PowerTALK™ News

45 YEARS 1976 · 2021

Published Monthly by Power Systems Research
Data · Forecasting · Solutions™

November 18, 2025 Volume 10 No. 11

Worldwide News & Analysis

In This Issue

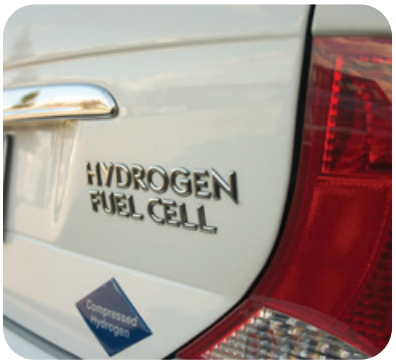
About Us

Power Systems Research (PSR) is a world leader in providing power equipment information, whether it's pure data, analysis, forecasting or specific business intelligence. This product information ranges from IC engines to battery-electric and hybrid powertrain technologies. PSR has been providing world class business and market intelligence to industry leaders for 45 years. How can we help you? For details, call **+1 651.905.8400** or email **info@powersys.com**.
www.powersys.com

Power Systems Research: Data...Forecasting...Solutions

Questions, Comments? Contact Joe Delmont, Editor
jdelmont@powersys.com | +1 651.905.8400 | www.powersys.com

Click Here To Go To Page 1



Alternative Power

By Guy Youngs, Forecast & Adoption Lead

GM Drops Hydrogen Fuel Cells For Vehicles

Guy Youngs

GGeneral Motors' decision to end development of its next generation Hydrotec fuel cells for vehicles marked the end of a long, careful experiment. After years of research, pilot programs, and cautious optimism, GM finally acknowledged what the energy math had been showing for years: Hydrogen fuel cells are not a viable pathway for road transportation.

GM has been exploring hydrogen vehicles since 1966. Framing its decision in practical terms, GM cited high costs, limited infrastructure, and low consumer demand. There are only about 60 hydrogen refueling stations in the United States.

Source: *CleanTechnica* **Read The Article**

PSR Analysis: The underlying problem was physics. Converting electricity to hydrogen through electrolysis, compressing or liquefying it, transporting it, and then converting it back into electricity inside a vehicle stack wastes most of the original energy. The entire process typically returns less than one third of the energy put in. Battery electric systems, by contrast, can deliver about three quarters of grid energy to the wheels. Basic economics has settled the argument. **PSR**

China All-Solid-State EV Battery Has Range of 620 Miles

All-solid-state batteries may be the key to unlocking longer range, faster charging, and overall, more efficient electric vehicles. While America steps back from EVs, scientists in China have made a series of breakthroughs, and overcome several hurdles that have been holding the new EV battery tech from hitting the market.

According to a report from China Central Television (CCTV), scientists achieved three breakthroughs that could be key to unlocking the next-generation battery tech and allow a 100 kg battery pack to deliver over 1,000 km (620 miles) of range.

Source: *Electrek* **Read The Article**

PSR Analysis: It's great to see progress in solid state battery technology leading to cutting weight and cost, increasing usable space inside the vehicle and improving handling and efficiency. But the key here is that it isn't who makes it first, it's who makes it better, cheaper and more efficiently, and the likes of CATL and BYD have proved that they make it better. **PSR**

Click Here To Go To Page 1

Alternative Power

Continued from page 2

Chinese scientists have developed a new battery system that could enable lithium cells to operate safely for thousands of hours, an advance that could lead to better batteries for electric vehicles and power grids

Chinese Battery Could Extend Lithium Cell Life by 9,000 Hours

Lithium metal batteries have become the cornerstone for future power systems due to their high energy storage capacity. Now, Chinese scientists have developed a new battery system that could enable lithium cells to operate safely for thousands of hours, an advance that could lead to better batteries for electric vehicles and power grids.

However, the current liquid electrolytes in these cells pose several risks, including leakage and combustion, and the growth of lithium metal inside batteries into needle-like or branch-like structures during charging (called dendrites), can compromise battery safety and performance.

Emerging studies suggest new types of electrolytes, called deep eutectic gel electrolytes (DEGEs), can help overcome these issues due to their high charge conduction capacity and inherent thermal stability

Source: *MSN* **Read The Article**

PSR Analysis: The fact that these electrolytes can improve the life span and thermal stability of batteries is a big step in making lithium batteries more useful and safer, and that's a big plus given all the myths and fake news about batteries catching fire. Yes, if a lithium battery (using an NMC cathode) is pierced it can lead to thermal runaway. However, the chances of this happening are less than the chances of a gasoline-powered car catching fire. **PSR**

Takeaways from Trump's Meeting with Chinese Leader Xi

In October, the Chinese government introduced new export controls on key dual-use items, citing national security concerns. The move affected the export of rare earths which are critical to all aspects of modern life (such as mobile phone, computers and EVs) **(Click here to read about this)**. China manufacturers 80% to 90% of the world's rare earths.

In response, US President Donald Trump threatened to impose an additional 100% tariff on Chinese goods and export controls on "critical" software beginning Nov. 1. These measures would come on top of the existing 30% tariff already in place.

Within two weeks the two leaders met, and the result was that Trump told reporters while heading home on Air Force One that he had agreed to cut his 20% tariff increase, imposed over China's role in producing fentanyl and chemicals used to make it, to 10%. China confirmed that will take average tariffs on Chinese goods to 47%, down from 57%.

In addition, Trump said the Chinese side has committed to buying "a tremendous amount" of American soybeans, sorghum and other farm products. The Chinese side did not provide any details, but U.S. Treasury Secretary Scott Bessent later

Click Here To Go To Page 1

Alternative Power

Continued from page 3

said China had agreed to buy 25 million metric tons of U.S. soybeans annually as part of the agreement

Source: *MSN* **Read The Article**

PSR Analysis: Leaving aside the rhetoric from President Trump, the meeting showed the bargaining strength that China possesses in relation to rare earths. It also may have bought the USA some time to establish alternative sources of rare earths. **PSR**

In 2024, production of Tractor/Loader/ Backhoes in North America increased 3.4%. Production is expected to decrease by 4% in 2025.

DATAPOINT: *North America Tractor/Loader/ Backhoes Production*

9,500

By Carol Turner, Senior Analyst, Global Operations

9,500 units is the estimate by Power Systems Research of the number of Tractor/ Loader/Backhoes expected to be produced in North America during 2025.

Tractor/Loader/Backhoes (TLBs) are full-size machines that are three pieces of construction equipment combined into one: the tractor, the loader and the backhoe. These units are designed to tackle an array of construction and agricultural related activities.

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.

Market Share: With 38% of total units produced, Deere leads in production of TLBs in North America. In second position is Case New Holland with 33.5%; third, is Kubota with 28.5%.

Export: Collectively, up to 30% worldwide.

Trends. In 2024, production of Tractor/Loader/Backhoes in North America increased 3.4%. Production is expected to decrease by 4% in 2025. There was an overall increase in construction related activities in 2024 that is reflected in the gain of production from residential, commercial and infrastructure sectors.

TLBs are a significant selling piece of construction machinery and will remain a popular machine. Expect production is expected to gain an additional 5% by 2030. The small construction segment is predicted to increase the demand for TLBs due to the machine's efficient use in material handling and digging applications. TLBs are easy to operate, especially in limited spaces and are a versatile machine. **PSR**

Click Here To Go To Page 1

North America Report

By Chris Fisher, Senior Commercial Vehicle Analyst

Trucking Market Recovery Will Be Driven by Supply Side

Chris Fisher

The signs of a freight recovery that appeared early this year are gone, replaced by a tough market where recovery will have to come from a supply-side correction, American Trucking Associations' Chief Economist Bob Costello said at ATA's 2025 Management Conference & Exhibition in San Diego.

Costello delivered a blunt and sobering economic warning: new tariffs, persistent stagflation, and a slowing labor market have created "absolutely unsustainable" conditions for many carriers, and the only way out, at least near-term, is to erase capacity from the highway.

"It's not easy to talk about because it's people's livelihoods, but it's a necessary evil," Costello said, noting that freight demand is unlikely to improve anytime soon. "This has got to be a supply-driven change in the market."

The current 18% effective tariff rate, nearly six times higher than it was during the first Trump administration, is a level not seen since the 1930s. Costello warned that the industry is only in the "bottom of the second or top of the third inning" of feeling the impact. "Any benefits of putting tariffs on foreign goods... are years in the future, but the cost hits much quicker," he said.

Tariffs will impact inflation and could go up to 4% year-over-year, Costello said, before slowing. But prices will rise and stay high unless the tariffs are reduced or eliminated, he added. Overall, prices are up more than 26% since 2020.

A bright spot, Costello said, is that private fleet growth has finally ended and is reversing. "Private fleets grew just after the pandemic. So, as we were in the pandemic craziness and freight was going crazy, there were a lot of frustrated shippers," he said. "Some of them had fleets and they decided to grow that privately. It was a knee-jerk reaction that I think they sort of second-guessed or regretted. They are contracting again, and I think that will put more freight into the for-hire market."

Source: CCJ

PSR Analysis. In the medium and heavy truck segment, reduced truck capacity and higher freight demand in the market will be the principal drivers for an increase in new truck sales. Reducing truck capacity to better align with the current freight environment will be the first step of the process followed by increased freight demand. This will ultimately drive an increase in truck sales.

Like what you see? To ensure that you continue to receive your complimentary copy of the PowerTALK™ News report each month, Sign up now.

Click Here To Go To Page 1

North America Report

Continued from page 5

A rebalancing of the market is likely to begin within the next six to nine months. Moving forward, the big question is not if but when and how quickly the freight market rebounds. Barring an economic downturn or recession, the most likely outcome will be a gradual increase in freight demand beginning late next year. This would allow OEMs and supply chains to gradually increase production capacity to meet improved demand. But what if, for instance, nine months from now the overall state of the market improves significantly and freight demand rises more quickly than anticipated. Will the OEMs and supply chains be able to react to a sharp increase in truck demand?

Meaningful interest rate cuts, a significant reduction in existing tariffs and a stable level of inflation could drive an increase in both consumer and business spending. This, along with the need to replace aging fleets that were last upgraded during the 2022-2024 buying cycle, could lead to a sharp increase in demand for new trucks, particularly in the class 8 segment. In 2022-2024, there was extremely strong truck demand caused by the Covid shutdown and very strong consumer demand.

While nobody is certain how this will unfold, it is very important for the industry to pay close attention to the freight market and economy in general so as not to get caught off guard. **PSR**

South America/Brazil Report

By Fabio Ferraresi, Director Business Development South America

Brazil, Colombia Renew 2026 Free Trade Quota

Fabio Ferraresi

Brazil and Colombia have agreed to extend for 12 months the bilateral automotive quota allowing duty-free export of up to 50,000 Brazilian vehicles per year. The mechanism, which had expired in September, risked reinstating a 16.1% import tariff on Brazilian ICE and flex-fuel passenger vehicles entering the Colombian market from 2025 onward. From January to September 2024, Colombia remained Brazil's third-largest automotive export destination, receiving 38,500 units (+55.2% YoY), below but close to the annual quota.

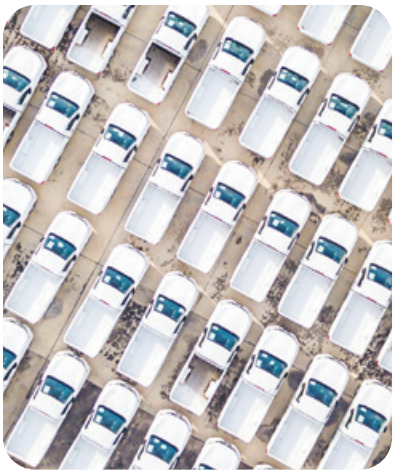
Source: *Autodata* **Read The Article**

PSR Analysis. The quota renewal preserves short-term market access for Brazilian OEMs, avoiding a steep tariff shock that would reduce competitiveness in Colombia's price-sensitive segment. The agreement also buys time for both countries to renegotiate structural terms of the automotive pact, including tariff schedules, local content rules and potential alignment with broader regional industrial policies. The 50,000-unit ceiling remains modest relative to Brazil's export capacity, signaling that future gains depend on deeper regulatory harmonization and Colombia's

Click Here To Go To Page 1

South America Report

Continued from page 6



internal demand recovery. Maintaining preferential access is strategically relevant as Brazil seeks to sustain export volumes amid domestic overcapacity and uneven Latin American markets. **PSR**

Stellantis Exports Ram Rampage from Brazil to Europe

Stellantis has begun exporting the Brazil-made Ram Rampage to Europe, marking the first Ram vehicle developed and manufactured outside North America to reach the continent.

Produced in Goiana (PE), the model will be offered in two configurations: the Rebel, equipped with a 2.2-liter turbodiesel engine (200 hp, 45.9 kgfm), and the R/T, fitted with the 2.0-liter Hurricane-4 turbo gasoline powertrain (272 hp, 40.8 kgfm). The Rampage project has accumulated more than 50,000 units sold in Brazil since its 2023 launch. In the midsize pickup segment, the Rampage ranks second in Brazil with 20,658 units licensed from January to October 2025, behind the Fiat Toro and ahead of the Chevrolet Montana.

Source: *Automotive Business* **Read The Article**

PSR Analysis. The Rampage export program signals a gradual expansion of Brazil's outbound vehicle flow. The increase in exports combined with the increase in BEV and HEV imports makes the analysis of Brazilian LV and LCV production markets more complicated than just using sales and registration numbers, which are widely available. The move also increases production scale at Goiana, but the broader competitive impact remains limited, given the modest volumes expected and the high competitiveness of the European pickup segment. **PSR**

Ford To Build Hybrid Ranger with Flex-Fuel Engine for Brazil in 2027

Ford has confirmed that the Ranger PHEV will be launched in Brazil in 2027 with a market-specific configuration: a 2.3-liter turbo flex-fuel engine combined with an electric motor and a rechargeable battery.

The model, already available in Europe with an 11.8 kWh battery and a 75 kW electric motor, delivers combined torque around 70 kgfm and maintains the 3,499-kg towing capacity of conventional versions. For Brazil, the flex adaptation is expected to raise system output above the 278 hp declared for the gasoline-only European version.

The PHEV variant will be produced in South America—most likely at Ford's Pacheco plant in Argentina—and will feature exclusive 18-inch wheels, lateral charging port, PHEV badging and the Pro Power Onboard auxiliary power system. Ford will thus become the first automaker to offer a flex-fuel plug-in hybrid midsize pickup in the Brazilian market.

Source: *O Estado de São Paulo* **Read The Article**

Click Here To Go To Page 1

South America Report

Continued from page 7

PSR Analysis. The introduction of a flex-fuel PHEV Ranger adds a new technological layer to Brazil's midsize pickup segment, reinforcing Ford's electrification strategy while leveraging the country's ethanol advantage. The program also expands regional industrial capability, as the PHEV will join other Ranger versions produced in Argentina.

Although the Ranger PHEV may set a new benchmark for performance and efficiency, its competitive impact will hinge on pricing, battery supply, and customer acceptance relative to upcoming electrified rivals such as BYD's Shark and the expected hybrid Amarok derivatives. **PSR**

Far East: Japan Report

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

J-ENG Launches Large Marine Engine Fueled by Ammonia

Akihiro Komuro

Japan Engine Corporation (J-ENG) has announced the completion of its first full-scale ammonia-fueled engine. The engine is due to be shipped to Japan Marine United (JMU)'s Ariake Works for installation on an ammonia-fueled ammonia carrier (AFMGC) which is currently under construction at the facility. The vessel is scheduled to enter service in November 2026.

Source: Kaiji Press Online

PSR Analysis: J-ENG's first domestically produced ammonia fuel engine is a significant milestone as Japan strives to lead the way in marine decarbonization technology. Ammonia emits no CO_2 during combustion, making it a strong candidate for alternative fuels under the stricter IMO GHG regulations.

Commercial-level completion and shipment will establish a competitive advantage. It will also accelerate investment in related industries, such as port bunkering facilities and the development of an ammonia supply network, by fostering a 'Japanese-style ecosystem' of domestic shipbuilding, engine manufacturing and fuel supply. However, challenges remain in terms of safety, combustion efficiency and NOx management. The next focus will be whether real-ship testing will enable Japan to take the lead in international standardization (ISO/IMO). Due to the high construction costs and the need to develop the supply environment, market penetration is likely to be gradual. **PSR**

Like what you see?

To ensure that you continue to receive your complimentary copy of the PowerTALK™ News report each month, Sign up now.

Click Here To Go To Page 1

Japan Report
Continued from page 8

In South Korea, the government-led 'Smart Safety Equipment Support Project' is encouraging the use of electric forklifts and standardized safety equipment.

極東 > 日本レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

J-ENG、アンモニアを燃料とする大型低速舶用エンジンを発売

ジャパンエンジンコーポレーション（J-ENG）は、フルスケールのアンモニア燃料エンジン初号機を完成させたと発表した。同エンジンは10月にジャパンマリンユナイテッド（JMU）有明事業所向けに出荷され、同事業所で建造中のアンモニア燃料アンモニア輸送船（AFMGC）に搭載される。同船は、2026年11月に就航する予定。

参考: 海事プレスOnline（一部筆者により元記事内容を改編しました）

PSR 分析: J-ENGの純国産アンモニア燃料エンジン初号機は、日本が舶用脱炭素技術で主導権を取りに行く明確な転換点といえる。アンモニアは燃焼時にCO_2を排出せず、IMOのGHG規制強化を背景にした国際的な代替燃料の有力候補であり、商用レベルの完成・出荷は競争優位を確立する成果となる。また国内造船・エンジン・燃料サプライの"日本型エコシステム"の形成を後押しし、港湾のバンカリング設備やアンモニア供給網整備など、周辺産業の投資加速を誘発する期待がある。一方で、安全性・燃焼効率・NOx管理の側面で課題は残るため、実船試験を通じて国際標準化（ISO/IMO）で主導権を取れるかが次の焦点になる。建造コストも高額になり、またサプライ環境の整備も含めて、市場への浸透は時間を掛けて進められていくだろう。**PSR**

Far East: South Korea Report

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

South Korea Pushes Promotion of EV Forklift Adoption

Akihiro Komuro

In South Korea, the government-led 'Smart Safety Equipment Support Project' is encouraging the use of electric forklifts and standardized safety equipment. According to the official notice, electric forklifts weighing less than 3 tons must be fitted with an overload prevention system, seat belts, warning devices, emergency stop buttons and anti-fall valves.

The subsidy program enables companies to introduce electric forklifts at a low cost, putting pressure on them to replace their diesel models with electric ones. The adoption of 'unmanned forklifts' and 'remote/automated transport' within companies is also progressing, with the smart transformation of logistics and factories stimulating market demand.

Click Here To Go To Page 1

South Korea Report

Continued from page 9

Consequently, the combination of safety standards, electrification and automation is establishing itself as the 'standard direction for next-generation forklifts' in South Korea.

PSR Analysis: The most distinctive feature of the Korean market is the government's aggressive promotion of safety standards to near-mandatory levels, coupled with the rapid rate at which these standards are adopted as market norms. Furthermore, against a backdrop of labor shortages, an ageing population and frequent overloading accidents, companies are highly incentivized to invest in safety equipment and automation.

Korea's unique strengths lie in its extensive IT infrastructure and smart factory adoption, as well as its advanced communication environments, making the transition from electrification to automation technically feasible. The concentration of major manufacturers in the automotive and electronics industries, coupled with high rates of 24-hour operation and indoor work, creates an ideal environment for electric forklifts, accelerating their adoption even further.

Conversely, weaknesses include the significant cost burden for SMEs (Small and Medium-sized Enterprises) and the limited diversity of manufacturers' lineups, which is slower than in Europe, leading to slower adoption of electric motors in high-durability and large-capacity segments.

While safety requirements are clearly defined for overseas manufacturers, this also creates an 'entry barrier' where low-cost models that do not meet safety and IT equipment standards find it difficult to enter the market. Over the next two to three years, the progression from electrification to telematics standardization to partial automation (remote/unmanned) is expected to become more pronounced. **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

韓国、電動フォークリフトの導入促進が活発化

韓国では、政府主導の「スマート安全装備支援事業」を通じて、電動フォークリフトの導入促進と安全装備の標準化が進んでいる。公示では、3t未満の電動フォークリフトに対して 過負荷防止、シートベルト、警報装置、非常停止装置、落下防止バルブなどを必須と明記した。

補助金制度により、企業は電動フォークリフトを低負担で導入可能になり、ディーゼルから電動への置き換え圧力が強まっている。「無人フォークリフト」や「遠隔・自動化搬送」の社内導入も進みつつあり、物流・工場のスマート化が市場需要を刺激している。

結果として、韓国国内では 安全規格 × 電動化 × 自動化 の三点セットが"次世代フォークリフトの標準方向"として定着しつつある。

Click Here To Go To Page 1

South Korea Report

Continued from page 10

> *The program will accelerate the mechanization and modernization of rural agriculture by enabling farmers to use machinery, thereby reducing working hours, cutting costs and increasing yields.*

PSR 分析: 韓国市場の最大の特徴は、政府が安全規格を事実上の義務化に近い形で押し上げ、その規格が市場標準として急速に定着する速度が速い点にある。また、労働力不足・高齢化・過積載事故の多さを背景に、企業側も安全装備と自動化への投資インセンティブが強い。

韓国独自の強みは、ITインフラ・通信環境・スマート工場化の浸透度が高く、電動化→自動化への移行が技術的に進めやすい点にある。製造業大手が多く自動車・電子産業が集中するため、24時間稼働＋屋内作業比率が高く、電動フォークリフトの適合環境が整っていることも追い風になる。一方の弱みは、中小企業では導入コスト負担が依然大きいことと、メーカー側のラインナップが欧州ほど多様ではなく、高耐久・大型帯での電動機普及が遅れがちな点だ。海外メーカーにとっては、要求安全仕様が明確である反面、安全・IT装備を満たさない廉価モデルが入りにくい"参入障壁"にもなる。今後2〜3年は、電動化→テレマティクス標準→部分自動化（遠隔・無人）という流れがより鮮明になると予想される。**PSR**

Indonesia Report

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

Ag Equipment Assistance Program Aids Farmers

Akihiro Komuro

The Indonesian Ministry of Agriculture is leading a nationwide initiative to provide local farmers and agricultural organizations with agricultural machinery, including rice transplanters, combine harvesters, dryers and packaging machines, free of charge, using national budget funds. The goal is to address labor shortages and improve production efficiency, with the aim of achieving self-sufficiency and improving yields of staple crops, especially rice.

The program will accelerate the mechanization and modernization of rural agriculture by enabling farmers to use machinery, thereby reducing working hours, cutting costs and increasing yields.

However, the need to establish systems for machine maintenance, repairs and parts procurement has also been highlighted, making the subsequent operation and maintenance of machinery crucial as well as its initial introduction. Consequently, the Indonesian agricultural machinery market is entering a phase where opportunities for entry and expansion are increasing for agricultural machinery manufacturers, parts suppliers, and service companies from the perspectives of 'boosting demand + regional expansion + maintenance/rental services'.

Source: BPS-Statistics Indonesia

Click Here To Go To Page 1

Indonesia Report

Continued from page 11

PSR Analysis: Although no specific figures have been disclosed regarding the scale of distribution, past statements from the Ministry of Agriculture suggest that the 2025 ALSINTAN (Agricultural Tools and Machinery) agricultural machinery subsidy budget is being prepared at around Rp10 trillion (approximately USD 700–800 million).

Furthermore, reports have mentioned plans to 'deploy 5,399 ALSINTAN units ahead of the harvest season'. This suggests a large-scale initiative involving several thousand to ten thousand units. This free distribution is a significant catalyst for advancing mechanization and demonstrates the country's commitment to agriculture. **PSR**

東南アジア > インドネシアレポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

インドネシアの農業機械無償配備プログラムについて

インドネシア農業省を中心に、田植え機・コンバイン・乾燥・包装機など、国の予算で農機を地方の農家や農業団体に無償で貸与・配布する政策が各地で実施されている。 目的は「人手不足」「収穫期集中」「生産効率の向上」に対処し、主食作物（特に米）での自給・収量改善を図ることだ。

このプログラムは、農家が機械を利用することで、作業時間の短縮・コスト削減・収量向上を実現し、地方農業の機械化・近代化を加速させる狙いがある。 同時に、機械の保守・修理・部品調達体制を整備する必要性が指摘されており、機械の導入だけでなくその後の運用維持が重要になっている。 結果的に、農機メーカー・部品サプライヤー・サービス企業にとって、インドネシア農機市場は「需要の底上げ＋地方展開＋保守／レンタルサービス」の観点から参入・展開機会が増えているフェーズと言える。

Source: BPS-Statistics Indonesia

PSR 分析: 配布の規模感について、数値は明確に公表されていないものの、農業省が「2025年のALSINTAN（農機）補助予算額を約Rp10兆約7～8億USD） と準備している」という発言が過去にあり、また「収穫期に向けて 5,399 台のALSINTANを配備予定」と報じた例もあり、数千～1万台規模の大きな事業となっているものと類推できる。こうした無償配布は大きく機械化を進展させるきっかけになるものであり、同国が農業に対して真剣に向き合っている現れといえる。**PSR**

China Report

By Jack Hao, Senior Research Manager - China

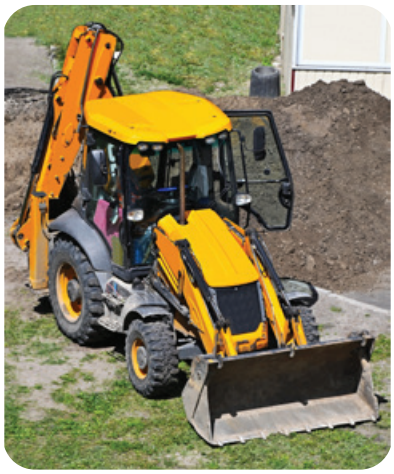
China Pushes Into South American Market

On Nov. 4, 2025, Lingong Heavy Machinery's Brazilian subsidiary, LGMG Machinery Brazil Ltda., promoted its globalization strategy in the South American market with the celebration of its plant in Indaiatuba, São Paulo State, Brazil.

Click Here To Go To Page 1

China Report

Continued from page 12



This move signifies a deepening of Lingong Heavy Machinery's South American expansion and marks an important milestone in China's industrial advancement.

Jack Hao

The establishment of the Brazilian subsidiary carries multiple strategic advantages for Lingong Heavy Machinery, providing a robust platform for serving local Brazilian customers through localized operations. It addresses customer needs with customized solutions and develops confidence in Brazilian customers by ensuring product supply stability through a localized spare parts warehouse, improving after-sales service, and enhancing technical support.

Simultaneously, capitalizing on Brazil's geographical advantages, Lingong Heavy Machinery is well-positioned to expand into neighboring South American markets in the future, leveraging Brazil's superior location and convenient transportation links to facilitate the extension of products and services to other countries in the region, laying a solid foundation for further South American business expansion.

Source: *Finance Sina* **Read The Article**

PSR Analysis: TThe establishment of Chinese construction machinery companies in Brazil marks a pivotal strategic milestone in their global expansion. It deepens the economic and trade cooperation between China and Brazil and leverages Brazil's role as a regional gateway for China to penetrate the broader Latin American market.

From an international political standpoint, this move strengthens bilateral trust, with companies like XCMG and Zoomlion integrating Chinese technological standards into Brazil's industrial policies through a model that combines investment, job creation, and technology sharing.

This approach positions Chinese engineering machinery as a tangible symbol of cooperation, facilitating future participation in large-scale national projects such as Brazil's "New Industrial Plan." Economically, Latin America's infrastructure gap, estimated at 3.5% of its GDP, drives demand for construction and mining equipment, while Chinese firms enhance supply chain efficiency through localization.

For instance, XCMG's Brazilian base boasts an annual capacity of over 10,000 units, enabling rapid responses to Brazil's "Mining 4.0 Plan." Zoomlion's localized R&D reduces equipment failure rates in high-altitude conditions by 40%, and Lingong Heavy Machinery's local spare parts warehouses cut maintenance response times from 72 hours to 24 hours.

This "Made in Brazil, Serving the Region" model has helped Chinese brands gain a 12-percentage-point increase in market share in countries like Peru and Chile within three years.

In terms of market trends, Brazil's engineering sector is evolving toward high-end and green solutions, with Chinese companies tailoring their product portfolios to meet these demands. Chinese-made excavators now account for 50% of

Click Here To Go To Page 1

China Report

Continued from page 13

Brazil's imports, and XCMG's adoption of 5G autonomous driving technology in its Brazilian factory has enabled zero-emission operations in Vale's mines.

Zoomlion's comprehensive service center in Betim has reduced customers' total lifecycle equipment costs by 18%, while Chinese brands' share of Brazil's high-end market surged from 15% in 2018 to 31% in 2025.

For Chinese firms, the Brazilian experience signifies a transformative shift from "going out" to "going deep," encompassing value chain upgrades (e.g., XCMG's local bank offering financial services), standard exports (Zoomlion's initiatives boosting local digitalization by 25%), and cultural integration (Lingong's "China-Brazil Joint Innovation Center" training over 200 local engineers). As a result, Chinese construction machinery's brand recognition in Latin America climbed from 37% in 2015 to 68% in 2025.

Looking ahead, the success of this model offers strategic lessons: it mitigates political risks through participation in Brazil's "Accelerated Growth Plan," exports Chinese new energy and smart construction standards as regional benchmarks, and builds a comprehensive service network across the Andes and Amazon regions.

In summary, the localization strategies of Chinese engineering machinery companies in Brazil demonstrate how "deep localization" can drive sustainable growth in emerging markets, setting a replicable blueprint for global expansion. **PSR**

India Report

By Aditya Kondejkar, Research Analyst – South Asia Operations

Aditya Kondejkar

H1 FY26 Auto Sector Driven by 2W Strength, Stable PV Demand

India's auto sector delivered a resilient performance in the first half of FY26 (April–September 2025), supported by healthy two-wheeler volumes, steady passenger-vehicle demand, and a modest recovery in commercial vehicles — even as the industry navigated EV market churn and shifting policy tailwinds.

Two-wheelers continued to underpin volume growth: production and domestic sales surged, with about 10,200,000 (1.02 crore) two-wheelers produced/sold in 1H FY26. This strength was driven by durable rural demand, improved affordability, and strong scooter and motorcycle cycles during the pre-festive and monsoon seasons.

Passenger vehicles showed robustness across the board, with roughly 2.05 million units recorded in the six-month period (Apr–Jun ~1.01m; Jul–Sep ~1.04m). OEMs benefited from a combination of steady urban demand, renewed festive spending and a partial easing of supply constraints. Strong export momentum — India recorded a record H1 export tally — also helped OEM plant utilizations.

Click Here To Go To Page 1

India Report

Continued from page 14

Commercial vehicles returned to modest growth — H1 wholesale CVs were roughly 463,000 (4.63 lakh) units — led by light- and medium-commercial segments.

Three-wheelers and commercial vehicles painted a mixed picture. Three-wheeler volumes recovered to near-pre slowdown levels with an H1 total close to 394,00 (3.94 lakh) units, supporting last-mile mobility and small-goods logistics. Commercial vehicles returned to modest growth — H1 wholesale CVs were roughly 463,000 (4.63 lakh) units — led by light- and medium-commercial segments, while heavy-truck demand remained sensitive to freight rates and fleet replacement cycles. Industry analysts flagged just a low-single digit YoY rise in CVs for H1.

Government-side trends. Government policy moves were a pronounced near-term demand stimulant. The GST rate rationalization (GST 2.0) and select duty adjustments boosted consumer sentiment and helped compress the purchase calculus for several passenger-vehicle segments during the festive window. Simultaneously, continued public capex on roads and logistics corridors lifted LCV/MCV freight activity — supporting CV demand recovery.

OEM-side trends. Manufacturers faced a two-track environment. Legacy incumbents posted healthy volumes and margin recovery aided by exports, while newer EV-first players confronted churn — notable revenue and volume downgrades at some e-two-wheeler startups highlighted the consolidation underway in electrified mobility. Capital discipline, localization of battery supply chains, and model rationalization were recurring OEM responses.

Demand-side analysis. Urban replacement and festival buying propelled personal vehicles (PVs), rural resilience — aided by crop prices and informal credit — kept two-wheelers buoyant, and freight-led restocking lifted LCVs. Inflation normalization and lower financing costs remained important enablers, though affordability pressures persist for entry segments.

Overall assessment. H1 FY26 reflects a mature, segmented recovery — broad volume strength in two-wheelers and passenger cars, selective recovery in CVs, and a realignment in the EV space. The near-term outlook hinges on festive momentum sustaining into Q3, continued export demand, and how quickly OEMs can stabilize EV unit economics while leveraging government incentives and capex-driven freight growth. **PSR**

Russia Report

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**

Click Here To Go To Page 1

Meeting Your Information Needs

Power Systems Research (PSR) has been providing world class business and market intelligence on power equipment to industry leaders for more than 45 years. A comprehensive range of database products and strategic analysis services is available to meet your planning needs. For more information, visit us at **www.powersys.com**.

- **EnginLink™** – Engine Production and Forecast Data
- **CV Link™** – Commercial Vehicle Production and Forecast Data
- **OE Link™** – Original Equipment Production and Forecast Data
- **OE Link Sales™** – Original Equipment Sales and Forecast Data
- **PartsLink™** – Engine and Original Equipment Population Data
- **MarineLink™** – Boat Production and Engine Installation Data
- **PowerTracker™ North America** – North American gen-set syndicated survey
- **Call Center** - In-house calling capability for custom surveys
- **Market Studies** – Conducted more than 3,100 proprietary studies
- **Component Modules** – Supplemental data sets including engine specifications, components and consumables.

PSR is the leading source of global production, forecast, and population data for equipment and vehicles powered by IC engines and electric and hybrid powertrains. PSR has been tracking the production of on-highway and off-road vehicles and equipment since 1976. We use this data to develop targeted **forecasts** by industry segment and region. Our team of experienced analysts works with OEMs, engine and component manufacturers, dealers, fleet managers and industry experts to compile detailed and focused data that has become an industry standard. PSR analysts combine our data with industry intelligence to create unique, targeted **solutions** to our clients' needs.