis. The whole Chinese EV car supply situation is absolute chaos and will only get worse when EV manufacturers like BYD introduce their own ocean going car carriers. Given this scenario, its becoming very hard to look past allegations of dumping, so we can reasonably expect that the EU will also consider tariffs.

Europe Sharpens Inquiry Into Chinese EV Subsidies

Last October, the European Commission opened an inquiry into whether Chinese automakers are the beneficiaries of such significant subsidies by the Chinese government that they have an unfair economic advantage over domestic manufacturers. The question is ridiculous, of course. Everyone on Earth knows the Chinese government has been providing massive support to its automotive sector for 20 years.

China has been open about its commitment to electric car manufacturing. It has told everyone its plans and then made those plans a reality. So, it should come as no surprise that Chinese companies can build electric cars in China, ship them overseas, and still undercut the price of electric cars from domestic manufacturers by 25% or more.

What the EU Commission is doing is trying to find a way to lock the barn door after the horses have bolted and do it in a way that is not blatantly illegal under international law.

Source: *CleanTechnica* [Read The Article](#)

PSR Analysis: Trade disputes have been part of international affairs for as long as there have been nations. The EU is trying to balance the joy of cheaper products

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Alternative Power Report

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against the need to protect jobs within the EU. The electric car price wars in China suggest there is massive oversupply in that country, so it is natural for its manufacturers to seek new markets.

Fool's Gold May Be Worth More than Previously Believed

In our childhood, many of us would have found iron pyrites and mistakenly believed it was gold. The disappointment of finding out it was Fools Gold may be over. Fool's gold could kick off this century's 'gold rush' after scientists discovered it contains lithium.

Scientists at West Virginia University discovered a surprising amount of lithium in 15 rock samples of iron pyrite.

Source: *Daily Mail (via MSN)* [Read The Article](#)

PSR Analysis: Sulphur-rich pyrite doesn't require as many resources during the extraction process which means its environmental impact is much lower than the lithium-ion alternative. And fool's gold is found in quartz veins that is mined throughout the world, which means there could be much more lithium hiding through the world than was originally thought.

Hydrogen Engine from Hyundai and Kia Is Very Different

Hyundai and Kia have announced that they plan to work together to create a new hydrogen engine that will better overcome the challenges faced by previous generations of the technology. A lack of refueling infrastructure has been a top issue in this area.

With a focus on this issue, the goal of the collaboration between Hyundai and Kia is to greatly enhance the range of the hydrogen engine. In fact, they are aiming for an unprecedented range to greatly improve the appeal of using H2 for zero-emission transport and transportation.

Source: *Hydrogen Fuel News* [Read The Article](#)

PSR Analysis: There has yet to be a passenger vehicle that is ready for drivers to purchase and use for their everyday needs in a realistic, practical, and affordable way. As a result, in order to overcome the lack of infrastructure, the range and appeal of this, will need to be massive, and in fact it may not be possible. **PSR**

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The new plant will be approximately 1.7 million square feet in size, and will focus on production of heavy-duty conventional vehicles for the Volvo and Mack brands.

Global Report

Volvo To Build Truck Plant in Mexico

By *Chris Fisher*, Senior Commercial Vehicle Analyst



*Chris
Fisher*

In April 2024, Volvo announced that it will build a heavy-duty truck manufacturing plant in Mexico to supplement the Group's U.S. production. The plant will provide additional capacity to support the growth plans of Volvo Trucks and Mack Trucks in the U.S. and Canadian markets, and support Mack truck sales in Mexico and Latin America. The plant is expected to be operational in 2026.

The new plant will be approximately 1.7 million square feet in size, and will focus on production of heavy-duty conventional vehicles for the Volvo and Mack brands. It will be a complete conventional vehicle assembly facility including cab body-in-white production and paint. At the time of this writing, Volvo has not announced the location of the new production facility.

Source: Volvo AB

PSR Analysis: The new plant will primarily focus on the markets in the United States with the intent on supporting sales on the Western third of the country as well as Mexico and the Latin American markets. Basically, this allows Volvo to reduce lead times to key markets, reduce production costs and help off-set potential disruptions to manufacturing like the UAW strike last year that shut Mack's production down for 39 days.

Volvo will finally join the other large North American OEMs with a production footprint in Mexico. PACCAR, Daimler and Navistar have had production facilities in Mexico for a number of years and it is surprising it took Volvo this long to establish a manufacturing presence in this country. **PSR**

Global ATV & SxS Market To Hit \$22.9 Billion in 2032

By *Michael Aistrup*, Senior Analyst



*Michael
Aistrup*

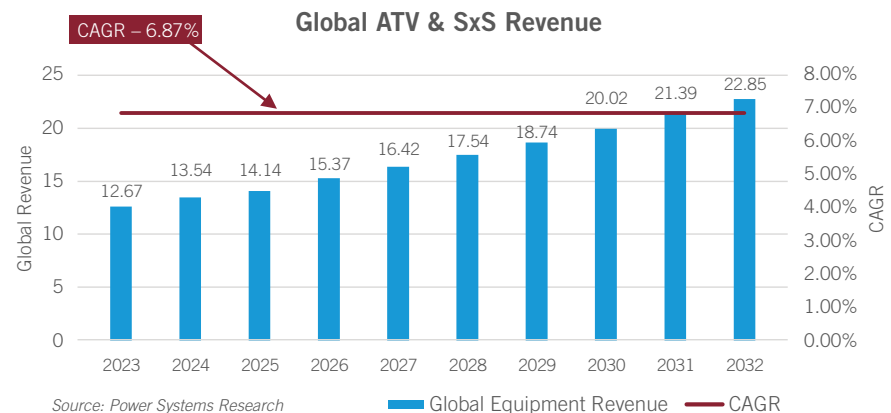
According to the latest research by Power Systems Research, the global ATV & SxS market size is valued at \$13.54 billion in 2024 and is expected to expand at a CAGR of 6.87% during the forecast period, reaching \$22.85 billion by 2032.

ATV stands for "All Terrain Vehicle." An ATV is an off-road vehicle with handlebar steering and a motorcycle-style seat that can seat a driver and one passenger in tandem. ATVs are designed for a variety of uneven terrain and roads. A side-by-side vehicle (SxS) is an off-road vehicle known for its 4- to 6-wheel design, unique side-by-side bucket seat setup, and steering wheel and pedal drive system.

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Global Report

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GROWTH DRIVERS

- Growing popularity of adventure sports
 - o Many nations host annual championships, which are gaining popularity because of ATVs.
 - o Increased development of off-road riding areas
 - o Non-competitive leisure purpose activities are created to promote tourism.
- Increasing usage of ATVs and SxSs in military
 - o ATVs and SxSs are becoming increasingly popular for military operations, including troop transportation, driving across challenging terrain, and improved mobility for tactical tasks.
- Increased development of new models with more flexibility.
- Development of electric units.

INDUSTRY CHALLENGES

- High labor costs.
- Increasing tariffs and taxes associated with imports affecting overall costs.
- Gasoline and electric SxS/ATVs are expected to increase in their prices.
- High maintenance cost of SxSs/ATVs.
- Nearly all the accidents related to these vehicles are caused due to the driver's failure to act safely and reasonably.
- ATV/SxS use in a wildlife area can have several negative environmental consequences, including noise pollution, vegetation damage, increased runoff, soil erosion, and deteriorated water quality and threatens the habitat of wildlife.

KEY MARKET TRENDS

The market is seeing a surge in demand due to all-terrain vehicles' capacity to operate effectively in rugged and steep terrain. Consumers are using them in agricultural areas, mountains, and forests. ATVs are being used for farming which requires less labor and lowers total farming costs. **PSR**

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In 2023, production of Skid Steer Loaders in North America increased 3%. Production is expected to remain flat in 2024 with a nominal gain of about 1%.

DATAPOINT: North America Skid Steer Loaders **96,000**

By *Carol Turner*, Senior Analyst, Global Operations

96,000 units is the estimate by Power Systems Research of the number of Skid Steer Loaders expected to be produced in North America (US and Canada) in 2024.

A Skid Steer Loader also known as a Skid Loader, Skid-Steer Loader, or Skidsteer, is a small rigid frame, engine-powered machine with lift arms used to attach a wide variety of labor-saving tools or attachments.

Four major uses for Skid Steer Loaders are: Agricultural, 29%; Rental Fleets, 22%; Construction, 20%, and Landscape, 12%.

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

Exports: Collectively, up to 25% worldwide.

Market Share: With 31 ¼% of total units produced, Bobcat leads in production of Skid Steer Loaders in North America. In second and third positions are Case New Holland and Deere with 21 ¼% and 14%, respectively.

Trends. In 2023, production of Skid Steer Loaders in North America increased 3%. Production is expected to remain flat in 2024 with a nominal gain of about 1%. The decline in 2020 was mostly attributed to COVID-19 related factors along with new equipment saturation in the market and a slight drop in construction related activities. The slight gain in 2024 is attributed to the need for new construction equipment and the overall stabilization of the economy, especially regarding the construction industry. As the construction industry continues to recover, construction will continue to be a key driver in overall industry growth.

The flat sales in 2024 can be attributed to the American agriculture industry that is sluggish (still battling commodity prices) that accounts for 29% of all Skid Steer usage in the market today. Look for Compact Tract Loader (CTL) sales to increase rapidly and Skid Steer Loaders (SSLs) to continue to lose ground to their tracked counterparts. Expect production of Skid Steer Loaders in NA to increase up to 7% by 2030.

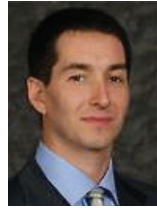
Battery powered Skid Steer units are continuing to grow in popularity. In 2023, a total of 879 units were produced, up from only 42 units in 2022. An estimated 1050 units are expected to be built in 2024, a 17.4% increase. The big jump in 2023 was the result of Bobcat entering the market with two models (S7X & T7X). **PSR**

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Europe Report

World Hydrogen Summit: The Hype Is Over



*Emiliano
Marzoli*

By *Emiliano Marzoli, Manager-European Operations*

Rotterdam, The Netherlands – During the World Hydrogen Summit (WHS) here many industry leaders, politicians and stakeholders came together to discuss the state of the art of this growing industry. The event, held at Rotterdam Ahoy centre between May 13-15, was one of the largest global meetings for the hydrogen industry. During the conference, many topics were covered, but some were more central amongst the panels PSR attended.

The time of the hydrogen hype is over, and while there has not been the revolution seen in previous years, different projects across the globe have been launched, stating the start of a new and more mature phase in the hydrogen industry.

While Europe has very ambitious targets, the industry asked for more support from institutions, and more clarity on objectives and regulations. Currently, the EU focus is on Green hydrogen, while some of the industry representatives asked for the definition of a low carbon hydrogen category to boost projects in this initial phase of transition.

The United States presents a more intricate and ambiguous scenario, as the upcoming November election raises questions about the longevity of incentives beyond this year.

Globally, many countries are emerging as candidates to fuel energy decarbonization. Morocco, wants to become one of the main exporters of green energy to the EU, and a major player in the production of Green Hydrogen. The country has abundant solar and wind resources, and already the gas pipeline infrastructures connected to Europe.

Similarly, different countries in the Middle East are looking at the green economy transition as an opportunity to grow. Oman is among these, with many projects already signed off to develop both renewable energy facilities, and hydrogen production projects.

On the other hand, the Netherlands, and in particular the city of Rotterdam, are investing significant resources to become one of Europe leaders in the hydrogen economy. The port of Rotterdam has a developed infrastructure for the distribution of natural gas, and they want to leverage their pipelines to become one of Europe's gateways for the imports of hydrogen in the old continent. They have already developed corridors with German, Belgium, France and the Scandinavian countries. The large infrastructure, and the strong gas industry in the country will allow the Dutch to become a major player in the decarbonization of the European energy sector. **PSR**

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Brazil/South America Report

By *Fabio Ferraresi*, Director Business Development South America



*Fabio
Ferraresi*

Brazilian OEMs Suffer from Heavy Rains in Rio Grande do Sul

Recent heavy rainfall in Rio Grande do Sul has led to production disruptions in many automotive OEM operations located in the region, including GM, AGCO, Marcopolo, John Deere, Randon, and auto parts manufacturers like Fras-le. Despite this, automakers and auto parts companies are gaining control over production operations. However, logistical challenges persist, raising concerns.

Both Anfavea, representing automakers, and Sindipeças, representing the components sector, express worry about the production flow from these companies in Rio Grande do Sul, which serve domestic and international demands, presenting an unpredictable aspect currently.

The initial expectation for vehicle production was to remain steady despite the rains, as Gravataí and the Serra Gaúcha region, where most automakers operate, remain largely unaffected. However, parts production in Porto Alegre faced important disruptions due to many manufacturers being located in flood-affected areas in the region and the transportation from production areas to OEMs was severely affected. Some OEMs—such as GM, Stellantis and Volkswagen--already announced temporary plant shutdowns.

An anticipated negative impact on May's vehicle sales is expected, particularly in Porto Alegre, which accounted for 9% of total sales over a four-month period. With dealerships affected by flooding, the commercial outlook is challenging. Automakers acknowledge the potential impact on annual sales projections due to the ongoing crisis in the region.

Source: *Automotive Business* [Read The Article](#)

PSR Analysis: Not only the production in May is concerning, but the entire economic impact in Rio Grande do Sul is a big issue for Brazil and South America economy. Rio Grande do Sul is an important area for grain and other agricultural products and this tragedy will affect Agricultural GDP and the entire GDP of Brazil. It will hurt segments like Agricultural Equipment and Construction Equipment since an important portion of this equipment is used in Agricultural production. It also will affect production and sales of Medium Heavy Vehicles, the main transportation channel for Agricultural products. We keep monitoring the effects of the rain and preparing for adjusting the markets at our next update process in Q2 2024. **PSR**

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South America Report

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With 520,000 square meters and 800 booths, the almost three-decade-old event in Ribeirão Preto (SP) received 195,000 people for five days.

Agrishow 2024 Reports US\$ 2.6 Billion in Business

Agrishow 2024 posted R\$ 13.6 billion (US\$ 2.6 Billion) in business, 2.4% higher than that recorded in 2023.

With 520,000 square meters and 800 booths, the almost three-decade-old event in Ribeirão Preto (SP) received 195,000 people for five days, from small, medium and large Brazilian producers to representatives of international companies. Four representatives of our PSR senior team in South America attended the Show to gather information and data.

Considered one of the largest open-air fairs in the world focused on agribusiness, Agrishow is not only a thermometer of the country's economic activity but also a showcase of the latest in field technology, from agriculture to livestock.

In addition to large harvesters, planters, and state-of-the-art tractors—including electrically powered models—exhibitors displayed innovations in robots and drones, with more and more applications in farming and features such as greater load capacity and remote control.

Before the fair, the management cited as problems that could affect business issues such as the drop in commodity prices in the international market, severe droughts in some regions of Brazil, high interest rates and lack of resources from the current Crop Plan, since the next one is expected to be announced only within the next month.

Source: *G1* [Read The Article](#)

PSR Analysis: Despite the good results of Agrishow, we see a decline in sales in the Agricultural Equipment market caused by problems with commodities prices and unfavorable funding conditions. During the show, we were able to monitor the impact of different factors on several OEMs and applications. This information enables us to update our databases using different perspectives for different applications and products and OEMs. **PSR**

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Far East: Japan Report

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



Komatsu Develops Transportable Hydrogen Generator



*Akihiro
Komuro*

Komatsu has announced the development of a hydrogen-powered generator that will be used to power an electric mini excavator. It can be transported to the job site, allowing electric construction equipment to be used in places where there is no electric power infrastructure. The system will be tested at customer sites by September 2024.

The generator was developed in cooperation with DENYO. The generator is 3.1 meters long, 1.1 meters wide and 1.7 meters high. It generates electricity by mixing up to 40% hydrogen with light oil. HVO fuel (hydrogenated vegetable oil), a type of biofuel made from waste cooking oil, can also be used.

Komatsu has developed hydrogen-blended combustion power generators for use in on-site power generation at factories and other facilities. The company sells seven types of electric construction equipment but is unable to supply power to sites where there are no power distribution networks, so it has been working to commercialize an electric power supply infrastructure.

Source: The Nikkei

PSR Analysis: The short operating time of electric construction equipment is a major problem, and in many cases, diesel generators are brought to job sites and operated while the batteries are being recharged. Under these conditions, it is difficult to achieve the goal of reducing CO2 emissions.

Even generators that can use hydrogen or HVO fuel cannot reduce CO2 emissions to zero, but they are making progress. As more of these devices enter the market, it is expected that the number of situations in which they will be used will increase.

There are three major issues that need to be addressed for the future use of hydrogen on construction sites. The first is to increase the number of sites where hydrogen is available. Currently, the number of places where hydrogen can be refueled is very small compared to gas stations. This is not a situation that Komatsu can solve on its own. A long-term plan is needed, including regulatory improvements.

The second issue is CO2 emissions from hydrogen production. At present, the amount of hydrogen that can be produced from water and air is limited and still at an experimental level. Most of the hydrogen used in various industries today is produced by combustion, which emits large amounts of CO2 during hydrogen production. Hydrogen is considered clean energy only in terms of CO2 emissions from hydrogen combustion, and CO2 emissions from hydrogen production will be considered in the future.

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Far East Report

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The third is cost. Compared with light oil, hydrogen is more expensive. The phase of popularization will not begin until the price of hydrogen becomes competitive.

All these issues require a great deal of effort and time to resolve, and widespread adoption is still a long way off. However, efforts to develop such products should continue, and only a limited number of manufacturers can make such efforts. Komatsu has an important role to play in determining how much hydrogen will be used in the construction equipment world in the future. **PSR**

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小室 明大 – 極東及び東南アジア リサーチアナリスト

コマツ、運べる水素発電機 電動ショベル向け

4月23日、コマツは水素を燃料とする発電機を開発したと発表した。電動ミニショベルの給電に使う。作業現場まで持ち運べて、電力のインフラがない場所でも電動建設機械を使えるようになる。発電時に排出するCO2を最大40%削減し、建設現場の脱炭素につなげる。2024年9月までに顧客の現場で実証実験する。デンヨーが協力して開発した。発電機の高さは長さ3.1メートル、幅1.1メートル、高さ1.7メートル。軽油に水素を最大40%混ぜて発電する。廃食油などを使ったバイオ燃料の一種「HVO燃料（水素化植物油）」も使える。

水素混焼発電機については、コマツはこれまで工場の自家発電などに使う設置式を開発してきた。同社は7種類の電動建機を扱っているが、配電網が整備されていない現場には電力を届けられず、電力供給インフラの製品化を進めていた。

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: 電動建機の運用時間の短さは大きな課題であり、工事現場ではディーゼル発電機を持ち込み、バッテリーを充電しながら運用するケースが多い。こうした現状ではCO2の削減という本来の目的を達成することは難しい。

水素やHVO燃料で利用できる発電機でもCO2をゼロにすることは出来ないが、こうした現状から進歩する過程であるといえる。今後さらにこうした機器が市場投入されることで使用されるシーンが増えていくことが期待される。

今後、建設現場での水素活用の課題は大きく3つある。ひとつは水素の供給拠点を増やすことだ。現時点では水素を充填できる場所はガソリンスタンドと比較するととても少ない。これはコマツ単独で解決できる状況ではない。法的整備も含めた長期的な計画が必要だ。

ふたつ目は水素生成時のCO2だ。現時点では水や大気から生成できる水素の量は限られており、まだまだ実験レベルだ。今日、様々な業界で使用されている水素のほとんどは燃焼によって生成されており、水素生成時にCO2が大量に排出されている。クリーンなエネルギーとして水素が評価されているのはあく

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Far East Report

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In early April, Kia's CEO showed signs of impatience at a business strategy meeting in Seoul, admitting that the EV market is slowing down and pushing back the goal of surpassing sales of 1 million EV units by 2026 to 2027.

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まで水素燃焼時のCO2排出の側面だけから語られており、水素自体を生成する際のCO2も今後は考慮されていく。

3つ目はコストだ。軽油と比較するとどうしても水素のコストは割高になる。価格競争力を持っではじめて普及のステージが始まる。

これらの課題はどれも解決に多大な努力と時間が必要なものばかりで、実際に本格的な普及はまだまだ遠い先になる。だがこうした製品の開発の努力は継続されるべきで、そのような取り組みをできるメーカーは限られている。今後建機の世界で水素がどれだけ活用されていくのか、コマツが担う役割は大きい。 **PSR**

Far East: South Korea Report

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

Kia To Double Hybrid Sales Amid EV Headwinds

Korea's Hyundai Motor Group is going on the offensive with hybrid vehicles. Its subsidiary Kia plans to introduce HV models in nine of its main models, doubling its current sales volume to 800,000 units by 2028. Kia will temporarily review its investment focus on EVs, where competition is heating up globally, to flexibly respond to market trends.

In early April, Kia's CEO showed signs of impatience at a business strategy meeting in Seoul, admitting that the EV market is slowing down and pushing back the goal of surpassing sales of 1 million EV units by 2026 to 2027.

At the same time, he announced the expansion of HVs: by 2028, he will introduce HVs in nine major models worldwide, increasing HV sales from 372,000 units (12% of the total) in 2024 to 800,000 units (19%).

Kia's new vehicle sales in 2023 will be 3.01 million units. Of these, less than 20% will be in Korea. The company aims to expand sales of HVs in the U.S. and European markets in addition to the domestic market.

Kia's production structure will also respond to the shift in sales strategy. Kia will engage in "mixed production" by manufacturing EVs, HVs and engine vehicles at its 13 plants in Japan and overseas, allowing it to flexibly change the production ratio.

Kia will also increase its R&D spending, investing 38 trillion won over the next five years to 2028, an increase of 5 trillion won (approximately 560 billion yen) from the existing five-year plan (2023-2027). Development of new engines for HVs is underway to improve energy-saving functions and increase maximum driving range.

According to the Korea Automobile Mobility Industry Association, new vehicle sales in Korea will fall to 116,000 EVs in 2023, down 6% from the previous year. HVs,

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Far East Report

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on the other hand, will increase by 55% to 280,000 units. Rising interest rates and a lack of charging facilities have slowed EV consumption, and HVs are gaining popularity due to their affordability and high fuel efficiency.

Source: The Nikkei

PSR Analysis: Until now, Korean automakers, led by the Hyundai Group, have increased their market share by focusing exclusively on BEVs, but they are now undergoing a major shift in strategy to respond to changes in the market. Until now, Europe and other countries have taken the lead in trying to exclude hybrids from the market. On the other hand, the market has gradually recognized the weaknesses of BEVs, and the advantages of hybrids are being reassessed. In particular, demand for BEVs has slowed, as evidenced by reports of an oversupply of EVs in China. In terms of responding flexibly to such market changes, Kia's shift in strategy this time is highly commendable.

Japanese automakers, led by Toyota, are technologically ahead of Korean automakers in hybrid technology, and a large investment will be necessary for Korean automakers to catch up. Since the gap is not so small that they can catch up immediately, prompt action based on this policy shift will be required for Korean brands to maintain and expand their presence in the global market. **PSR**

極東 > 韓国レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

起亜、ハイブリッド車販売2倍へ EV逆風で戦略修正

韓国現代自動車グループがハイブリッド車で攻勢を掛ける。傘下の起亜は主要9車種でHVモデルを新たに投入し、2028年までに販売台数を80万台と現状の2倍に増やす計画だ。世界的に競争が過熱するEVへの重点投資を一旦見直し、市場動向に柔軟に対応する。

「需要の減速、競争の加速だ」。4月上旬、起亜がソウル市内で開いた経営戦略説明会でCEOは焦りをにじませた。EV市場の失速を認め、2026年としていたEV販売台数100万台突破の目標を2027年に延期した。

同時に打ち出したのはHVの拡大だ。2028年までに世界の主要モデル9車種でHVを発売する。HVの販売台数を2024年の37万2000台（全体の12%）から80万台（19%）に増やす。

2023年の起亜の新車販売台数は301万台。うち韓国国内は2割弱。欧米が販売の5割を占める。HVも国内に加え、欧米市場を中心に販売拡大を目指す。

製造体制も販売戦略の転換に対応する。起亜は国内外の13工場でEVとHV、エンジン車のいずれも製造する「混流生産」を手掛け、製造比率を柔軟に変動させることができる。

さらに、研究開発費を積み増す。2028年までの今後5年間で既存の5カ年（2023～2027年）計画に比べ5兆ウォン（約5600億円）増やし、38兆ウォンを投資す

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Far East Report

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Rankings of new vehicle sales in Southeast Asia are shifting, with Malaysia overtaking Thailand to take second place in 2023.

る。HV向けの新しいエンジン開発を進めている。省エネ機能を高め、最大走行可能距離を伸ばすなどする。

韓国自動車モビリティ産業協会によると、2023年の韓国内の新車販売はEVが前年比6%減の11万6000台に落ち込んだ。一方HVは55%増の28万台だった。金利上昇や充電設備の不足でEV消費が伸びず、手ごろで燃費も良いHV人気が高まっている。

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: これまで現代グループに代表される韓国勢はEV一辺倒の戦略でシェアを伸ばしてきたが、市場の変化に対応すべく大きな戦略転換を行う。これまでハイブリッド車は欧州などが中心となって市場から排除しようする動きがあった。その一方で、BEVが持つ弱点を市場が徐々に認知したことでハイブリッドの良さが見直されつつある。特にBEVは中国のEV車の供給過多などが報道されるなど、需要に陰りが見られている。こうした市場の変化に柔軟に対応するという意味で今回の起亜の戦略転換は高評価されるだろう。

ハイブリッド技術はトヨタを筆頭に日本勢が技術的にリードしており、韓国勢が追いつくためには大規模な投資が必須となる。すぐに追いつけるほど小さな差ではないだけに、韓国ブランドが世界市場で存在感を維持拡大していくためには、この方針転換に基づいた迅速なアクションが求められるだろう。 **PSR**

Southeast Asia: Thailand Report

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

Malaysia Overtakes Thailand in New Vehicle Sales

Rankings of new vehicle sales in Southeast Asia are shifting, with Malaysia overtaking Thailand to take second place in 2023. The Philippines overtook Vietnam to take fourth place. EV sales continue to grow across the region, particularly in Thailand.

New vehicle sales in six major Southeast Asian countries, including Indonesia and Thailand, totaled 3.34 million units in 2023, down 2% from the previous year. This was the first decline in three years. Rising interest rates weighed on the market. In Southeast Asia, customers with low equity often buy cars with car loans, which was affected by higher lending rates and stricter underwriting.

Despite the headwinds, sales increased in Malaysia and the Philippines. Sales in Malaysia rose 11% to 790,000 units, a record high, and the country became the second largest market in the region for the first time. The introduction of sales tax exemptions for domestically produced vehicles as part of an economic stimulus package provided a boost.

The growth rate of private consumption in 2023 was a robust 4.7% y/y, leading to market expansion. Produa, the domestic automaker with the largest market share,

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Southeast Asia Report

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grew 17%. Sedans and other vehicles performed well. Proton, another national carmaker with the second largest market share, rose 11%.

In the Philippines, sales rose 20% to 410,000 units, moving the country up to fourth place, as domestic demand increased on the back of population growth. The country's real gross domestic product (GDP) growth was strong at 5.6% in 2011, and the easing of the impact of the semiconductor shortage also boosted sales.

Source: The Nikkei

PSR Analysis: The automotive market in Southeast Asia is changing rapidly. Thailand and Indonesia have been the two strongest markets, but this report that Malaysia has overtaken Thailand is a big surprise.

The simple explanation is that Malaysia's sales have been boosted by subsidies, while Thailand's have been slowed by stricter credit checks. Malaysia is enthusiastic about having its own car brands and has historically been aggressive in growing its own auto industry.

As a SE Asian market where policy interest rates have a significant impact, it is difficult to expect Thailand to see a rapid recovery in sales volumes in a market where interest rates are expected to remain high for some time. Similarly, interest rates are holding back sales in Vietnam; EVs are gradually growing in all countries, but there are concerns about a prolonged period of stagnation in the market. **PSR**

東南アジア > 東南アジア全体レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

東南ア新車販売、マレーシアがタイ抜く 順位変動激しく

東南アジアの新車販売台数に順位変動が起きている。2023年はマレーシアがタイを抜き2位に浮上した。フィリピンもベトナムを追い越し4位に付ける。金利上昇によるマイナス影響を、税優遇などで緩和出来たかが各国の明暗を分けた。EVではタイを中心に地域全体で販売増が続いている。

インドネシアやタイなど東南アジア主要6カ国の新車販売台数をまとめた結果、2023年は全体で334万台と前の年に比べ2%減だった。減少は3年ぶり。市場の重荷となったのは金利の上昇だ。東南アジアでは自己資本の少ない顧客が自動車ローンで購入するケースが多く、借入金利の上昇や審査の厳格化が影響した。

逆風下でも販売を拡大したのがマレーシアとフィリピンだ。マレーシアは11%増の79万台と過去最多を更新し、域内2位に初めて浮上した。景気刺激策で国内生産車を対象に売上税の減免措置を実施したことが追い風となった。

2023年の個人消費の伸び率は前年比4.7%と堅調で、市場拡大につながった。シェア首位の国民車メーカー・プロドゥアは17%増。セダン車などが好調だった。同じく国民車メーカーでシェア2位のプロトンも11%増だった。

フィリピンは人口増を追い風に内需が拡大し、20%増の41万台と4位に浮上した。

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Southeast Asia Report

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Bosch says it is optimistic about the development prospects of hydrogen fuel cell commercial vehicles and is actively promoting the adaptive development and promotion of related technologies.

同国の実質国内総生産 (GDP) の伸びは23年に5.6%と高く、半導体不足の影響の緩和も販売台数を引き上げた。

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: 東南アジアの自動車市場の変化は著しい。タイとインドネシアが2強だったが、マレーシアがタイを抜いたというこの報道は大きな驚きだ。

シンプルに説明すると、マレーシアは助成金によって販売を伸ばし、タイはローン審査を厳格化したことが販売のブレーキになった、ということだ。特にマレーシアは自国の自動車ブランドを持つことに熱意を持っており、歴史的にも自読の自動車産業を成長させるために積極的である。政策金利の影響が大きく出る市場であるため、今後もしばらくは金利が高止まりすると予測されている中では、タイが販売台数を急速に回復させることは期待しにくい。ベトナムでも同様に金利が販売の足かせになっている。EVはどの国でも徐々に伸びているが、市場全体の停滞の長期化が懸念される。 **PSR**

China Report

By *Jack Hao*, Senior Research Manager - China

Bosch China Establishes Commercial Vehicle Group



*Jack
Hao*

Bosch Powertrain announced the establishment of a commercial vehicle group, aiming to strengthen cross-domain cooperation at the same time it introduced a new electronic pneumatic braking system and intelligent mobility solutions for commercial vehicles at the 2024 Beijing International Automotive Exhibition.

Bosch also has developed an advanced super thermal management system to address the thermal management challenges in the commercial vehicle industry. Bosch says it is optimistic about the development prospects of hydrogen fuel cell commercial vehicles and is actively promoting the adaptive development and promotion of related technologies.

During the Beijing Auto Show, Wang Weiliang, the President of the Board of Bosch Intelligent Transportation Solutions China and the President of Bosch Powertrain Systems China, announced Bosch's significant strategic initiatives for this year. Wang Weiliang said that China, as the world's largest commercial vehicle market, is in a golden era of booming development for the commercial vehicle industry.

Wang Weiliang further emphasized that Bosch Power is committed to transforming a variety of diversified and intelligent commercial vehicle powertrains, intelligent electronic steering technology for commercial vehicles, and autonomous driving technology for commercial vehicles into a platform. This platform also includes

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China Report

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electronically controlled pneumatic automatic braking systems and heavy-duty electric drive axles. It is a significant move for Bosch's new business expansion from the driving to the braking field. Currently, Bosch's braking systems are being tested in domestic first-tier vehicle manufacturers and are planned to be mass-produced by the end of 2024. At the same time, the Bosch heavy-duty commercial vehicle electric power steering system was also exhibited to achieve safer braking and steering.

Source: [CVWORLD.CN](#) **Read The Article**

PSR Analysis: Twenty years ago, Bosch Powertrain seized the opportunity for emission upgrades in Chinese commercial vehicles and entered the Chinese market. The transition from mechanical pumps to electronic controls was a significant turning point and a tremendous opportunity for Bosch Powertrain. Despite adjustments in technical routes and market fluctuations, Bosch Powertrain has steadfastly promoted the high-pressure common rail technology and achieved great success through localized manufacturing and localized development applications. Now, the Chinese commercial vehicle market is undergoing new changes, with the inevitable trend towards higher-end, intelligent, and green transformation.

China is committed to building a platform that integrates diversified and intelligent commercial vehicle powertrains, intelligent electronic steering technology, and autonomous driving technology for commercial vehicles. This platform also includes electronic brake systems (EBS), heavy-duty electric axles, thermal management systems, and alternative fuels.

The multi-structure fuel development landscape will continue to exist for a long time. Bosch continuously optimizes diesel power technology and expands the application of clean alternative fuels, including low-carbon alternatives such as natural gas and methanol, as well as zero-carbon hydrogen.

As for the technology of natural gas powertrain systems, Bosch's strength is well-known, and it leads the domestic natural gas engine market. Regarding methanol and hydrogen, commercial vehicle news media report that Bosch has achieved mass production and implemented solutions. Hydrogen fuel for internal combustion engines achieves zero carbon emissions, leveraging existing technology with high efficiency. The cost of hydrogen fuel cells has significantly decreased and is expected to further drop in the next few years.

In terms of its entire lifecycle, the cost is now on par with diesel vehicles. By 2025, it is predicted that the use cost of hydrogen fuel cell commercial vehicles over their entire lifecycle (traveling between 750,000 to 1 million kilometers) will be slightly lower than diesel vehicles.

Although the initial cost of hydrogen fuel cell vehicles is still higher than diesel vehicles, with the government actively promoting the construction of infrastructure, including hydrogen refueling stations and hydrogen highways, hydrogen fuel cell

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China Report

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commercial vehicles are expected to soon enter the market in significant numbers.

Currently, many regions are actively promoting the adaptive development and promotion of hydrogen fuel cells in cold chain logistics, intercity and long-distance logistics, sanitation vehicles, and other fields, contributing to the rapid development of hydrogen fuel cell commercial vehicles. **PSR**

India Report

By Aditya Kondejkar, Research Analyst – South Asia Operations

Kubota Plans To Leverage India as Global Production Hub



*Aditya
Kondejkar*

In a strategic move reminiscent of Suzuki Motor's successful expansion strategy, Japanese agricultural equipment giant Kubota is carving out a path to global dominance by establishing India as its production nucleus. The recent acquisition of Escorts, a leading tractor manufacturer in India, marked a pivotal moment for Kubota, propelling it into a position of strength in the Indian and international markets.

Kubota's journey in India began in 2008, albeit with sluggish growth and single-digit market share due to its specialization in lightweight tractors, which initially lacked the requisite power for Indian applications. However, with the acquisition of Escorts in 2022 and subsequent rebranding as Escorts Kubota, the company gained a significant foothold, complementing its expertise with Escorts' established presence in the Indian market.

Nikhil Nanda, chairman and managing director of Escorts Kubota, highlighted the transformative impact of Kubota's ownership on production facilities. With Kubota's backing, Escorts Kubota is poised to replicate Maruti Suzuki's success, envisioning a trajectory of growth and expansion.

Source: Nikki Asia [Read The Article](#)

However, challenges loom on the horizon, as exemplified by Daiichi Sankyo's misadventure in India's pharmaceutical sector. Success hinges on a deep understanding of cultural differences and a steadfast commitment to embracing Escorts within Kubota's organizational ethos.

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India Report

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Kubota aims to double its market share in India by 2030, leveraging India's burgeoning agricultural sector and its proximity to Africa, a promising growth market.

Looking ahead, Kubota aims to double its market share in India by 2030, leveraging India's burgeoning agricultural sector and its proximity to Africa, a promising growth market. With plans to expand exports to South Africa and Tanzania and introduce new tractor series with Kubota's technical expertise, Escorts Kubota is poised for a trajectory of sustained growth and global dominance.

In conclusion, Kubota's strategic move to leverage India as its global production hub represents a paradigm shift in the agricultural equipment industry. By capitalizing on India's vast market potential and synergizing with Escorts' established presence, Kubota is poised to redefine the landscape of global agriculture, echoing Suzuki Motor's trailblazing expansion strategy.

As the company charts a course towards doubling its market share and expanding its footprint in Africa, the stage is set for Escorts Kubota to emerge as a formidable force in the global agricultural equipment market. **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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