EnginLink™ Update *Bulletin*

October 1, 2026

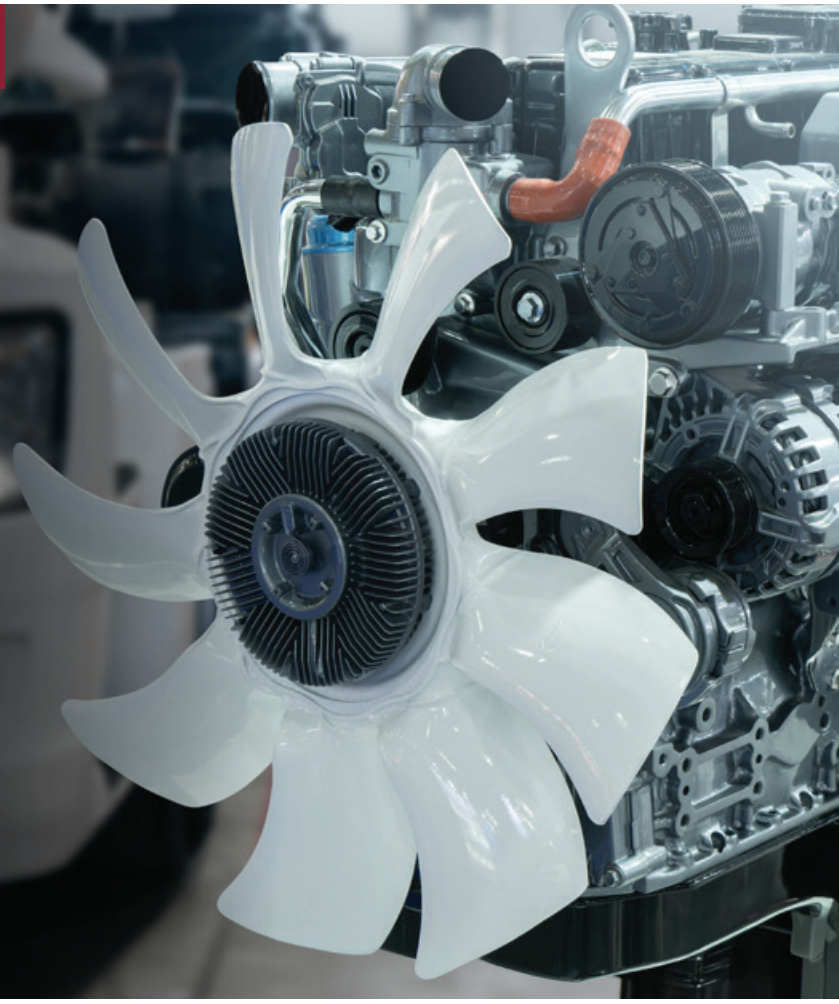
Q3 2026 REVIEW AND FORECAST

Power Systems Research
Data · Forecasting · Solutions™

www.powersys.com | +1-651-905-8400 | info@powersys.com

EnginLink™ is a comprehensive database containing global historical and forecasted engine production volumes. This document outlines important forecast trends as well as the additions and enhancements applied to the database in the third quarter of 2026.

Highlights



Global
Growth Forecast Despite Wars, Tariffs, and Oil Problems. Page 7

Europe
Geopolitical Factors Affect Europe Economy. Page 9

China
2026–2031 Provides Steady Start to Five-Year Plan. Page 20

Far East
Power and Marine Segments Lead Recovery. Page 25

Southeast Asia
Power and Industrial Investment Expand, but Equipment Recovery Remains Uneven. Page 30

India
Growth Continues Across Broad Economy. Page 33

South America/Brazil
Overall Production Outlook Is Positive. Page 37

North America
More of the Same Economy from Q2 2026. Page 42

Inside

I. Executive Notes 3
II. Introduction 5
III. EnginLink™ Database Update Notes 6
IV. Forecast Trends 7
V. Research Methodology 43
VI. Forecast Methodology 44
VII. Contact Information 45



Commercial Vehicle Outlook

Medium and heavy truck production in North America is expected to increase by 13.4% this year compared with low 2025 production. Class 8 truck production is expected to increase by 13.8% this year as order rates for class 8 trucks improved strongly throughout much of the year. Improvement in freight rates and freight demand along with tightening truck capacity and some level of truck pre-buy ahead of the 2027 GHG emission regulations is expected to drive increased truck production this year.

To get the full story, contact us today.

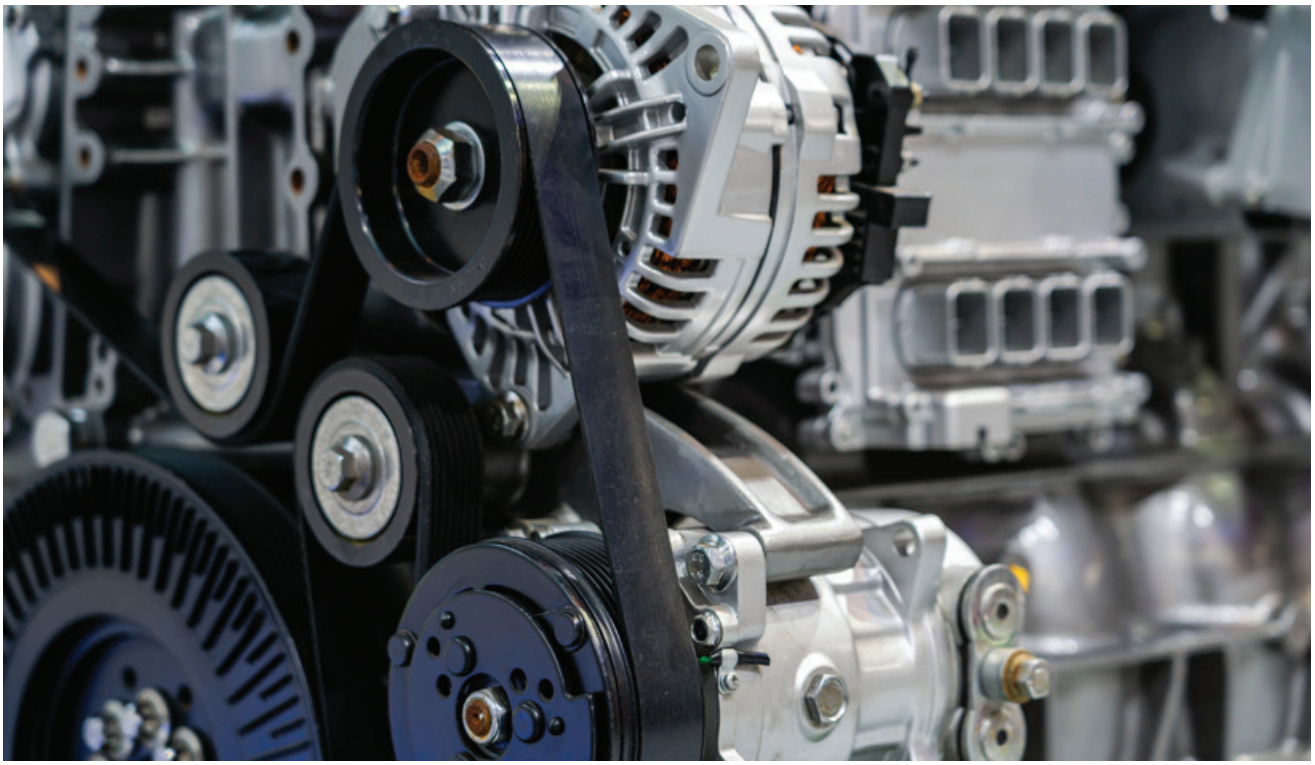
Power Systems Research

Data · Forecasting · Solutions™

St. Paul, USA | Beijing, China | Brussels, Belgium | Detroit, USA | Pune, India | Sao Paulo, Brazil | Tokyo, Japan

Contact Us Today: +1 651.905.8400 | info@powersys.com | www.powersys.com

I. Executive Notes



Staying at the Forefront of Data Center Trends

It seems as though every day we see news about the production and development of data centers and the related arguments about possible benefits and downsides of these large data centers.

The amount of news generated about data centers isn't surprising, since there are more than 11,000 of these centers in operation or in production globally today.

While articles about battles over where to locate these centers are frequent, it is helpful to note that there is one important common element in these discussions and that is the need for more power. As demand increases for more capability from AI as well as other computing and data storage needs, having the necessary power—both primary and backup—beyond that available from the infrastructure grid is an ongoing requirement.

That's where the markets that Power Systems Research (PSR) track come into play.

Our dependance on data centers and the critical services they provide is growing every day. Data centers essentially power the digital world, enabling seamless connectivity, storage, and processing of vast quantities of data. These facilities support essential services, from powering global communication networks and cloud platforms, to driving innovation in artificial intelligence, healthcare, and financial systems.

One might think that data centers use diesel generator sets as the common source of primary and backup power since this is the most cost effective and proven power technology.

While it's true that diesel generator sets often are employed, there are environmental and technology

Author



Joe Zirnhelt is President and CEO of Power Systems Research.

questions that also come into play. For example, if the power requirements are scaled to a certain size, then use of gas turbines in place of, or in addition to, diesel or natural gas generator sets, may be part of the solution.

Another twist to this trend involves growth in future requirements as more renewable energy targets are developed in certain countries for sourcing data center power. Future data centers that have larger power requirements may employ a mix of technologies where engine power is just one piece of the puzzle and wind and solar and Battery Energy Storage systems also are used.

At PSR, we are monitoring data center growth trends and we're analyzing the possible impact of this growth on the demand and production of equipment PSR tracks. PSR is actively working to better delineate the purpose of the generator sets that might be used to power data centers.

We realize that having this type of insight is important to be able to identify the size of the market for power generation equipment and components used in data centers and critical power applications.

We will have more to share on this topic in future updates but for the time being you should be aware of our work in this area and of our awareness of these important trends.

As we prepared this Q3 2026 update, we incorporated important insights we gathered during the third quarter to provide our best outlook for 2026 as well as our five-year forecast.

We hope you find this database update valuable at this important time. As always, we appreciate your feedback and continued dialogue as you review this latest update.

If you are facing new challenges or issues that require data-driven solutions, talk to us. We can be an important resource.

Thanks for reading and for being a valued client of Power Systems Research. **PSR**



II. Introduction



Power Systems Research (PSR) has developed and maintained comprehensive market data specific to the power products and drivetrain industry since 1976. Because accurate and reliable market data has always been at the heart of its activities, PSR has developed a unique family of highly specialized databases. These core databases include:

- **EnginLink™** – Engine Production and Forecast Database
- **OE Link™** – Original Equipment Production and Forecast Database
- **CV Link™** – Commercial Vehicle Production and Forecast Database
- **PartsLink™** – Original Equipment Population Database

The **PowerLink™ 3.0** dashboard effectively combines all market databases into one Internet-based tool. Using this system, subscribers can easily access, organize and download the latest engine-powered market data anytime, anywhere in the world.

The PowerLink™ 3.0 dashboard has extensive reporting capabilities and allows for customization and report distribution within your organization. This innovative system sharpens your business and planning strategies by finding hidden opportunities and targeting potential customers. The PowerLink™ 3.0 dashboard is your link to a competitive advantage in the marketplace.

EnginLink™ is continuously updated; this Update Bulletin reflects changes made to EnginLink™ during the previous quarter. Included in this Update Bulletin are EnginLink™ database notes listing significant data modifications and an explanation of our research and forecast methodology. Additional Power Systems Research initiatives also are outlined here.

Please feel free to circulate these research notes to your colleagues and internal data users

If you have any questions regarding this update, please contact us via email at support@powersys.com or by phone at 651-905-8400. Our support email account is monitored 8-5 CDT M-F by associates at our corporate offices and at our data center.

Thank you for your continued support of Power Systems Research. **PSR**

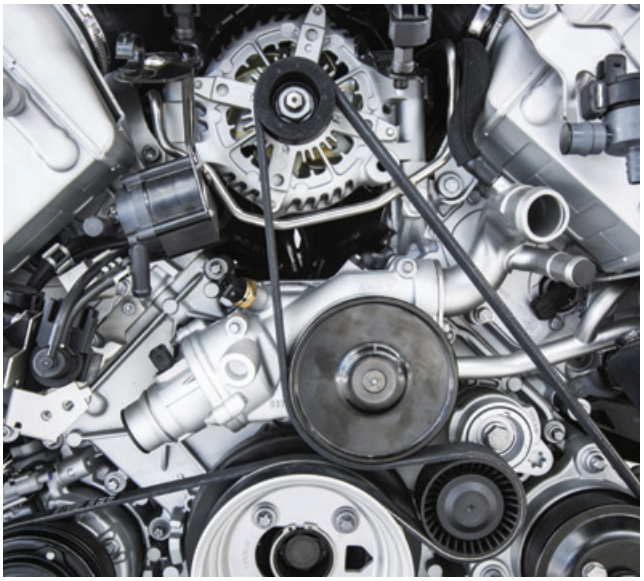
III. EnginLink™ Database Update Notes

Engine Manufacturer News and Notes

Cummins Inc: Launched a series of mining solution updates starting in Q3 2026, featuring refinements to the QSK60 high-horsepower engine, capabilities on the PrevenTech remote monitoring platform, and an all-new clean-sheet mining engine designed to cut emissions and lower ownership costs.

General Motors: GM advanced production plans at its Brookville, Ohio, DMAX facility targeting heavy-duty truck and industrial-application diesel development, highlighting a competitive push with its new high-torque Duramax/Mongoose diesel V-8 variants.

Wartsila: Following a massive wave of global energy and marine demand, Wärtsilä finalized plans to ramp up technical engine production capacity at its Sustainable Technology Hub in Vaasa, Finland, by a cumulative 65% compared to 2025 levels.





Engine Models Added

Manufacturer	Model
Caterpillar	C32D, C13D
Deutz	TCD 24.0 V12
John Deere	JD5, JD8
Yanmar	4TN86DHT

Major Manufacturers with Data Updates

- Ashok Leyland
- BRP
- Caterpillar
- FPT Industrial
- Kawasaki Heavy Industries
- Perkins Engines
- Suzuki
- Wartsila
- Weichai Power
- Yamaha Motors
- Yanmar

EnginLink™ Update Editor



Jim Downey is Vice President-Global Data Products at Power Systems Research.

Global

Global Growth Forecast Despite Wars, Tariffs, and Oil Problems

SUMMARY. The five-year Global economic outlook is generally positive even thought it is muddied by wars, mixed tariffs, oil shortages and inflation. The wars in the Middle East and Ukraine show no signs of coming to an end anytime soon, and the Iran War continues to cause global oil shortages which drive up inflation. The tariff wars pushed by US President Donald Trump have upset production and supply chains across the globe and continue to drive up prices. Increases in diesel fuel are especially disruptive, but increased prices of gasoline continue to plague consumers. Despite these worldwide problems, the global economy is expected to show solid growth through the forecast period.

The five-year Global economic outlook is generally positive even thought it is muddied by wars, mixed tariffs, oil shortages and inflation.

AGRICULTURAL. The Agricultural sector is showing consistent signs of good growth in the range of +2.2% to +3.9%. The average growth rate gains to a level of +2.9% and the market is expected to grow +666k units by the end of the forecast period. Most of this growth comes from China (+385k) and India (+171k) which add over 150k units during the forecast period, while Japan shows the slowest growth of the major agriculture countries, at +1.3% average over the forecast period.

CONSTRUCTION. The global construction equipment sector is expected to grow by an average rate of +3.3% in the forecast period, gaining +196k units by the end of the forecast period. Of the major countries, China adds most of the volume with +105k by the forecast end.

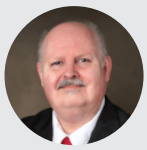
INDUSTRIAL. This segment is expected to remain positive throughout most of the forecast period with average growth rate at a solid +3.4%. The market is expected to grow +1.036 million units by the end of the forecast period. Of the big two manufacturing countries, only China continues to grow throughout the period, averaging +5.5%, while the USA declines in 2030 but still averages +2.9%. The next fastest growing major region is India with average growth of +5.6%.

LAWN & GARDEN. The Lawn & Garden segment remains positive in all forecast years except for 2030 when it is expected to decline by -2.3%. The average growth rate remains at+2.4% and the market grows +3.292 million units by the end of the forecast period. The USA is the largest producer for this sector with almost a third of the total volume, so a fall in 2030 of-3.9% contributes significantly to the 2030 market decline. Of the big five producers only China and Brazil remain positive throughout the entire forecast period.

LIGHT COMMERCIAL VEHICLES. This segment is expected to remain positive throughout most of the forecast period with the average growth rate remaining a solid +2.5%. The market is expected to grow +1.531m units by the end of the forecast period. Of the top three countries (China, USA and India) only China remains positive throughout the period, adding +565k units while the USA shows a mixed growth/decline figures throughout most of the forecast but still ends the forecast period with growth of +244k.

MARINE AUXILIARY/MARINE PROPULSION. After a difficult 2025, these segments are expected to grow throughout most of the remainder of the forecast period with the average growth rate remaining at +1.9%, and the market growing by +81k units by the end of the forecast period. Japan is the largest producer in this segment with over half the volume. Japan is expected to grow by an average of +2.8% and add +61k units in volume.

Author



Guy Youngs is Forecast and Technology Adoption Lead at Power Systems Research.

Global: Global Growth Forecast Despite Wars, Tariffs, and Oil Problems

Continued from page 7

MEDIUM & HEAVY VEHICLES. This segment is expected to decline in 2030 but grow for the remaining years. The average growth rate remains at +2.0%, and the market is expected to grow by +433k units by the end of the forecast period. Of the big three production countries, only China remains positive throughout the period, adding +291k units with average growth rates of +2.4%.

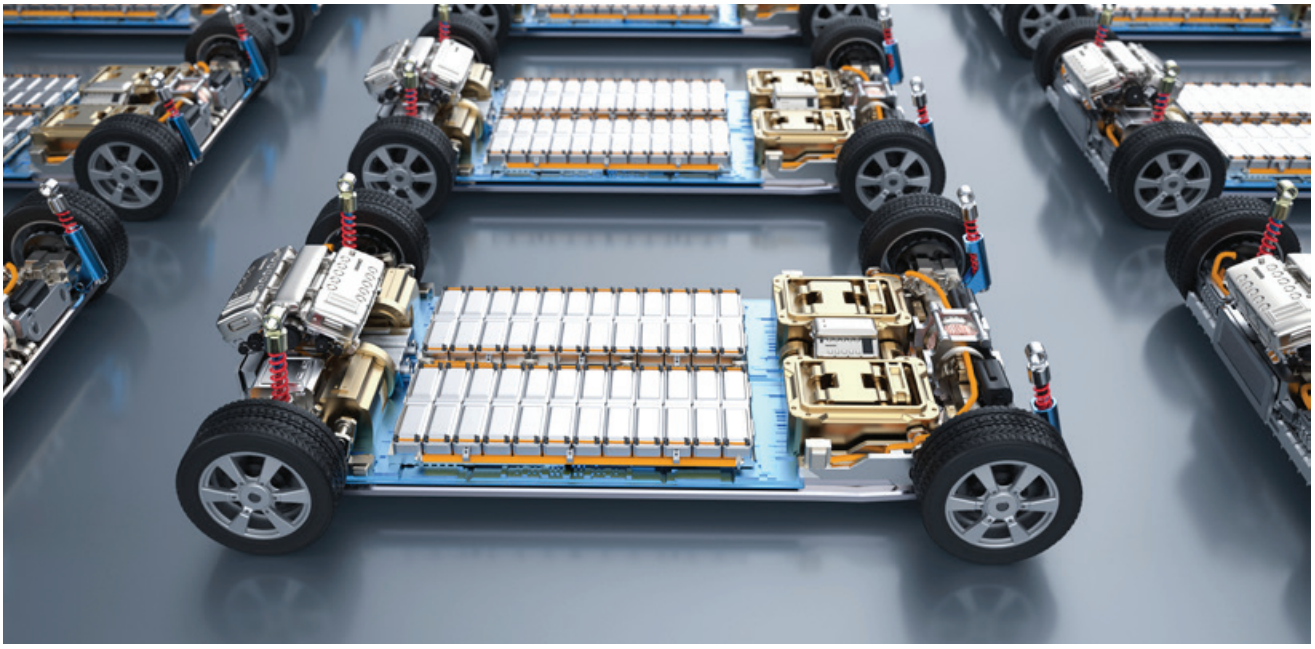
PASSENGER CARS/MINIVANS & SUVs. Generally, 2026 is expected remain a solid year for these segments with growth averaging +3.0% (Minivans +4.2% and Passenger Cars at +1.3%) and the combined market growing by +12.680m by the end of the forecast period. China and USA produce a little over half of the volume in these segments, and both remain strongly positive for most of the forecast period with China +4.5% and USA +3.9%.

POWER GENERATION. Power generation is expected to continue to grow strongly during the whole of the forecast period with growth ranging from +2.0% to +5.5%. The average growth rate remains solid at +3.9% and the market should grow by +1.620m units by the end of the forecast period. The top two power generation countries (China and United States) show mixed results with China averaging +4.4% and USA averaging +2.7%.

RAILWAY. Global railway production is expected to grow strongly throughout the forecast period with an average growth rate of +4.8% and increase in size by just over +1.5k. The market is dominated by China (60% of the production) which is forecast to have an average growth rate of +3.3%.

RECREATIONAL PRODUCTS. This segment continues to grow strongly with volumes growing on average +3.8% and adding 21.575m units by 2031. The size of this segment is so large that it can distort overall market views. Growth rates for the future years are driven by China and India which dominate the market (over 80% share) The key factors to better performance in recreational products are affordable personal transportation, significant demand for these products, the impact of electrification and higher consumer spending with more disposable income.

ALTERNATIVE POWER. Battery Electric Vehicles (BEV) are expected to grow at between +5.4% and +9.0%, with an average growth rate of 7.5%, and add an extra 30.851m units by 2031. The Internal Combustion vehicles on the other hand are growing much slower with changes ranging from -1.4% to +3.1%, averaging +1.1% and adding 6.352m in volume. **PSR**



Europe

Geopolitical Factors Affect Europe Economy

SUMMARY. Q3 2026 can be best described as "growth under mounting pressure." The EU continued to face a combination of energy supply constraints, trade uncertainty, and emerging political, economic and environmental challenges, yet the economy remained resilient, with EU GDP growing 0.7% in Q3 2026. While these pressures have not eased, continued growth highlights the EU economy's ability to absorb external shocks as policymakers adjust and implement measures to stabilize economic conditions and strengthen competitiveness.

This development is broadly in line with our baseline forecast of 3.0-3.2% growth for H2 2026. On the positive side, formalizing the EU-US trade agreement into EU law provides a clearer framework for transatlantic trade and may reduce some tariff uncertainty. At the same time, the EU is pursuing greater diversification of its trade and supply chains through new agreements and is accelerating policies to improve energy security and reduce energy costs.

However, these measures largely address underlying structural vulnerabilities rather than providing immediate solutions. High energy costs, exposure to external energy supplies, dependence on international trade and geopolitical instability remain significant challenges for European industry. The policy response therefore points to a longer-term process of strengthening the EU's resilience and competitiveness, rather than a quick resolution to the pressures experienced during Q2 2026.

On Sept. 16, 2026, European Commission President Ursula von der Leyen delivered her annual State of the Union (SOTEU) address to the European Parliament. The speech reviewed the EU's progress over the previous year and set out the Commission's priorities for the year ahead. Three themes stand out:

1. Strengthening European competitiveness
2. Reducing energy dependence
3. Diversifying international trade and supply chains

> *Q3 2026 can be best described as "growth under mounting pressure."*

Von der Leyen directly linked Europe's industrial competitiveness to energy costs. She argued that Europe cannot remain an industrial powerhouse if energy prices are structurally too high. After Russia reduced gas supplies, Europe diversified its energy sources, but the closure of the Strait of Hormuz has again exposed the cost of dependence on imported fossil fuels. She said imported fossil fuels have cost Europe an additional USD $103.3 billion (€90 billion) since the conflict began.

Her response is to accelerate the deployment of affordable, homegrown energy and electrification. She called for Europe to double the share of electricity by 2040, which she said could reduce the fossil-fuel import bill by USD $298.5 billion (€260 billion) annually. She also highlighted the need to speed up grid connections and expand storage.

This is consistent with the "Electrification Action Plan", published by the European Commission in July 2026, which provides a concrete policy framework for accelerating electrification. The plan is part of the Commission's wider objective of making Europe an "electro-powered continent."

Author



Christopher Bamforth is the PSR European Market Analyst

Emiliano Marzoli and Natasa Mulahalilovic contributed to this report.

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 9

Von der Leyen highlighted the EU's expanding network of trade agreements, including agreements with India, Mercosur, Mexico, Australia and Indonesia. She said the EU now has trade deals with more than 80 countries and announced the Middle Corridor, a connectivity project intended to link Central Asia and the South Caucasus more directly with the European market and diversify trade routes.

China was addressed primarily through the lens of trade imbalances and strategic dependencies. Von der Leyen highlighted Europe's dependence on China for critical raw materials and rare earths and announced a European Corporation on Critical Raw Materials to procure and stockpile materials needed for electric cars, chips, batteries, clean technology and defense.

The SOTEU address increasingly connects economic security with industrial and geopolitical policy. Energy independence, critical raw materials, trade routes, technology, manufacturing capacity and defense are presented as interconnected elements of European resilience.

For industry, the direction is therefore towards greater diversification of energy sources, suppliers, trade routes and strategic partnerships. For engine and automotive markets, this reinforces the importance of monitoring not only electrification and energy costs, but also the resilience of the supply chains and resources European manufacturing depends on.

The SOTEU address comes at a time when the EU faces several issues at once. Most notably, ongoing tariff uncertainty with the US, potential closer cooperation with Canada, and the conflict in the Middle East spreading across key energy and shipping routes.

- **EU-US trade:** The EU and US have established a framework for their tariff relationship, with the EU formally approving and transposing its tariff commitments into EU law in June 2026. However, uncertainty remains around the longer-term implementation of the agreement and future US

OE Link™

Your source for OEM production and forecast data

OE Link™ is the definitive source of global OEM production and forecast data for with global OEM production and forecast data; includes engine installation data for the full-range of highway vehicle and off-road segments. And now it includes information on electric and hybrid-drive systems.

Data includes model level detail on vehicle, mobile and stationary equipment applications in 13 key industry segments.

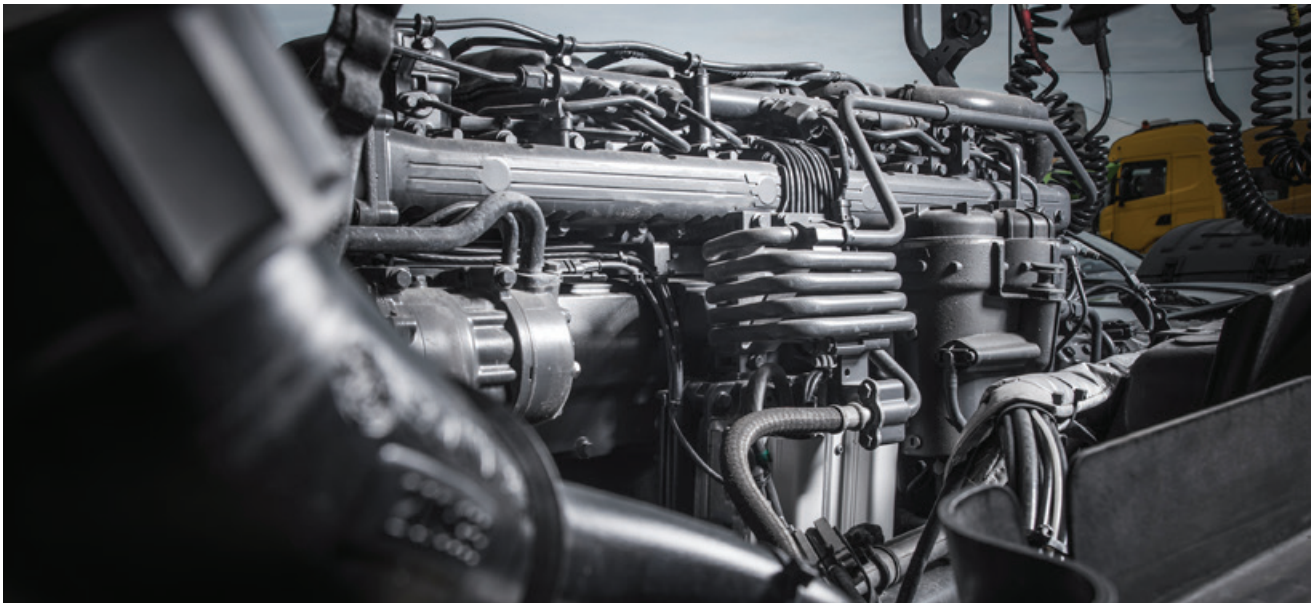
Call today. +1 651.905.8400, or email us at info@powersys.com.

Call Today.
Why wait for success?

Power Systems Research
Data · Forecasting · Solutions™

1365 Corporate Center Curve | Eagan, MN 55121

+1 651.905.8400 | www.powersys.com



Europe: Geopolitical Factors Affect Europe Economy

Continued from page 10

trade measures. Recent Eurostat data also show that the EU's trade balance with the US has changed significantly from USD $91.83 billion (€80 billion) in Q1 2025 down to USD $33.29 billion (€29 billion) in Q2 2026) as trade flows adjust.

- **EU-Canada:** Canada is seeking closer economic ties with Europe as trade tensions with the US intensify. This gained additional political weight at the SOTEU, where Ursula von der Leyen proposed opening the door for Canada to become the EU's first associate member, with closer cooperation envisaged across areas including defense, energy, technology, raw materials and supply chains. For European industry, this could create opportunities through greater trade, investment and supply-chain cooperation.
- **Middle East:** Disruptions in the Strait of Hormuz continue to pressure global energy markets. Traffic through the Strait remains at exceptionally low levels, while instability around the Bab el-Mandeb Strait is creating additional risks for an alternative shipping route. Recent disruptions to Saudi oil infrastructure have further increased supply concerns, keeping oil prices elevated and European fuel markets under pressure.

AGRICULTURAL. After having seen nearly a two-digit decline in production of agriculture machinery last year, there is still a cautious optimism about the second half of this year. We have seen some recovery in this segment in H1 2026. However, the recovery will be stunted by the current socio-economic climate and tariffs creating much uncertainty, which in turn is slowing the recovery that we were expecting to see this year. Instead, we are now having to deal with all these moving parts and the impact of oil price increases, with heavy uncertainty. There seems to be some positive changes that could reduce some of the uncertainty, which could have a beneficial factor on recovery speed seen in the second part of this year.

According to the CEMA (European Agricultural Machinery Association) barometer, we are starting to reflect this as we are seeing an improvement in medium to long term responses from key industry players. They are seeing a potential for the next six months that will be a better business climate than the previous six months. This could still be reverted and missed depending on the outcome but there are still many players expressing some concerns, insecurity, uncertainties over tariffs, and socio-political tensions.

On the other side is the recent announcement from Von Der Leyen about incentives to Agriculture to boost this market and technology for efficiency. This, combined with the optimism from key players, should be reflected in 2027.

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 11

CONSTRUCTION. The European construction equipment market is showing a modest recovery in 2026, with demand expected to finish approximately 3% above 2025 across internal-combustion and electric equipment. OEM results support this outlook: Volvo CE reported strong European second-quarter revenue growth, Wacker Neuson achieved double-digit EMEA growth, and CNH recorded improving regional demand.

However, tariffs, exchange-rate movements and geopolitical uncertainty continue to affect orders and profitability. US tariffs raise the cost of European exports and imported components, while European duties on certain Chinese machines may reduce pricing pressure on local manufacturers.

Germany's recovery is becoming more visible: construction orders rose 6% month over month in June and 5.7% during the second quarter, with civil-engineering orders up 9.3% and residential permits also improving. France remains the weakest major market, with second-quarter construction output declining 2.9%, year over year, including a 7.1% decrease in civil engineering. Italy is performing moderately well, with construction production rising 2.7% in April and 2.9% in May, supported by ongoing projects and renovation activity.

Civil engineering, energy networks, transportation and digital infrastructure—particularly data centers and their associated power, utility and telecommunications systems—are providing the strongest support for equipment demand. Residential construction is improving in Germany, Spain and Ireland but remains weak in France, while financing costs and uncertain office demand continue to restrict commercial construction.

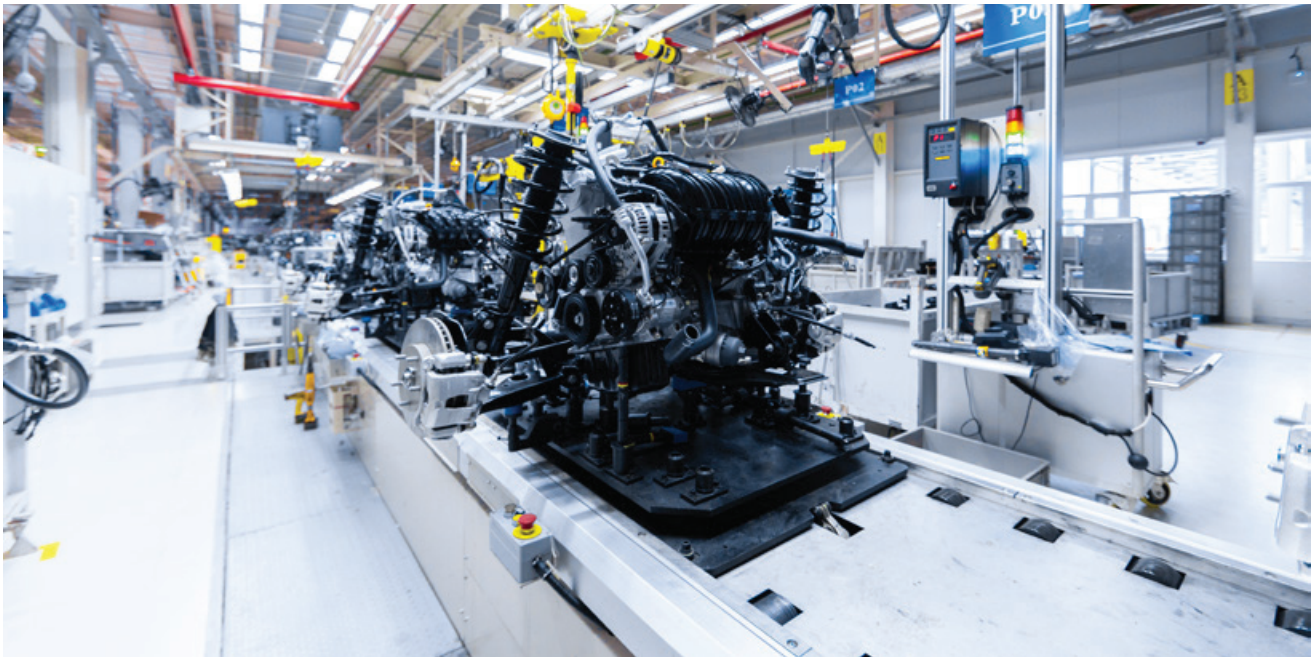
Battery-electric equipment is expected to grow by 18–20%, led by compact excavators, loaders, dumpers and telehandlers used indoors, in urban projects and under municipal contracts. Norway, the Netherlands, Denmark and Sweden lead adoption because of zero-emission public procurement, comparatively clean electricity and financial-support programs. Adoption elsewhere remains constrained by higher prices, limited on-site charging and insufficient customer familiarity. Diesel will therefore remain dominant, offering rapid refueling, predictable uptime, established service and fuel infrastructure, and lower acquisition risk—particularly for large machines, remote sites and multi-shift operations.

> *The European construction equipment market is showing a modest recovery in 2026, with demand expected to finish approximately 3% above 2025 across internal-combustion and electric equipment.*

LAWN AND GARDEN. We saw some recovery in 2025, mainly fuelled by professional demand supplemented by a small contribution from residential demand. This recovery did not offset the 2024 decline but reduced optimism for 2026. We are expecting some downward trends affecting this segment, due to the uncertainties, although to a lesser degree than other segments as many consumers are investing or switching to battery-powered equipment, and even professionals are switching so they can use it as a USP (unique selling point), especially since many government contracts now call for a portion of all machines used on the job to be low emission.

However, in a lot of cases the steel and aluminium content of these products is relatively low and so they aren't much affected by the tariffs, although generally these products are very price sensitive and even a small effect could have a great knock-on effect by tariffs.

INDUSTRIAL. The European industrial machinery market is poised for steady slow growth through 2026 and 2027, driven by increasing industrial automation, modernization efforts, and demand for energy-efficient equipment. The market is expected to continue expanding as manufacturers invest in advanced machinery to improve productivity and comply with stricter environmental regulations.



Europe: Geopolitical Factors Affect Europe Economy

Continued from page 12

Key sectors such as manufacturing, automotive, and logistics are fueling demand for versatile and technologically sophisticated industrial machines. This growth is supported by ongoing digital transformation trends, including the integration of IoT, AI, and robotics, which enhance operational efficiency and predictive maintenance capabilities across industrial operations.

Within this broader market, the forklift segment is experiencing particularly strong momentum. The European forklift market, valued at nearly USD $20 billion in 2025, is forecasted to grow at a CAGR of around 5.2%, reaching over USD $32 billion by 2035. This surge is largely driven by the rising adoption of electric, automated, and digitally connected forklifts that meet sustainability goals and improve warehouse efficiency. The push for greener logistics and supply chain solutions is accelerating the replacement of traditional internal combustion forklifts with electric and hybrid models.

Additionally, advancements in automation and safety features are making forklifts more adaptable to complex industrial environments, further boosting market demand in the near term. Overall, the European industrial machinery market, including forklifts, is set to play a critical role in supporting the continent's industrial competitiveness and sustainable growth ambitions in 2026 and 2027.

MILITARY EQUIPMENT. The European military vehicle market is expanding rapidly as governments rebuild inventories, reinforce national security and modernize land forces in response to the war in Ukraine, instability in the Middle East and concerns over Russia. EU defense expenditure is expected to rise 8.6%, from USD $479.82 billion (€418 billion) in 2025 to USD $521.15 billion (€454 billion) in 2026, while NATO members have committed to progressively increasing defense and security spending to 5% of GDP by 2035. Based on current budgets, order backlogs and production programs, European military vehicle demand is expected to grow by approximately 8% in 2026, including armored combat, tactical, logistics and support vehicles.

Demand is shifting from individual combat vehicles toward complete fleet capabilities. Main battle tanks and infantry fighting vehicles remain priorities, but orders are also increasing for military trucks, armored recovery and engineering vehicles, mobile artillery, air-defense platforms and unmanned ground systems. Germany, Poland, Romania, the Nordic countries and the Baltic states are among the most active markets as they expand armored formations, replace vehicles transferred to Ukraine and strengthen NATO's eastern flank.

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 13

OEM performance confirms this upward trend. Rheinmetall's Vehicle Systems revenue increased 28% in the first half of 2026, while its vehicle backlog rose 41% to €28.8 billion. KNDS entered 2026 with a €33.1 billion backlog, supported by Leopard 2A8, Puma, Boxer, CAESAR and RCH 155 programs, while GDELS is benefiting from higher European volumes for Piranha, Pandur and ASCOD vehicles. BAE Systems Hägglunds and Patria are expanding production of the CV90, BvS10 and Patria 6x6. Industry consolidation is accelerating as well: Leonardo acquired Iveco Defense Vehicles, KNDS acquired Texelis Defense, and Rheinmetall purchased a majority stake in DOK-ING to strengthen its unmanned-vehicle capabilities.

It´s expected that growth should continue into 2027 by 8-10% as current contracts move into serial production and delivery. However, actual output will depend on the availability of engines, transmissions, armor steel, electronics and skilled labor, as well as governments' ability to convert larger budgets into firm orders.

LIGHT COMMERCIAL VEHICLES. The Light Commercial Vehicle (LCV) segment remains a resilient operational focus in European automotive production. This follows a highly challenging 2025, during which EU commercial registrations contracted significantly, highlighted by an 8.8% drop in the van market. This slump was heavily driven by SME "investment inertia" brought on by restrictive borrowing rates and structural uncertainty surrounding upcoming fleet regulations.

However, for 2026 we are seeing a production recovery of +1.9%, with a further +3.8% projected for 2027. This rebound is driven by the "Last-Mile Mandate." Record e-commerce volumes and the 2026 enforcement of new Low-Emission Zones (LEZs) across 50 major European cities are forcing a massive fleet replacement cycle. Manufacturers like Ford Pro and Stellantis are ramping up production of "hybrid-transitional" vans, which bypass the high upfront costs and infrastructure gaps of pure BEVs while meeting the new 2026 city access requirements.

MARINE PROPULSION. The European marine pleasure industry in 2026 was expected to move from correction to stabilization, with selective growth depending on segment, size, and business model. The sharp post-pandemic adjustment seen in 2024–2025 — characterized by dealer destocking, delayed purchases, and softer demand in entry and mid-market boats — largely ran its course by the end of 2025. In 2026, confidence was expected to improve, but with the added uncertainties we are expecting to see another small decline in this segment.

> *The Light Commercial Vehicle (LCV) segment remains a resilient operational focus in European automotive production.*

PLEASURE BOATS. The European pleasure boat market is entering a more stable growth phase following the post-pandemic inventory correction. The market is estimated at $17.9 billion in 2026 and is forecast to grow at approximately 6.6% CAGR through 2031. Growth in 2026–2027 is expected to be driven increasingly by premium vessels, new propulsion technologies and changing ownership models.

Motorboats remain the dominant part of the European market, with outboard boats accounting for 45.7% of market revenue in 2025. The 30–60 ft category represented 45.9%, while boats below 30 ft are forecast to grow at 6.7% CAGR, supported by demand for smaller, more accessible and increasingly shared boats.

Sailing boats and multihulls remain important segments of European production, particularly in France and Spain. The European sailboat market is forecast to grow at approximately 3.3% CAGR through 2030, with multihulls identified as the fastest-growing hull-type segment. The recent performance of Groupe Beneteau also illustrates the current market environment: sailing represented 44% of its boat sales in 2025, although sailing revenues declined during the year due to weaker monohull and charter demand.

Superyachts represent a much smaller volume but a disproportionately high share of industry value. Demand remains concentrated among high-net-worth customers, with European shipyards—particularly Italian yards—

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 14

continuing to dominate new-build activity. As of July 2026, 936 superyachts of 24m+ were under construction globally, including 466 scheduled for delivery in 2026 and 301 in 2027. Italy accounted for 519 yachts currently in build, by far the largest national share.

Italy remains the leading European recreational-boating market, representing approximately 19% of European market revenue, and is particularly strong in luxury yachts and superyachts. France and Spain are major centers for sailing yachts, catamarans and serial production, while Germany, the Netherlands and the Nordic countries have strong positions in premium, specialized and technologically advanced vessels.

Internal-combustion engines remain dominant, accounting for approximately 86.6% of the European recreational boating market in 2025. However, electric propulsion is forecast to grow at approximately 7.1% CAGR through 2031.

Electrification is particularly relevant to smaller boats and selected premium applications, while hybrid propulsion, battery systems, digital navigation, connectivity and assisted/autonomous functions are increasingly being incorporated into new vessel designs.

The European pleasure boat industry is expected to deliver moderate overall growth of around 6–7%, but performance will vary significantly by segment. Small motorboats and access-based boating models should provide volume growth, while superyachts and premium motorboats will continue to drive value. Sailing boats and multihulls remain important European manufacturing segments, although their near-term performance is likely to be more mixed.

The key trend for 2026–2027 is therefore a shift toward higher-value, more technologically advanced and increasingly electrified vessels, rather than a broad-based increase in traditional ICE boat volumes.

PASSENGER CARS, MINIVANS & SUVs. With the European Commission's plan to support electrifying Europe and the European Parliament's votes on the



Carbon Border Adjustment Mechanism (CBAM) and Emission Trading System (ETS), the industry has a chance to recover with fewer restrictions. Our forecast reflects this, with a slight growth of 1.4% for the remainder of 2026, compared to a 4.2% decrease in late 2025. However, the recovery is expected to remain moderate, as higher production and energy costs remain a significant challenge for European car manufacturers.

The SOTEU address focuses on electrification, energy costs and European industrial competitiveness and is reflected in recent developments in EU climate policy. The European Parliament's September position on strengthening the CBAM would extend carbon-border measures further down the value chain, including additional steel- and aluminum-intensive products, while tightening anti-circumvention rules. The Commission proposal would add 180 downstream products, with an average steel and/or aluminum content of 79%, targeting products considered particularly exposed to carbon leakage.

This is relevant to the automotive industry, given the significant use of steel and aluminum across vehicle manufacturing and component supply chains. The EU's CBAM entered its definitive phase Jan. 1, 2026, with the mechanism covering iron and steel, aluminum, cement, fertilizers, electricity and hydrogen. The Q2 2026 CBAM certificate price was USD $86.09 (€75.28) per ton of CO_2, illustrating the carbon cost increasingly embedded in international supply chains.

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 15

At the same time, Parliament has advanced changes to the EU ETS Market Stability Reserve (MSR), with direct relevance to the future cost of road transport. For ETS1, MEPs voted to retain the existing allowance-invalidation mechanism but increase the threshold from 400 million to 650 million allowances after Feb. 1, 2027. The objective is to maintain a sufficiently large buffer against supply-demand imbalances while improving long-term market predictability. At the beginning of 2026, the MSR contained 400 million allowances, while a further 190.5 million allowances are scheduled to be placed into the reserve between September 2026 and August 2027.

For the automotive market, ETS2 is particularly relevant because it covers buildings, road transport and additional sectors. Its full operation has been postponed to 2028, with allowance auctions starting in January 2027. The system includes a price-stability mechanism: during its first two operating years, additional allowances can be released if the ETS2 carbon price exceeds €45/tCO_2 in 2020 prices, or if prices rise too rapidly.

At the member-state level, Volkswagen Germany has entered a major restructuring phase as weaker earnings in China, US tariffs, and substantial European production overcapacity increase pressure on the Group's cost base. The Supervisory Board approved the "Future Plan 2030" in early September, including a further reduction of around 50,000 positions worldwide, while targeting lower production volumes and higher operating margins. Four German sites – Emden, Hannover, Zwickau and Audi's Neckarsulm plant – currently lack a secured, competitive production allocation beyond the early 2030s. While the plants have not been formally designated for closure, their production is expected to run down unless alternative uses or new allocations are identified.

The restructuring follows intensive discussions with employees across Volkswagen's German sites in late August. Management has argued that the Group's cost structure must be fundamentally adjusted, while employee representatives continue to demand concrete perspectives for individual plants.

At the member-state level, Volkswagen Germany has entered a major restructuring phase as weaker earnings in China, US tariffs, and substantial European production overcapacity increase pressure on the Group's cost base.

Political developments are an exceptional variable for the plants in Emden and Hannover. Lower Saxony holds 20% of Volkswagen's voting rights and appoints two shareholder representatives to the Supervisory Board. The September 2026 municipal elections weakened the SPD and Greens while strengthening the CDU and AfD. Although this does not immediately change Volkswagen's governance, a change in the Lower Saxony government after the 2027 state election could alter the state's political representation and priorities within Volkswagen. A shift from the current SPD/Green government towards a CDU-led government could therefore also change the policy emphasis of Lower Saxony's representatives on the Supervisory Board, potentially placing greater weight on industrial competitiveness, cost efficiency and employment than on environmental and climate-policy considerations.

As such, Volkswagen's plan to close plants reflects a slight downward trend, with German passenger-car production down 4% year on year in the first eight months of 2026. Across the EU, production remains broadly stable at around 11 million vehicles, although developments differ considerably between Member States. While German output has weakened, supported by restructuring and plant retooling, several Southern European markets have shown greater resilience.

POWER GENERATION. The European power generator market remains resilient with a size of approximately USD $7.31 billion (EUR 6.4 billion) in 2026, supported by rising demand for reliable and flexible power, particularly from data centres, critical infrastructure and industrial applications. However, geopolitical tensions, disrupted energy supply routes and elevated oil and

Europe:
Geopolitical Factors Affect Europe Economy

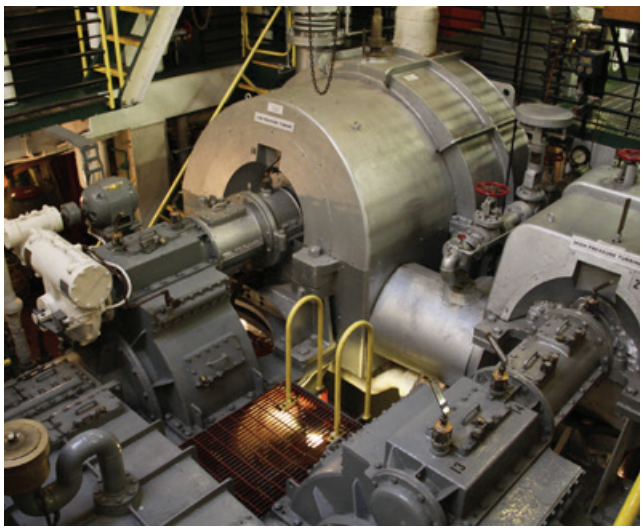
Continued from page 16

gas prices are increasing operating and manufacturing costs, while accelerating electrification and alternative technologies are reshaping the market. For the rest of 2026, we predict 2.1% growth, continuing into 2027 (+3.2%).

The geopolitical environment became a significant factor in the European power-generation market in 2026. The continuing armed conflict involving the United States and Iran has disrupted maritime energy flows through the Strait of Hormuz, one of the world's principal energy-trade chokepoints. The disruption has reduced the availability of Middle Eastern oil and LNG and has introduced a substantial risk premium into European energy markets. Energy prices remain elevated as the market enters winter. In mid-September, European natural gas sat at approximately EUR 78.46/MWh, up more than 23% over the preceding month and approximately 138% above the level of a year earlier. Oil prices have similarly remained above pre-conflict levels, as Brent crude was trading at approximately USD $104–$105 per barrel.

The situation is further complicated by developments around the Bab al-Mandab Strait, where renewed Houthi advances and attacks have created a second major risk to maritime energy and trade flows. The dual conflict raises the possibility of simultaneous disruption at the two strategic maritime chokepoints connecting Middle Eastern energy producers with European and global markets, adding further uncertainty. The effect is not limited to crude oil: disruption to LNG flows is particularly relevant for Europe because the region is entering the winter heating season with storage levels of only around 67–68%, according to data available in mid-September.

The energy shock creates a two-sided effect for the European generator-set industry. On the demand side, higher and more volatile energy prices increase the value of energy resilience and backup generation. On the supply side, however, higher oil and gas prices increase the cost base of generator-set manufacturers and their customers.



The impact extends beyond the generator's fuel. Generator-set production is dependent on energy-intensive inputs and components, including steel, aluminium, copper, electronic components, alternators, switchgear and transportation. Higher energy and logistics costs can therefore increase both manufacturing costs and the cost of installing and operating generator systems.

This effect is likely to be particularly relevant for smaller OEMs and manufacturers operating in lower-margin, lower-power segments. Smaller generator sets, particularly those serving residential, agricultural, small commercial and individual users, tend to have lower absolute selling prices and therefore provide less scope to absorb increases in manufacturing, logistics and component costs. At the same time, customers in these segments are more sensitive to the operating cost of the generator because fuel represents a relatively high proportion of the total lifecycle cost.

The economics are different for large high-power systems. Large projects for data centers, defense infrastructure and critical industrial facilities are generally specified around reliability and availability requirements rather than solely around the lowest purchase price. These projects can therefore accommodate more complex and higher-value solutions, including multiple gen-sets, battery storage and alternative-fuel capability. The strongest current demand is increasingly concentrated in higher-power generator sets. The 750 kVA and above segment

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 17

is benefiting from two major investment trends: the expansion of data-centre infrastructure and increased European investment in defence and critical infrastructure.

Data centers are particularly important because the rapid expansion of AI and cloud-computing capacity is creating large electricity loads in locations where grid connections may be constrained or delayed. The development is visible in the order books of major European power-system manufacturers. Rolls-Royce reported in its H1 2026 results that Power Generation order intake increased by 55%, driven by strong demand for backup and prime-power solutions for data centers.

Power Generation underlying revenue increased by 41%, while the company's overall Power Systems order intake reached £4.6 billion (EUR 5.37 billion), more than 50% above the comparable prior period. Rolls-Royce also reported that government-related order intake increased by 50%, reflecting stronger demand across both land and naval applications.

Alongside the growth of conventional high-power diesel systems, the European generator-set industry is entering a period of technological transition. Gas and dual-fuel systems, HVO-compatible diesel engines and hybrid generator systems combining engines with battery energy storage are becoming increasingly relevant to OEM strategies.

This transition is closely linked to the broader European energy-policy direction. In her State of the Union address, Ursula von der Leyen highlighted the Commission's objective of increasing the share of electricity in Europe's energy system and of "make Europe's future electric."

For generator manufacturers, this does not imply an immediate displacement of engine-based generation. Rather, it is accelerating the development of integrated power systems in which engines operate alongside batteries, renewable generation and the grid. Additionally, Gas and dual-fuel systems are gaining relevance where customers require lower-emission dispatchable generation without sacrificing the reliability and rapid-start characteristics of engine-based systems.

Data centers are particularly important because the rapid expansion of AI and cloud-computing capacity is creating large electricity loads in locations where grid connections may be constrained or delayed.

The European generator-set market enters Q4 2026 against a substantially more uncertain geopolitical and energy-market backdrop than at the beginning of the year. The conflicts affecting the Strait of Hormuz and the Bab al-Mandab region have introduced greater uncertainty into the availability and pricing of oil and gas, making longer-term capacity and investment planning more difficult for both customers and manufacturers. The impact is likely to remain relevant through 2027. Against this background, the underlying structural drivers of the industry remain supportive. The expansion of European data-centre capacity, increasing electricity demand and, defence and critical-infrastructure investment are creating continued requirements for reliable and flexible power generation.

RECREATIONAL PRODUCTS. As of late March 2026, the European two-wheeler industry was navigating a high-stakes structural realignment, transitioning from a "survival phase" into a complex calculation of domestic vs. global assembly. After a brutal 2025—which saw a -12.9% registration slump across the "Big Five" (France, Germany, Italy, Spain, and the UK)—the sector is now dividing into two distinct potential futures, complicated by a fresh geopolitical shock and an imminent policy "cliff edge."

We forecast a 4% increase in production volumes for 2026, confirmed by a robust start to the year. The European Association of Motorcycle Manufacturers (ACEM) confirms this spike is heavily technical—proving

Europe:
Geopolitical Factors Affect Europe Economy

Continued from page 18

that the market has stabilized following the messy operational transition from Euro 5 to the newer Euro 5+ compliance standards. Production lines are currently running at higher capacity to replenish thin dealer networks following the high-profile KTM-Bajaj supply chain disruptions.

Despite the strong start to the year, severe downside risks threaten European assembly volumes for late 2026 and 2027:

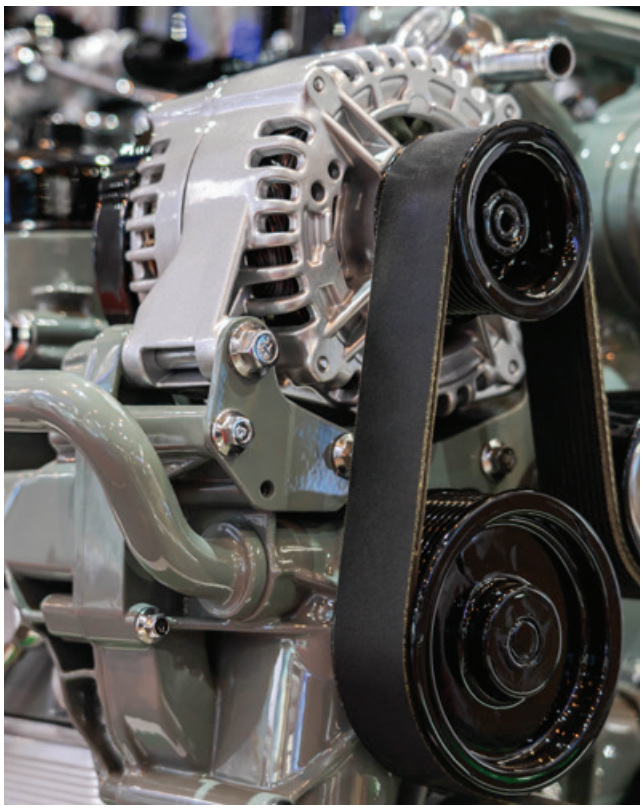
- **The "Metal Content" Tariff Threat:** Ongoing trade tensions and threatened 50% "Metal Content" surcharges from the US remain a primary risk. Because the US is a vital export market for premium European bikes, sustained duties would make exporting steel-dense and aluminum-dense vehicles economically unfeasible. This would likely force domestic OEMs to shift production footprints permanently to Southeast Asia, Turkey, or India to preserve global margins.
- **The Energy/Inflation Tax:** The prolonged Iran conflict serves as a severe macroeconomic headwind. With Brent crude sustained above $110 per barrel, rising factory utility costs act as an invisible tax on domestic plants. Simultaneously, high fuel costs threaten to trigger a rapid cooling of consumer discretionary spending on leisure vehicles heading into the autumn riding season.

RAILWAY. Despite recent geopolitical and economic challenges, the European rail market has maintained stable growth and is expected to increase by 8.8% in 2026 and by 14.6% in 2027, making it the most reliable segment. This stability stems from new environmental and sustainability requirements and ongoing investments to expand and modernise Europe's rail infrastructure. Further, the market was estimated at USD $285.5 billion (EUR 248.4 billion) in 2025 and is expected to reach USD $440.1 billion (EUR 383 billion) by 2033.

Drivers of this growth include intensified decarbonisation mandates in the transport sector, the continued expansion of cross-border rail connections, and planned capacity increases in both passenger and freight services. Rail freight, in particular, is expected to benefit in the long term from the political objective of shifting a larger share of cargo from road to rail in order to meet EU climate targets.

Additionally, the EU Commission has taken steps to simplify EU public procurement rules (Public Procurement Act), supporting more effective investments in public services and infrastructure. Of particular relevance to the rail industry are the new minimum requirements for qualitative award criteria (at least 30%, or 50% for labor-intensive contracts) and the option to exclude bidders with less than 50% European content. This strengthens European OEMs and infrastructure operators in the award of contracts.

However, challenges such as remaining implementation differences between EU Member States, capacity bottlenecks on core routes, and economic volatility due to high energy prices and geopolitical tensions persist. Nevertheless, the European rail sector is overall positioned for robust and sustainable expansion in the coming years. **PSR**



China

2026–2031 Provides Steady Start to Five-Year Plan

SUMMARY. China's economy is expected to grow 4.8% in 2026, within a range of 4.5%–5.0%. Q1 2026 grew 5.0%, while Q2 2026 cooled to about 4.7%. Industrial output slipped to 4.1% in April and then recovered to 4.5% in May. Consumption is now the main driver, adding 3.0 percentage points and contributing 60% of GDP growth.

But retail sales were weak, up only 1.4% through May, because subsidies faded and auto sales dropped 11.8%. Service spending stayed strong at 5.5%. Investment was mixed: real estate is still bottoming out, while high-tech manufacturing grew 13.1% and infrastructure picked up. Exports face pressure from tariffs and slower global demand, so growth is expected at 3%–4%. Inflation remains low at 0.5%–1.0%, and policy is still supportive, with fiscal stimulus and easier money.

By 2031, China's economy will shift from speed to quality, aiming for 4.5%–5% annual growth. Consumption will stay above 60% of GDP as incomes and social security improve. New energy vehicles and smart manufacturing will lead industrial upgrading. Exports will grow more slowly but move to higher value goods. The economy will become more balanced, more driven by innovation, and less dependent on real estate and cheap exports.

AGRICULTURAL. China's agricultural machinery market is transitioning to more sophisticated and environmentally friendly equipment. In 2026, subsidies of USD $3.95 billion (RMB 26.5 billion) are allocated for new machinery purchases and USD $223.50 million (RMB 1.5 billion) for recycling old equipment, with top models eligible for discounts up to 55%. The industry is now prioritizing hybrid tractors, GPS navigation systems, and electric tools, while phasing out less efficient models.

Author



Jack Hao is Senior Research Manager - China for Power Systems Research

> *China's economy is expected to grow 4.8% in 2026, within a range of 4.5%–5.0%.*

Technological advancements are at the forefront, with hybrid tractors now available in the 200 to 700 horsepower range, offering fuel savings of 20 to 40%. Chinese brands have made significant strides in the CVT transmission market, traditionally dominated by foreign companies. Smart farms are operating fully automated from plowing to harvesting, reducing water and labor needs by approximately one-third.

Electric farm machinery is rapidly gaining popularity, with a projected market share of over 15% in 2026. Orchards and greenhouses are leading this shift, bolstered by additional subsidies. Sales of advanced tractors over 200 horsepower have doubled, marking a first-time 15% market share.

Looking ahead to 2031, the market is expected to expand significantly, from RMB 1.34 trillion to RMB 2.08 trillion. Electric machines are set to grow from 15% to 52% of sales, reaching the critical 30% mark around 2028. Smart farming technology will become the norm, and China is poised to move from a major producer to a global leader, exporting expertise and establishing factories overseas. Nonetheless, challenges such as demand spikes due to subsidies, inventory build-ups, trade barriers, and the initial issues with new electric equipment in challenging field conditions must be monitored.

CONSTRUCTION. China's construction machinery market is growing fast in 2026. The market is expected to reach RMB 257.3 billion this year, up from RMB 165 billion in 2024. Smart tech, 5G/AI automation, and green energy are the main growth engines. The Belt and Road Initiative also keeps pushing high-value exports. The industry already had strong momentum before 2026: total import and export trade reached

China: 2026–2031 Provides Steady Start to Five-Year Plan

Continued from page 20

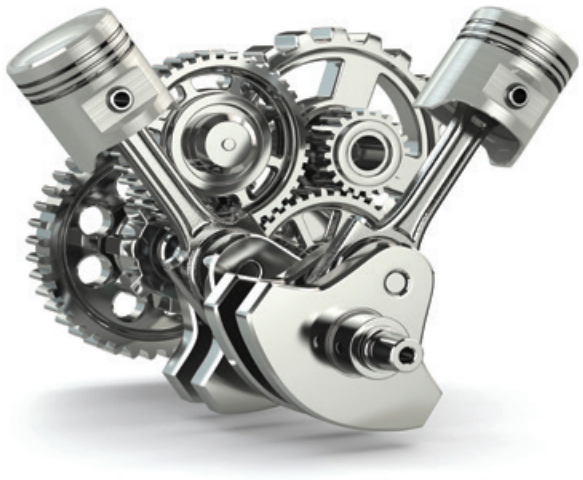
USD 62.743 billion in 2025, up 13.2%. In January 2026, excavator sales hit 18,708 units, up 49.5%, and exports reached 9,985 units. Loader sales in January were 11,759 units, up 48.5%, including 2,701 electric loaders sold at home. These numbers show the market started the year with real strength.

On the domestic side, Q2 2026 beat expectations. May excavator sales jumped 36.2% year on year to 24,794 units, with medium and large excavators leading at +45% and +20%. Loader sales reached 13,405 units, up 27.2%. Policy support from ultra-long-term treasury bonds and local special bonds is funding big projects like the Yarlung Zangbo hydropower plant. Equipment renewal policies are also unlocking demand as Stage III machines reach replacement age. Renewal purchases now exceed 50% of domestic sales.

A notable change came in Q2: top makers XCMG, Sany, and LiuGong raised prices together for the first time in three years. Excavator prices rose 3–5% in May, and crane prices rose 2–5% in June. This marks a move from "cheap volume" to "value competition." The replacement cycle itself is expected to peak around 2028, when annual excavator sales may reach 250,000 units.

New energy is at a turning point. Electric loaders took 63.8% of domestic sales in May and averaged 56.8% in January–May. Overall new energy penetration is forecast to reach 15.5% by the end of 2026, nearly double the 8.5% at the end of 2025. Stronger policy incentives, battery costs down about 35% since 2023, and rising ESG pressure on construction firms are driving this. New energy construction machinery sales have already reached RMB 124.561 billion, up 32.27%, or 13.91% of total industry revenue.

Exports are a major support. Q1 2026 exports hit USD 16.1 billion, up 24.3% year on year. January–May exports reached USD $27.9 billion, up 20.8%. Africa is the star: Q1 exports to Africa rose 61.6% to USD $2.8 billion, and January–February growth was even stronger at +77%. Europe grew 20.6%, and North America grew 7%. Belt and Road countries took 43.4% of January–February exports. Chinese brands keep winning on



price (15–20% cheaper than rivals) and speed (30-day delivery versus 90 days for European OEMs).

Electric loaders and mining trucks are passing trials in Chile and Australia, cutting diesel costs by 60%. Electric and hybrid gear now make up over 35% of export value. Regional strategies differ. Africa and Latin America expand through EPC financing and local CKD plants. Europe and North America follow carbon rules, with strong electric orders. CKD hubs in Mexico, Poland, and Indonesia, plus 24/7 cloud parts centers, cut delivery to seven days.

Export CAGR should stay at 12–15%, and overseas revenue share should rise from 40% to 48%. In 2026, exports may pass USD $60 billion, with electric products at 20% of exports. By the end of the 15th Five-Year Plan, overseas revenue may pass 50%, with emerging markets at 60% and Europe/US at 25%. In the first half of 2026, total import and export trade was USD 35.627 billion, up 20.5%, and exports were USD $34.373 billion.

Technology is changing the market, too. 5G remote excavators and unmanned mining truck fleets are now in commercial use. They lift efficiency by 30% or more. Hydrogen stackers and pure-electric aerial platforms are spreading fast in ports and cities. Local firms have broken foreign monopolies on core parts, with localization above 85%. The top five players (CR5) are closing in on 80% market share. (Five-Firm Concentration Ratio—CR5) measures the combined market share of the 5 largest firms in a specific industry.

In January–April 2026, excavator sales reached

China: 2026–2031 Provides Steady Start to Five-Year Plan

Continued from page 21

102,081 units, up 22.2%. Domestic sales were 56,499 units, up 15%, including 97 electric excavators. Exports were 45,582 units, including 76 electric excavators. In January–August 2026, road roller exports reached 10,936 units, up 45.8%, while domestic sales fell 11.1% to 4,131 units. This shows exports are making much of the heavy lifting.

The global construction equipment market should grow from USD $167 billion in 2025 to USD $169.6 billion in 2026, then to USD $289.5 billion by 2035, at a 6.1% CAGR. In 2027–2028, the replacement cycle will peak as Stage III machines reach maximum replacement volume.

Electric loader domestic share should top 70%, and overall new energy penetration should approach 20–25%. Export growth will slow to 10–12% a year, but value per unit will keep rising. The domestic market should reach USD $41.71 billion to USD $44.69 billion (RMB 280–300 billion). By 2029–2031, the market should mature at USD $44.69 billion to $47.67 billion (RMB 300–320 billion).

New energy penetration should reach 30–35%. Hydrogen will go commercial in heavy mining and ports. Africa, Southeast Asia, and Central Asia together should pass 50% of overseas revenue. Chinese OEMs should lead electric and autonomous segments globally. CR5 should top 80%. Leaders should earn over 60% of revenue from abroad. By 2031, the industry will enter a new cycle built on high-end products, smart operations, green energy, and global services. Speed of tech upgrades and after-sales response will decide who wins. AI, digital twins, and autonomous platforms will redefine equipment life cycle management. Circular economy and equipment-as-a-service models will open new revenue streams beyond hardware.

INDUSTRIAL. Forklifts. China's forklift market is set to reach USD $20.85 billion to USD $23.83 billion (RMB 140–160 billion) in 2026, up 18–22% YoY. Electric models now dominate with over 75% share, and lithium-ion penetration has surpassed 55% as battery costs fell 35% since 2023. In Q2 2026, unmanned forklift sales kept growing 45%+ annually, with market size exceeding USD $2.23 billion (RMB 15 billion). AGV demand is surging on e-commerce logistics automation. Core parts like laser radars are now 75% localized.

> *The global construction equipment market should grow from USD $167 billion in 2025 to USD $169.6 billion in 2026, then to USD $289.5 billion by 2035, at a 6.1% CAGR.*

Exports are projected at USD $6.8 billion (+15% YoY), with Southeast Asia, Africa and LatAm leading at 18%+ growth. Looking at 2031, electric share will top 85%, lithium-ion will dominate all segments, hydrogen will scale in heavy-load logistics, and intelligent forklifts will exceed 50% penetration as AI, 5G and digital twins become standard.

MEDIUM & HEAVY TRUCKS. China's medium and heavy truck market is going through a rapid shift toward new energy, and the numbers are clear. In the first five months of 2026, new energy heavy truck sales hit 92,900 units, up 82.2% from the same period last year, with May alone reaching 30,000 units.

Full-year 2026 sales are projected at 234,100 units, with penetration crossing 35%. The top four makers each sold over 12,000 units, with Sinotruk leading at 15,100 units, up 116.3%. Battery-swap trucks are scaling fast, with 3,000 stations nationwide, while hydrogen fuel cell trucks reached 25,000 units, up 120%. L2 ADAS penetration is now at 75%, meaning most new trucks already come with some level of driver assistance.

Exports are also picking up. In the first half of 2026, China saw a surge in new energy heavy truck exports, with shipments to Southeast Asia, Latin America, and the Middle East growing fast. This is helping Chinese brands replace European and American competitors in those markets. Sinotruk alone exported 15.33 million units in 2025, and the trend is accelerating. Looking ahead to 2031, new energy share is expected to stabilize above 50%, with pure electric at 35%, fuel cell at 8%, and hybrid at 4%.

China: 2026–2031 Provides Steady Start to Five-Year Plan

Continued from page 22

Level 4 autonomous trucks will start deploying at scale in ports and on highways, and exports should exceed 450,000 units as Chinese brands continue to expand overseas. The whole market is moving from policy-driven growth to real demand, and the winners will be the ones that can scale fast, control costs, and meet local certification requirements abroad.

PASSENGER CARS. China's passenger car market is no longer fuel led. In June 2026, overall volume was under pressure but improved month by month, with fuel domestic sales collapsing, NEVs taking the lead, and exports staying strong. Retail NEV penetration hit a record 62.9% in May and 63.6% in June. May retail sales reached 950,000 units, and domestic brands held over 65%. For the first time, the top 10 best-sellers were all NEVs, leaving ICE at just 37.1%.

Batteries above 250Wh/kg now support 800V platforms and 10-minute charging for 500km, so range and charging are less of a blocker. The 2025 base was already strong: cumulative retail reached 23.744 million units, up 3.8%, and wholesale grew 8.8%; NEV output and sales both passed 16 million units, with domestic new-car NEV share above 50%.

In 2026, the market is entering a high-volume, low-growth stage. Exports are now a major support: China's vehicle exports could exceed 8 million units in 2026 and reach 10 million by 2030, while NEV exports are projected above 7 million units.

Policy is also pushing rural demand, as the NEV rural program expanded to 155 models after six years of cumulative sales above 20 million units, and the government is promoting the aftermarket and consumption upgrades. At home, price competition and consolidation are accelerating, fuel car weakness is becoming clearer, active brands may shrink 20–30%, and by 2031 NEV penetration should pass 80%, solid-state batteries should be commercialized, and urban NOA should be standard on cars above USD $22,343.86 (RMB150,000). Overseas expansion gives Chinese makers scale and room to invest, but it also raises compliance and local-production pressure, so the

COMPONENTS

Looking for component data?

We can help.

Many components are already included in our databases. If the ones you require are not, we may be able to identify them for you.

The **Components & Consumables Module Directory** provides a quick overview of components data available in our EnginLink™, OE Link™, CV Link™ and PartsLink™ proprietary databases.

The modules are not stand-alone products; they can be purchased only as part of a subscription/extract to one of the databases, EnginLink™, OE Link™, CV Link™ or PartsLink™.

Call today. +1 651.905.8400, or email us at info@powersys.com.

Power Systems Research
Data · Forecasting · Solutions™

1365 Corporate Center Curve | Eagan, MN 55121

+1 651.905.8400 | www.powersys.com

China: 2026–2031 Provides Steady Start to Five-Year Plan

Continued from page 23

winners will be brands that can cut costs, export smart EVs, and still serve upgrade demand in China.

MOTORCYCLES. China's motorcycle market is shifting from a fuel-heavy base to an electric, export-led structure. Fuel bikes still make up 83.7% of production, but electric motorcycle output has reached 361,180 units, or 16.3%, and demand is concentrating among a few large makers.

In Jan–May 2026, electric motorcycle sales grew 5.2% to 1.49 million units, with the top 10 firms holding 93.5% of the market, while electric share in first- and second-tier cities passed 55% and sodium-ion batteries began commercial use with 150 km+ range.

Exports are now the main growth engine: China shipped 13.3657 million motorcycles in 2025, about 41% of global trade, and Jan–May 2026 exports rose 17.29% to 6.1973 million units worth US$4.178 billion, up 20.7%.

Fuel exports remain a stable 9–10-million-unit base, but electric exports are growing much faster—Q1 2026 electric two-wheeler exports hit 7.2 million units, up 68%, with electric motorcycle export value above USD $3.426 billion (RMB23 billion)—leaving factories at full capacity and orders running into August. Africa has overtaken Latin America as the largest destination, and tighter export licensing is pushing less compliant players out.

By 2031, electric motorcycles should dominate urban markets with 70%+ share, connected intelligence will be standard, and Chinese brands could hold over 45% of the global market through localized production and certification compliance.

LAWN & GARDEN. The global gardening machinery market is shifting at a fast pace toward electric and smart products. This trend is reshaping the development path of China's domestic gardening machinery industry. In 2026, the electric product share in Europe and North America has already broken 60%, while emerging markets are accelerating toward 35% electric penetration driven by the rising popularity of solar-storage integrated gardening solutions.



Robotic lawn mowers and smart irrigation systems are seeing more than 10% annual demand growth worldwide. China controls over 75% of the global lithium battery production capacity, which gives local gardening machinery firms a unique and unrivaled supply chain cost and response edge. China's total gardening machinery exports are projected to stay above USD $12 billion in the near term.

By 2031, the electric product share in major developed markets will top 75%, AIoT features including autonomous navigation and voice control will become standard configurations on mid-to-high end models, and competitive Chinese brands are on track to approach 45% of the total global market share.

POWER GENERATORS. China's generator set market is now clearly split into two distinct tracks. High-horsepower diesel and natural gas sets see steady growth, driven by the ongoing energy transition and fast-rising backup power needs for large-scale wind and solar installations. Small gas generators face obvious market volatility, as they rely heavily on overseas exports, where the mature North American small generator market only posts 3% annual growth with limited new demand.

By 2031, the continuous gas-to-power shift and growing new energy backup demand will keep the high-horsepower segment growing at a solid pace, supported by its clear competitive edges from technical barriers and stable industrial end-user demand. For domestic small generator makers, the most reliable path to future growth is to expand their presence to more high-potential markets outside North America. **PSR**

Far East (Japan and South Korea)

Power and Marine Segments Lead Recovery

JAPAN SUMMARY: Power systems and investment in advanced industries are leading Japan's equipment recovery in Q3 2026. Data centers and semiconductor factories continue to expand, but routine replacement spending remains cautious. The recovery is still narrow, keeping overall production growth modest.

Demand is concentrated in large standby generators and construction equipment for factory projects. Reliable power remains a spending priority. As industrial centers expand, investment in roads, electricity networks and logistics facilities should also sustain equipment demand.

Higher farm income is reviving deferred machinery replacement in Japan. Construction equipment purchases remain constrained by prices and borrowing costs, while forklift production continues to fall. Recovery across general machinery will remain uneven in the second half.

Selected construction and marine products should lead the export recovery, with agricultural equipment following later. Construction equipment sales are improving, but agricultural markets remain weak in North America and Thailand. Indonesia's large coal-mining equipment market is also contracting, limiting a wider export recovery.

I forecast Far East production growth of 4.5% for power generation equipment, 3.5% for marine propulsion engines and 2.5% for industrial equipment in 2026. Construction and agriculture should each grow 1.0%. Power and marine will lead, with replacement and recovering exports bringing only modest gains elsewhere.

Author



Akihiro Komuro is the Research Analyst Far East / Southeast Asia at Power Systems Research.



SOUTH KOREA SUMMARY: Semiconductors and shipbuilding continue to lead an export-driven recovery. August trade figures, released Sept. 1, 2026, showed further semiconductor export growth. Investment by exporters should sustain demand for factory equipment and power systems, offsetting weak domestic construction.

Large marine engine backlogs should keep production high through 2027. Dual-fuel engines are well established in major customers' newbuild orders. Marine therefore remains one of the strongest parts of Korea's machinery industry.

HD Construction Equipment's profitability is improving following its merger. Recovering overseas sales and growth in industrial and defense engines are reducing dependence on the construction cycle. These wider applications should help fund investment and product development.

Korean engine makers are also seeing demand grow from Chinese shipyards and the US power market. Land-based generation adds a source of growth beyond shipbuilding. Overseas power investment and vessel construction should sustain output despite a slow domestic recovery.

Marine, industrial and power applications should lead

Far East:
Power and Marine Segments Lead Recovery

Continued from page 25

Korea's recovery, with domestic construction improving only gradually. Wider export markets support medium-term growth, but labor shortages and component and energy costs limit the scope for higher output.

AGRICULTURAL. Japan. Replacement demand is beginning to recover. Kubota's first-half domestic machinery revenue rose 13.1% year on year, driven by agricultural equipment and engines. Higher rice prices have improved farm income and made machinery purchases more affordable.

Replacement of aging tractors and harvesters should sustain second-half demand. Higher equipment prices remain a constraint, however. Buyers are likely to favor machines that work frequently and have enough future work to justify the cost.

Land consolidation encourages larger farms and contractors to buy bigger, more productive machines. Farmers leaving the industry reduce replacement demand for smaller units. Investment in capacity per machine will continue, but fewer buyers will limit overall unit growth.

Export recovery remains slow. Kubota reported weak North American demand for residential-use tractors, slower agricultural demand and low farm incomes in Thailand. European sales are normalizing after inventory adjustments, but weaker markets elsewhere continue to restrain Japanese shipments.

Domestic replacement and a more stable European market should sustain production through 2027. Weak North American demand will slow the export recovery. A sharp fall in Japanese rice prices could also reduce farmers' purchasing power again.

I forecast agricultural equipment production growth of 1.0% in 2026 and 1.2% in 2027. Renewed replacement and gradual export recovery should bring modest gains. Farm consolidation and a shrinking agricultural workforce will continue to limit medium-term unit growth.

CONSTRUCTION. Japan. The Japan Construction Equipment Manufacturers Association (CEMA) forecast on Aug. 5, 2026, puts FY2026 shipment value flat, with

Need Intelligence?

Download Complimentary PSR Industry Reports

Our Targeted Industry Reports Provide Timely Global Data and Analysis

Truck Production Index (TPI)
Truck Production Index - South America
Alternative Power Reports
DataPoint Reports
Trade Show Reports
PowerTALK News

Download Current Reports at powersys.com

Power Systems Research
Data · Forecasting · Solutions™

1365 Corporate Center Curve | Eagan, MN 55121
+1 651.905.8400 | www.powersys.com

Far East: Power and Marine Segments Lead Recovery

Continued from page 26

domestic shipments down 3% and exports up 1%. It expects only 1% overall growth in FY2027. Domestic buying remains weak, leaving recovering exports to sustain the market.

Equipment prices and financing costs are restraining investment. CEMA also cites concern over rising interest rates. Labor costs add pressure, encouraging contractors to retain or rent machines. New purchases should focus on replacing aging machines and meeting confirmed project needs.

Road, water and sewer renewal, along with factory site preparation and foundation work, is sustaining demand for hydraulic excavators and other equipment. Infrastructure maintenance provides recurring work. High purchase costs should nevertheless keep new machine sales growth modest.

Komatsu reported higher construction, mining and utility equipment sales volumes in April-June. Demand for large coal-mining machines in Indonesia is falling, however. I expect recovering civil engineering and infrastructure demand to offset mining weakness during the second half.

Far East construction equipment production should grow 1.0% in 2026 and 1.5% in 2027. Japanese infrastructure renewal and factory work, alongside overseas civil engineering, will support output. High purchase costs and weak coal-mining equipment demand should keep the recovery gradual.

South Korea. HD Construction Equipment's April-June operating margin exceeded 10% for the first time since the merger. Recovering overseas markets and growth in industrial and defense engines lifted profitability. External demand is leading the improvement.

Shared purchasing and development should improve price competitiveness after the merger. The ability to lower costs while maintaining sales and service coverage should help the company win business in price-sensitive markets, even as the overall recovery remains slow.

Overseas roads and industrial parks sustain demand for medium and large construction machines. Lower coal production plans in Indonesia will keep purchases of additional large mining machines weak. Recovery should remain stronger in civil engineering than in mining.

Road, water and sewer renewal, along with factory site preparation and foundation work, is sustaining demand for hydraulic excavators and other equipment.

Korean construction equipment output should rise gradually with overseas sales through 2027. Industrial and defense engine applications will add growth. Domestic construction remains weak, but exports and a wider range of applications should sustain the production base.

MARINE. Japan. LNG leads alternative-fuel adoption; methanol and ammonia remain limited. ClassNK's July report puts LNG at 65% of first-half alternative-fuel vessel orders for ships of at least 5,000 GT, excluding LNG carriers. LNG should lead dual-fuel engine demand in 2026-27.

Mitsui E&S announced completion of land trials for its Tamano-built WinGD methanol engine in August, expanding supply options. Adoption is slowing, however. ClassNK reports that methanol's share of alternative-fuel vessel orders fell from 14% in second-half 2025 to 4% in first-half 2026.

EXMAR received its ammonia dual-fuel vessel ANTWERPEN in June. Mitsui E&S announced commercial readiness of its large ammonia engine and fuel supply system on Aug. 20, 2026. Operators with fuel-handling experience, including gas shipping companies, lead adoption and create early opportunities for Japanese suppliers.

Fuel availability and operating costs constrain adoption. DNV describes methanol technology as commercially ready, but use of low-carbon methanol remains limited. Adoption should concentrate on routes where freight rates or cargo-owner contracts cover the extra fuel cost.

Far East: Power and Marine Segments Lead Recovery

Continued from page 27

Fuel	Current adoption	2026-27 outlook
LNG	Commercially established	Leads dual-fuel engine demand
Methanol	Proven technology; orders slowing	Growth on routes that can secure fuel and recover costs
Ammonia	Early use on oceangoing ships	Initial projects, mainly in gas shipping

Asian demand is supporting outboards. Yamaha Motor reported flat first-half unit sales in North America and Europe, with growth in Asia. Asian demand should lift Japanese second-half production, though limited growth in Western markets will keep the recovery modest.

Existing shipbuilding orders and recovering outboard demand should lift Japanese marine production through 2027. New fuels will spread first through newbuilds, with slower adoption across the fleet. Lower fuel prices and wider supply networks would accelerate the transition.

South Korea. Hanwha Engine's June-end backlog reached about USD $4.5 billion (KRW 6 trillion), up 44.1% from the end of 2025. April-June revenue declined, but orders remained strong. The backlog should sustain production through 2027, keeping marine engines among the stronger machinery segments.

Dual-fuel engines account for 83% of Hanwha's marine backlog and are established in major customers' newbuild programs. Continued LNG-related demand should keep dual-fuel engines a large share of Korean manufacturers' output.

Hanwha also has a large backlog from Chinese shipyards. China's shipbuilding expansion increases competition for Korean yards while creating export opportunities for engine makers. Supplying shipbuilding demand outside Korea should strengthen the engine production base.

Hanwha is launching a four-stroke business for onboard power, propulsion for small and midsize vessels, and land-based generation. Auxiliary and land applications broaden its customer base. Initial contributions will be small, but the business should add growth from 2027 onward.



I forecast annual Far East growth of 3.5% for marine propulsion and 3.0% for auxiliary engines in both 2026 and 2027. Shipbuilding orders and dual-fuel demand will sustain growth. Methanol and ammonia adoption should remain gradual, leaving established demand, including LNG, to lead production gains.

INDUSTRIAL. Japan. July figures from the Japan Industrial Vehicles Association show forklift production down 6.1% year on year to 9,095 units. Engine-powered units fell 7.7% to 3,262. The market remains weak, and I expect industrial engine demand to stay subdued in the second half.

Battery-powered output also declined, showing weakness across the market. Domestic buyers remain cautious and are likely to keep existing vehicles longer. Logistics activity sustains replacement needs, but offers little basis for a rapid second-half production recovery.

Labor-saving investment favors automated warehouses and transport systems, with more electric and automated equipment used indoors. Outdoor work and heavy-load handling remain the main applications for engine-powered forklifts. Replacement in these uses should sustain only slow growth in Japanese industrial engines.

Korean export manufacturing investment and improving industrial engine demand should offset Japanese weakness. I forecast Far East industrial equipment production growth of 2.5% in both 2026 and 2027.

Japanese replacement demand should recover through 2027, but fleet expansion will remain modest in this

Far East: Power and Marine Segments Lead Recovery

Continued from page 28

mature market. Manufacturing investment should sustain near-term regional growth. Output growth should ease as investment growth moderates.

POWER GENERATION. Japan and South Korea. Power generation should be the Far East's strongest growth segment. Data centers and semiconductor factories need large standby systems, while overseas demand for continuous-duty generation is also rising. Investment in reliable power benefits manufacturers in both countries.

Yanmar plans to open its Kitakyushu large standby power systems factory in 2028. Its range will expand from 2,000 kVA to 3,000 kVA from FY2026, then 4,000 kVA from FY2028, meeting demand for larger systems.

Large-unit demand should sustain growth through 2027, with new factory capacity adding supply from 2028. Smaller portable units face a slower recovery in construction and general investment. Large stationary systems should therefore lead market growth.

In August, HD Hyundai Heavy Industries announced a $673.8 million contract with US-based Corban Energy Group. The 1,000 MW package uses 9.6 MW HiMSEN engines for a major US technology company's data centers.

Medium-speed engines capable of continuous operation are winning large orders for land-based power as well as ships. Where grid capacity remains constrained, investment in onsite generation should expand. Data centers could become a lasting customer base for Korean makers.

Far East output of power generation equipment should grow 4.5% in 2026 and 4.2% in 2027, easing to 3.0% by 2031. Data center expansion and added manufacturing capacity sustain medium-term output growth. Investment growth will moderate, but replacement at existing facilities should maintain demand.

RECREATIONAL PRODUCTS. Japan. Weak domestic motorcycle demand leaves overseas recovery to sustain production. The shift from 50cc mopeds to models under revised moped rules continues, but purchase costs can discourage replacement. I expect a small, export-led production recovery in the second half.

Power generation should be the Far East's strongest growth segment. Data centers and semiconductor factories need large standby systems, while overseas demand for continuous-duty generation is also rising.

Yamaha Motor reported first-half motorcycle sales growth in Europe, North America and emerging markets, but a decline in Japan. Prices and household budgets remain domestic constraints. Medium and large motorcycles supplied from Japan should benefit from improving overseas demand.

Concerns about purchase prices and handling can delay moped replacement. Owners are likely to retain familiar small, lightweight models longer, making the shift to the new models gradual. Japan's small motorcycle market should remain driven by replacement, with little unit expansion.

Recovery in Europe and North America supports exports of medium and large motorcycles. These are costly discretionary purchases, however. If households remain cautious about expensive leisure products, sales recovery will be modest.

Yamaha's August plan to end in-house ROV production in the US reflects a stronger focus on profitability in leisure equipment. It plans to source vehicles from other manufacturers. I expect manufacturers to keep reducing fixed production costs to cope with demand fluctuations.

Far East recreational products output should grow 0.5% in both 2026 and 2027. Export demand for medium and large motorcycles will sustain output, while weak domestic demand for small models and household budgets limit growth. Production should rise slowly as exports recover. **PSR**

Southeast Asia

Power and Industrial Investment Expand, but Equipment Recovery Remains Uneven

SUMMARY: Power and industrial infrastructure investment should lead Southeast Asian growth in Q3 2026. Data centers and factories will sustain equipment demand, while Indonesian coal-mining machines and Thai agricultural equipment remain weak. Countries and applications attracting investment will lead the recovery.

Power shortages encourage factories and data centers to secure their own power supply. Reliable operation protects returns, making generators a spending priority. Stationary generation demand should remain firm where electricity networks cannot keep pace with consumption.

Indonesia. Lower coal production plans will keep large mining equipment purchases weak through the second half. Resource processing, power and logistics investment continues, however. Related construction equipment, site power and coastal shipping demand should remain steady.

Malaysia. Data centers and cloud projects accounted for USD $23.48 billion (MYR 95.8 billion), or 44%, of first-half approvals by the Malaysian Investment Development Authority (MIDA). Manufacturing approvals fell after last year's large projects. Power-intensive investment remains strong, sustaining generation equipment and demand around industrial centers.

Philippines. Government mechanization support helps farmers and farming groups acquire equipment. Demand is broadening to shared use and contract services. Public support should sustain medium-term mechanization despite a slow recovery in private purchases.

Power and industrial infrastructure investment should lead Southeast Asian growth in Q3 2026. Data centers and factories will sustain equipment demand, while Indonesian coal-mining machines and Thai agricultural equipment remain weak.

Thailand. First-half investment applications to the Board of Investment (BOI) reached about USD $44.54 billion (THB 1.47 trillion), including USD $33.94 billion (THB 1.12 trillion) in digital projects. Data centers and industrial parks should lift power and construction equipment demand. Low farm incomes restrain agriculture, leaving a gap between new industrial investment and traditional markets.

Vietnam. Manufacturing and public investment are expanding factory sites, roads and logistics facilities. Supporting infrastructure should keep construction equipment and power demand firm through 2027. Dependence on imported equipment and components leaves investment exposed to currency and procurement costs.

Cambodia. The Council for the Development of Cambodia (CDC) approved 276 projects worth $4.7 billion in the first half, including special economic zones, manufacturing and energy. Factory expansion should lift construction and power equipment demand. Zones with reliable power and logistics will lead, with slower growth in surrounding areas.

I forecast 2026 production growth of 6.0% for power generation equipment and 4.0% each for construction and agriculture. Power shortages and industrial development will lead growth into 2027. Purchases by miners and individual farmers should recover more slowly.

Author



Akihiro Komuro is the Research Analyst Far East / Southeast Asia at Power Systems Research.

Southeast Asia: Power and Industrial Investment Expand, but Equipment Recovery Remains Uneven

Continued from page 30

AGRICULTURAL: Government support and labor-saving needs sustain demand, but low farm incomes restrain private purchases. Shared use and contracting should lead second-half growth. Operators spreading purchase costs across larger working areas are best places to mechanize.

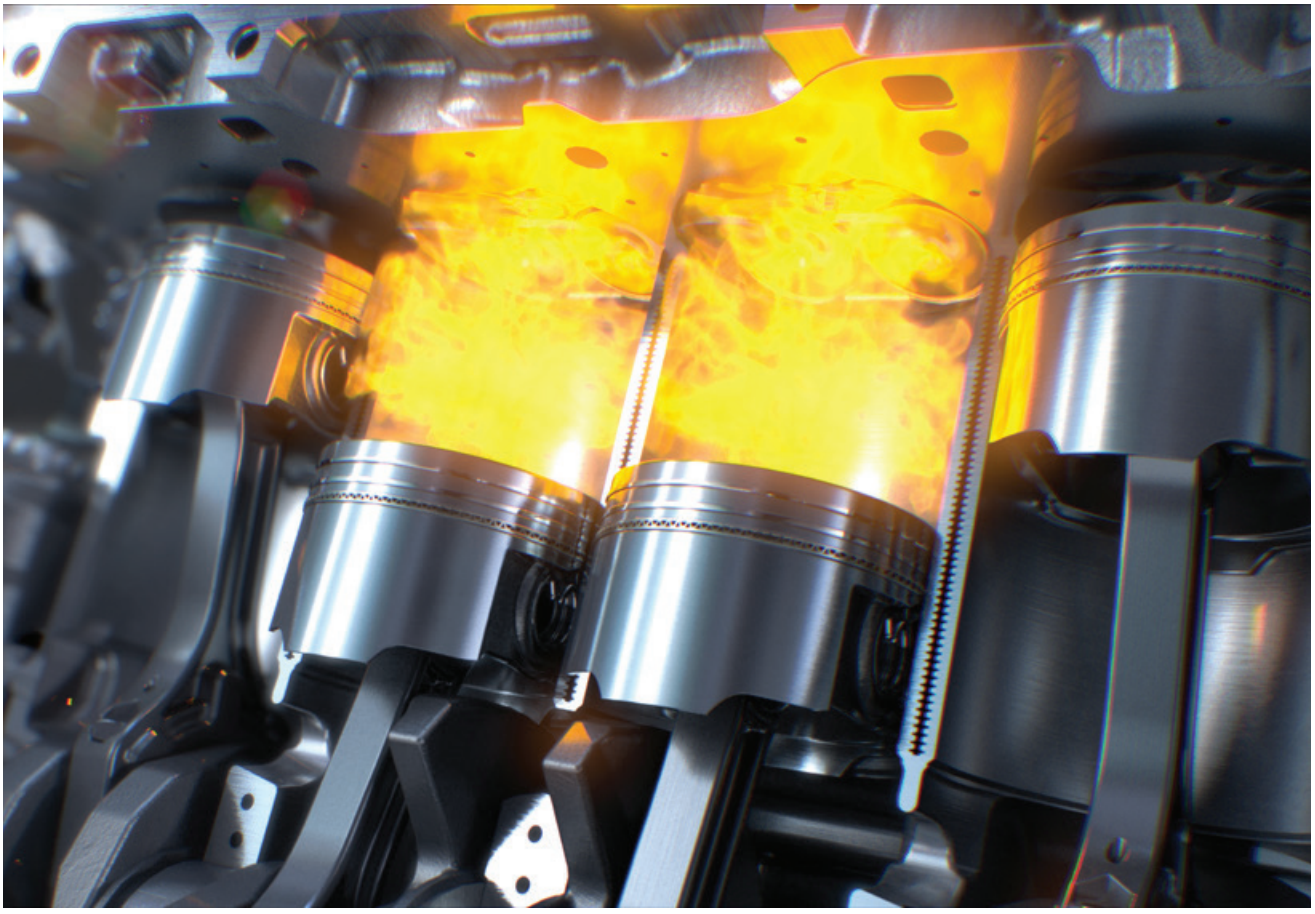
In July, 24 districts and cities in Indonesia's South Sulawesi received agricultural supplies and machinery assistance. Public funding lowers purchase costs for equipment needed to raise food production and save labor. Adoption should advance fastest in areas receiving support.

Thailand should remain weak. Kubota's first-half results described a depressed market caused by low farm incomes. Limited individual purchasing power favors shared use and contracting. Replacement demand should center on operators able to keep machines working regularly.

Drying, storage and processing should attract agricultural investment in Vietnam. Reducing post-harvest losses and preserving quality raises income from the same crop. Contractors combining these facilities with agricultural machinery should help expand equipment demand.

In the Philippines, 1,731 of 2,289 machines procured under the 2025 Rice Competitiveness Enhancement Fund (RCEF) budget were reportedly distributed by June-end. Deliveries included tractors, harvesters and dryers. Public support and shared use reduce costs, helping mechanization spread through rural areas.

Agricultural equipment production should grow 4.0% in 2026 and 3.8% in 2027. Government support and shared machinery services sustain demand, but Thai weakness and financing constraints slow growth. Falling crop prices or higher fuel costs could further weaken private purchases.



Southeast Asia: Power and Industrial Investment Expand, but Equipment Recovery Remains Uneven

Continued from page 31

CONSTRUCTION: Infrastructure and industrial facilities are expanding, while large coal-mining equipment remains in decline. Public works and industrial parks should lead second-half growth. With Indonesian mining machinery weak, recovery will be concentrated on civil engineering and industrial infrastructure work.

United Tractors' first-half Komatsu sales fell 27% to 1,994 units; large mining machines fell 55% to 325. Lower approved coal production plans were the main cause. Parts and service revenue edged up. Spending favors existing machines, leaving additional large-unit purchases weak.

Thai data centers and industrial parks sustain site preparation and foundation work. Roads and power infrastructure also need small and midsize excavators. Areas attracting new investment should remain firm, but weak overall domestic investment will keep market growth modest.

Vietnam's state-funded investment rose 18.4% year on year in January-July. Public works and manufacturing investment are growing together, making construction equipment demand relatively strong. Roads, logistics facilities and industrial sites should sustain machine use and purchases through 2027.

High purchase costs favor rental among contractors, shifting some demand to rental companies. More construction raises fleet utilization. Fleet additions and replacement by rental firms in expanding markets should help new equipment sales recover.

Construction equipment production should grow 4.0% in 2026 and 4.2% in 2027. Vietnamese public works and regional industrial investment offset weak coal-mining equipment demand in Indonesia. Supporting infrastructure around industrial centers should strengthen growth in 2027.

RECREATIONAL PRODUCTS: Daily travel and commercial use sustain motorcycle demand. Electric models are increasing competition in cities, while rural transport needs and exports sustain internal combustion engine (ICE) models. The market should expand, but electrification will gradually limit engine production growth.

> *Infrastructure and industrial facilities are expanding, while large coal-mining equipment remains in decline. Public works and industrial parks should lead second-half growth.*

AISI, Indonesia's motorcycle industry association, reported about 4.36 million domestic shipments and 430,000 complete motorcycle exports in January-August. Indonesia's large home market and exports sustain production. Practical transport needs should drive second-half growth, though household budgets limit the scope for large gains.

The five members of the Vietnam Association of Motorcycle Manufacturers (VAMM) sold 638,431 motorcycles in April-June, up 4.4% year on year. Established manufacturers are recovering, while electric two-wheelers increase urban competition. Electric models should gain share among urban commuters; ICE demand will remain concentrated among rural and utility-focused buyers.

Hanoi's low-emission zone trial, launched in July, encourages electric transport. Phased restrictions target selected areas and vehicle types, concentrating the initial impact in cities. Adoption should advance where charging and purchase costs are manageable. Rural ICE demand should last longer.

Exports should offset domestic weakness in production centers including Thailand. ICE models retain demand for longer journeys and easy refueling. Manufacturers will expand urban electric ranges while competing on price, durability and service coverage for models used for everyday transport.

Recreational products output should grow 3.0% in 2026 and 2.8% in 2027. Utility demand and exports sustain growth, while tight household budgets and urban electrification limit engine output. Growth should ease over the medium term. **PSR**

India

Growth Continues Across Broad Economy



SUMMARY. India's economic environment remains supportive for the automotive sector, with domestic demand, government spending and improving credit conditions providing a strong base. GST collections remain close to ₹2 lakh crore a month, while industrial production and core-sector activity continue to grow, indicating healthy economic activity and goods movement.

For on-road vehicles, freight movement, construction, mining and replacement demand remain important demand drivers for CVs. Higher e-way bills, industrial activity and infrastructure spending support vehicle utilization. Lower interest rates and better financing availability are also helping vehicle affordability.

For off-road, construction and mining activity remain key. Road, railway, housing and infrastructure projects support construction equipment, while mining and cement activity directly influence equipment and heavy-truck demand. Tractor demand will depend more on rural income, crop output and the monsoon. The 2026 monsoon has been mixed, making rural demand an important variable to watch.

EV adoption is gradually becoming a structural factor, particularly in two-wheelers, three-wheelers and passenger vehicles. This is increasing the importance of battery costs, charging infrastructure and domestic component supply in the automotive value chain. EV registrations also rose strongly in FY26.

The main risks remain crude oil, fuel prices, commodity costs and freight rates. West Asia tensions can quickly affect oil, shipping routes and imported components, putting pressure on vehicle costs and fleet profitability.

Author



Aditya Kondejkar is PSR Research Analyst, South Asia Operations.

> *India's economic environment remains supportive for the automotive sector, with domestic demand, government spending and improving credit conditions providing a strong base.*

Overall, India's auto cycle remains demand-led and supported by domestic economic activity, but the next phase of growth will depend on rural recovery, infrastructure execution and how global fuel, commodity and geopolitical pressures evolve.

RECREATIONAL PRODUCTS. The two-wheeler market is seeing a clearer recovery, but the story is different for scooters and motorcycles. Scooters are currently driving the incremental growth, helped by strong urban demand and rapid EV adoption. TVS and Honda remain the key volume players, while Bajaj, Ather and Hero are expanding their electric portfolios.

The EV shift is much stronger in scooters than motorcycles, with manufacturers increasingly competing in the affordable as well as premium scooter space. Bajaj is expanding Chetak capacity and plans to enter electric motorcycles by FY28, while Yamaha-backed River has raised fresh funding to expand scooter production and develop new models.

In motorcycles, the focus is moving towards premiumization, feature upgrades and stronger product differentiation rather than a major powertrain shift. TVS recently upgraded its Apache and Ronin range with traction control, TFT displays and other technology features.

Honda has taken a particularly aggressive product approach, unveiling a broad new India portfolio covering motorcycles, adventure scooters, EVs and flex-fuel technology. Its ADV 160 is planned as a flex-fuel scooter capable of running on higher ethanol blends.

© 2026 Power Systems Research | www.powersys.com | +1-651-905-8400 | info@powersys.com

India:
Growth Continues Across Broad Economy

Continued from page 33

Overall, scooters are becoming the main battleground for EVs, while motorcycles remain largely ICE-led but are moving towards premium products, technology and alternate-fuel options.

The Indian three-wheeler market is seeing a strong shift towards electric powertrains, particularly in passenger and last-mile applications. Electric three-wheelers are gaining traction among fleet operators because of lower running costs and suitability for high-utilisation urban routes. Bajaj, Mahindra and TVS are expanding their electric offerings, while several regional players continue to compete in the entry-level segment.

Bajaj Auto launched the WEGO electric range covering both passenger and cargo applications, with multiple variants and longer-range options. This expands Bajaj's EV portfolio beyond its traditional ICE three-wheeler range.

A significant development is the Hyundai–TVS partnership for jointly developing and commercialising electric three-wheelers. Hyundai brings design and engineering capabilities, while TVS contributes its electric platform, three-wheeler expertise and local manufacturing. The companies are also targeting high localisation of components.

The market is also seeing greater product segmentation, with OEMs developing separate solutions for passenger mobility, cargo, e-commerce and intra-city logistics. Battery range, charging time, payload and total operating cost are becoming key product differentiators.

On the ICE side, CNG remains relevant, particularly for commercial operators where refuelling infrastructure is established. However, new product development and partnerships are increasingly centred on electric platforms, making the three-wheeler segment one of the fastest-moving areas in India's commercial-vehicle electrification.

PASSENGER CARS, MINIVANS & SUVS. The passenger vehicle market remains strongly SUV-led, with manufacturers continuing to refresh compact, mid-size

CV Link™

We know trucks and buses.

CV Link™ is the leading source of global production, forecast and specification data for on-highway commercial vehicles.

CV Link™ contains OEM names, brands, and models, engine model detail, and qualitative analysis of OEMs and product platforms.

Call today. +1 651.905.8400, or email us at info@powersys.com.

Call Today.
Why wait for success?

Power Systems Research
Data · Forecasting · Solutions™

1365 Corporate Center Curve | Eagan, MN 55121

+1 651.905.8400 | www.powersys.com

India: Growth Continues Across Broad Economy

Continued from page 34

and three-row SUV portfolios. Recent launches include the updated Mahindra Scorpio-N, BE 6 Sporteq and MG Hector Tomahawk, while Kia has added the new Sorento to the premium SUV space.

The EV market is moving beyond Tata's early lead, with Mahindra rapidly expanding its electric SUV range and Maruti Suzuki, Hyundai, Kia and VinFast adding new products. Tata and Mahindra are increasing competition across multiple SUV price points, while MG is adding a PHEV option, keeping hybrid technology relevant alongside pure EVs.

Hybrid and CNG are gaining more attention as OEMs avoid relying on a single powertrain. Kia has introduced the Sorento with a strong-hybrid option, while CNG continues to be important in mass-market cars. Alternative-fuel vehicles are increasingly becoming a mainstream part of the product strategy.

The MPV/minivan segment remains relatively focused, with Ertiga, XL6, Innova and Carens continuing to anchor the market. However, new three-row SUVs are increasingly competing for the same family-use customer.

Product development is therefore moving towards SUVs, three-row vehicles, EVs and hybrids, while entry-level hatchbacks and traditional sedans are receiving fewer new investments.

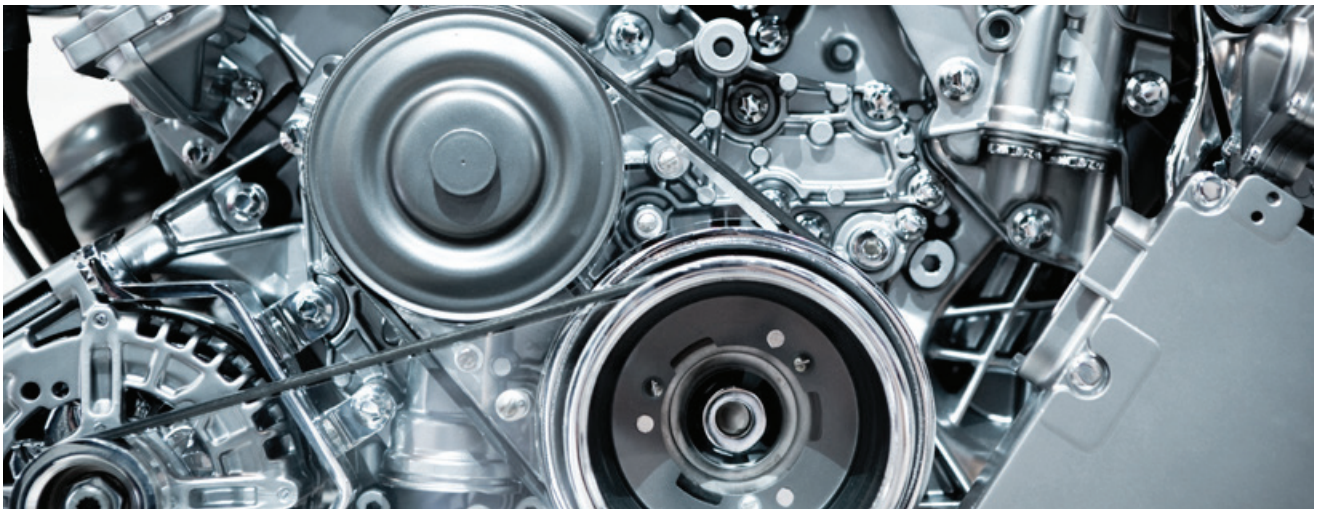
COMMERCIAL VEHICLES. The LCV segment remains focused on last-mile and intra-city applications, with e-commerce, FMCG and small-business logistics supporting demand. Product development is increasingly centred on payload, cargo volume, mileage and lower running cost. Mahindra recently expanded the Veero range with a new 1.1-ton CNG variant, while Ashok Leyland has introduced twin-fuel CNG-petrol versions of the Dost and Dost+ XL, addressing range concerns around CNG availability.

In M&HCVs, replacement demand and fleet productivity remain key themes. OEMs are adding technology focused on fuel efficiency, uptime and higher payload rather than just increasing engine power. Mahindra recently launched the BLAZO i-TRK, offering improved mileage, connected fleet management and an uptime guarantee.

Ashok Leyland has also introduced new 45–49 tonne air-suspension trucks, targeting higher payload and better operating productivity. This indicates increasing focus on improving fleet economics through vehicle technology.

On the regulatory side, the PARIVARTAN scheme for Delhi-NCR is an important development, providing incentives for replacing older trucks and buses with cleaner vehicles, including EVs and BS-VI vehicles.

Alternative powertrains are developing differently across CVs: CNG and dual-fuel solutions are gaining traction in LCVs, while M&HCV manufacturers are increasingly evaluating electric, LNG and other lower-emission technologies for specific duty cycles.



India: Growth Continues Across Broad Economy

Continued from page 35

CONSTRUCTION EQUIPMENT. The Indian construction equipment market remains supported by road construction, railways, urban infrastructure, mining and industrial projects. Demand is gradually improving after a softer FY26, with equipment replacement and new project orders supporting manufacturers.

Recent product activity is focused on higher productivity, fuel efficiency and operator comfort. JCB has expanded its backhoe loader, excavator and wheel-loader portfolio, while Tata Hitachi has added compact excavators for urban and utility applications. Volvo CE has strengthened its offering in the higher-capacity mining segment.

Technology and localisation are becoming important areas of competition. OEMs are increasing local sourcing while adding telematics, fleet monitoring and predictive maintenance to improve machine utilisation and reduce downtime.

Electrification is progressing mainly in compact equipment and applications with predictable operating cycles, where charging is easier to manage. Larger excavators and mining equipment remain largely diesel-driven, although OEMs are exploring battery-electric, hydrogen and other low-carbon technologies for future applications.

Near-term demand will remain closely linked to government infrastructure spending, mining activity and project execution, while high equipment costs, financing conditions and imported component prices remain key factors for OEMs and customers.

AGRICULTURE. The tractor market has remained firm through the recent months, supported by healthy farm cash flows, government support and replacement demand. August sales also remained positive despite uneven rainfall, although the patchy monsoon remains the key near-term risk for the market.

The 30–50 HP segment continues to see strong product activity, with OEMs focusing on better fuel efficiency, comfort, hydraulics and application-specific tractors. Farmtrac recently expanded its PROMAXX range, while Sonalika continues to add products and increase production capacity to cater to festive-season demand.

> *The Indian construction equipment market remains supported by road construction, railways, urban infrastructure, mining and industrial projects.*

Higher-horsepower tractors are gaining attention as farm mechanization increases and tractors are increasingly used for commercial and non-farm applications such as haulage and construction-related work. This is encouraging OEMs to offer more specialised 4WD and higher-output models.

Electrification remains very early-stage, with high upfront cost, battery weight and charging requirements limiting adoption. Escorts Kubota is evaluating an electric tractor launch but is waiting for stronger subsidy support and a viable ownership proposition. At the same time, new electric powertrain developers are targeting OEM integration rather than only complete-tractor sales.

Financing, MSP support, crop prices and monsoon distribution will remain the key variables influencing tractor replacement and new purchases over the coming months.

GEN-SETS. The gen-set market is seeing stronger demand from data centers, manufacturing, healthcare, infrastructure and commercial facilities, increasing demand for reliable high-power engines. From an engine perspective, CPCB IV+ compliance is driving changes in fuel injection, turbocharging, electronic controls and after-treatment systems, increasing engine complexity and component value. OEMs are also focusing on fuel efficiency, transient-load response and remote diagnostics. Gas engines and hybrid battery-gen-set systems are gaining interest for specific applications, but diesel remains the dominant solution for high-power and long-duration backup. Data center expansion is likely to remain an important driver for large-engine genset demand. **PSR**

South America/Brazil

Overall Production Outlook Is Positive

SUMMARY. South America's production outlook for the remainder of 2026 remains positive overall but increasingly uneven across market segments. Passenger vehicles and motorcycles continue to benefit from resilient consumer and mobility demand, while construction and mining equipment, railway, and power generation are supported by project-related investment.

In contrast, high interest rates and restrictive credit continue to delay purchases of heavy trucks, agricultural machinery, and industrial equipment. This divergence is expected to remain the main characteristic of the regional market through the end of the year.

Brazil continues to provide the largest contribution to regional production. GDP expanded by 0.5% during the second quarter and by 2.0% compared with the same period of 2025. Agriculture and mining were among the strongest activities, while household consumption, manufacturing, and building construction showed weaker momentum.

Full-year GDP expectations remain close to 1.9%, but the composition of economic growth is less supportive of capital investment. Financial markets previously expected a more significant reduction in Brazilian interest rates during 2026. Persistent inflation and fiscal concerns have delayed monetary easing, and the year-end Selic expectation has moved higher. (The Selic rate (Taxa Selic) is the benchmark interest rate of the Brazilian economy, set by the Central Bank of Brazil's Monetary Policy Committee (COPOM)).

The extended period of restrictive credit is affecting heavy trucks, agricultural machinery, and industrial equipment more severely than consumer-mobility and project-related segments. Fiscal uncertainty and the approaching election cycle are also expected to encourage more cautious investment decisions through the remainder of 2026.

> *South America's production outlook for the remainder of 2026 remains positive overall but increasingly uneven across market segments.*

Argentina's economic recovery has lost momentum. Domestic vehicle demand, investment, and industrial activity have weakened, while exports and selected production reallocations provide partial support. The country's historically high economic and policy volatility continues to limit forecast visibility and may produce additional changes in demand and production during the remainder of the year.

Colombia is growing faster than expected, supported by stronger household consumption and investment. Vehicle and motorcycle registrations increased substantially during the first seven months of 2026. However, the country's direct contribution to regional production remains limited because of its smaller industrial base and the high share of imported vehicles.

Regional production growth through the end of the year will therefore depend mainly on high-volume passenger vehicles and motorcycles, together with project-driven demand from mining, infrastructure, energy, and logistics. Equipment markets that depend more directly on customer financing and replacement investment are expected to remain under pressure until monetary conditions begin to improve.

REGIONAL PRODUCTION OUTLOOK. Strong mobility demand and project-related investment are offsetting a more difficult year for financing-sensitive equipment. Reflecting this combination, total South American

Author



Fabio Ferraresi is Managing Director - South America at Power Systems Research.

South America/Brazil: Overall Production Outlook Is Positive

Continued from page 37

production is forecast to finish 2026 approximately 11.6% better than in 2025.

High-volume mobility segments provide most of the positive contribution. Passenger vehicle production is expanding in Brazil, supported by resilient demand, new product launches, and increasing local production by Chinese and traditional OEMs. Motorcycle production also remains strongly positive across the region.

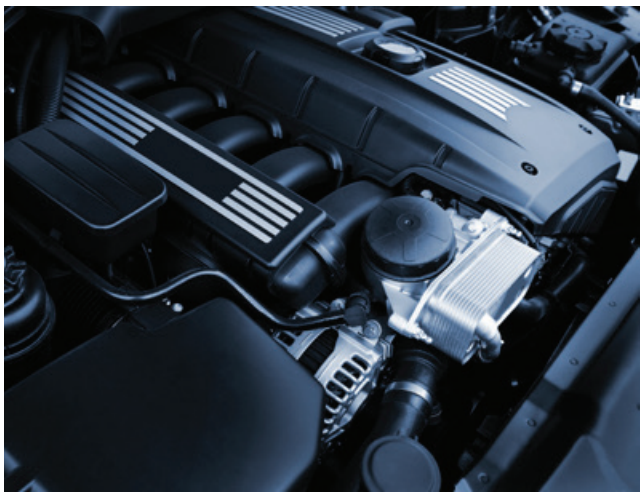
Capital-intensive equipment markets face a more difficult second half. Lower interest rates are unlikely to provide meaningful support before the end of the year, and replacement decisions will remain selective. Agricultural machinery is affected by producer indebtedness and restricted credit, while heavy-truck operators continue to extend vehicle replacement cycles.

Infrastructure, mining, logistics, energy, and data-center investment provide more stable demand for construction equipment, industrial applications, railway equipment, and power generation. These project-related markets are less dependent on consumer credit and provide greater production visibility through the end of 2026.

MEDIUM & HEAVY VEHICLES. With Brazilian heavy and extra-heavy trucks carrying most of the impact from delayed fleet renewal, South American Medium and Heavy Vehicle production is now forecast to close 2026 approximately -4.4% below 2025.

Freight activity and fleet utilization remain relatively stable, but high financing costs continue to delay replacement decisions. The extended period of restrictive credit is particularly relevant for larger vehicles, where acquisition costs and financing requirements are highest.

Brazilian truck production was down approximately 12% through July. Production improved from the low levels recorded during the first half in Q3 2026, but the recovery will not be sufficient to offset the accumulated decline before the end of the year. Move Brasil provided financing support for selected purchases and helped to offset part of the decline. However, the resources available are over and the forecast for the second half of the last quarter is for stability.



Bus production has been more stable and is expected to decline by approximately -4% in 2026. Caminho da Escola, public fleet procurement, and the inclusion of coach buses in Move Brasil support production despite weaker private demand and lower registrations. Brazilian bus production was down approximately 3% through July and should remain close to this level through the end of the year. There is a new program Caminho da Escola, but the delay on the bid moved the production and sales impact to 2027.

In Argentina, weaker domestic demand is being partially offset by manufacturing-footprint changes and the ramp-up of Mercedes-Benz production in Zárate. The transfer of selected models from Brazil to Argentina supports local output, but market conditions remain volatile.

Although Colombian truck registrations are growing strongly, supported by fleet renewal and the transition toward Euro VI vehicles, most of this demand is supplied through imports, limiting its direct contribution to Colombian production. A new EV BYD chassis, assembled by Hino in Colombia will increase Colombian bus chassis production, but the effect on total of South America is not relevant.

LIGHT COMMERCIAL VEHICLES. Urban logistics, services, utilities, and fleet operations continue to protect Light Commercial Vehicles from the sharper downturn affecting heavier trucks. This relative resilience should leave South American LCV production at approximately -3.6% in 2026.

Brazilian production remains positive, while Argentina is affected by weaker domestic demand and more

South America/Brazil: Overall Production Outlook Is Positive

Continued from page 38

cautious inventory management. Brazil is the region's largest production base for vans and light utility vehicles, while Argentina remains an important pickup manufacturing hub for domestic and export markets. Production volumes during the remainder of the year will depend on Brazilian demand, export flows, and the timing of new model launches.

New pickup investments and the planned introduction of hybrid models strengthen the segment's medium-term outlook. Electrification will continue to expand in selected delivery applications, but acquisition cost and infrastructure limitations will restrict broader adoption in the near term.

PASSENGER CARS, MINIVANS & SUVs. Strong vehicle registrations are providing only part of the production upside in 2026, as much of the additional Brazilian demand is being supplied by imported Chinese models. Even with this difference between sales and locally manufactured volumes, Passenger Car, Minivan & SUV production is forecast to grow by approximately 5.1% across South America.

At the same time, the localization of Chinese vehicle production continues to advance. New assembly operations, manufacturing investments, and the gradual transfer of models previously supplied through imports are expected to increase local output over the forecast period.

This transition creates the potential for Brazilian production to grow faster than total vehicle sales in future years, even as the current pace of market expansion moderates. Production growth will increasingly reflect import substitution and local manufacturing ramp-ups rather than an equivalent increase in overall demand.

Traditional manufacturers are also investing in new products and powertrain technologies, but competition is increasing in compact and midsize SUV categories. Changes in production footprint, product mix, and OEM market share are therefore expected to remain more significant than the growth of the total Brazilian market.

Hybrid and battery-electric vehicles continue to gain market share, with much of the current volume still supplied through imports. Hybrid technology is expected to expand faster in the near term because it provides lower fuel consumption without the same dependence on public charging infrastructure. Increasing localization should gradually raise the contribution of electrified vehicles to Brazilian production.

> *Electrification will continue to expand in selected delivery applications, but acquisition cost and infrastructure limitations will restrict broader adoption in the near term.*

Argentina's production outlook remains weaker. Lower domestic sales, inventory adjustments, and the transfer of selected vehicle production to Mexico reduce local output. Exports, particularly to Brazil, provide partial support but are not expected to fully offset these pressures.

Colombia is experiencing strong growth in registrations and local Renault-Sofasa production, that offsets the GM decline. Nevertheless, its production scale remains relatively small compared with Brazil and Argentina.

AGRICULTURAL EQUIPMENT. A record grain harvest of approximately 360 million metric tons has not been enough to trigger a new equipment-investment cycle. With producer indebtedness, restrictive financing, weaker margins, and dealer inventories continuing to delay purchases, South American Agricultural Equipment production is forecast to finish 2026 approximately 8.4% below 2025.

Producer indebtedness, high financing costs, dealer inventories, and tighter credit standards continue to restrict replacement demand. Lower farm margins in several crops are also encouraging producers to maintain existing equipment for longer periods.

The largest impact is concentrated in higher-value machines such as combines and large tractors. Smaller tractors, planters, and implements are relatively more resilient because of lower acquisition costs and different replacement requirements.

Move Agricultura program should provide additional financing support during the remainder of the year. The

South America/Brazil: Overall Production Outlook Is Positive

Continued from page 39

program may improve order activity and reduce the contraction during the final months of 2026, but a broader recovery will require lower interest rates, improved producer margins, and reduced dealer inventories.

Medium-term growth rates were adjusted for selected Agricultural Equipment applications to reflect an expected pre-buy in 2030 ahead of the first MAR-II implementation phase in 2031, followed by a post-introduction correction. Application-level technology shifts were also incorporated, including the gradual adoption of spraying drones and its effect on the outlook for self-propelled sprayers.

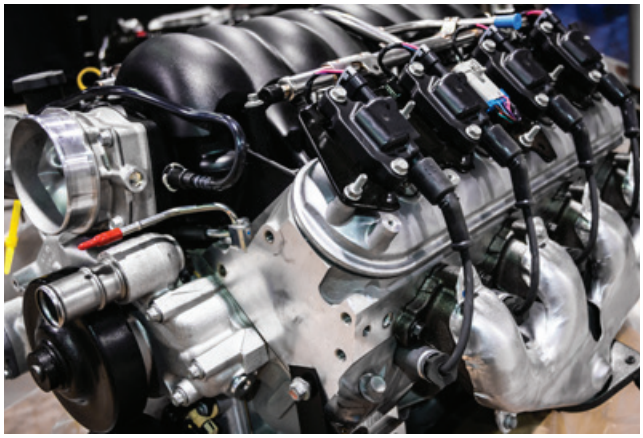
Argentina shows a similar product mix. Tractor and combine demand remain weak, while planters and implements are performing more favorably. Agricultural investment is expected to remain selective through the end of the year.

CONSTRUCTION EQUIPMENT. Mining, infrastructure, earthmoving, and rental-fleet demand continue to compensate for weaker residential and commercial construction. This combination should keep Brazilian Construction Equipment production growing by approximately 7.4% in 2026, broadly consistent with industry expectations for a 4% increase in yellow-line equipment sales.

Mining activity is one of the main market drivers. The sector continues to benefit from high equipment utilization, expansion projects, and a large investment pipeline. Agricultural logistics, roads, ports, and other infrastructure projects provide additional demand for excavators, wheel loaders, motor graders, backhoe loaders, and compact equipment.

Residential and commercial building activity is more sensitive to interest rates and is expected to remain weaker during the second half of 2026. As a result, growth will be concentrated in mining, infrastructure, rental, and maintenance applications rather than across the entire construction market.

Demand should remain positive through the end of 2026, although equipment purchases will continue to be selective and the second half is expected to grow at a



more moderate rate. Growth profiles for selected higher-power Construction Equipment applications were also adjusted to reflect the expected 2030 pre-buy ahead of MAR-II implementation in 2031, followed by market adjustment and normalization.

INDUSTRIAL EQUIPMENT. The Industrial Equipment market is being shaped by two different trends: weak capital investment across general manufacturing and more resilient demand from logistics, mining, ports, and infrastructure. After balancing these movements, regional production is forecast to grow by approximately 3.4% in 2026.

Manufacturing investment remains weak as high interest rates and economic uncertainty limit capital expenditures. Brazilian machinery and equipment consumption declined during the first half of the year, and a broad recovery is unlikely before financing conditions improve.

Mining, logistics, oil and gas, infrastructure maintenance, and project-related investments provide support for selected applications. These markets are expected to perform better than general manufacturing and agriculture-related industries during the remainder of 2026.

Forklifts remain one of the most resilient applications. Warehousing, distribution centers, ports, e-commerce, and rental fleets continue to generate replacement demand. Electric forklifts are also gaining share because of lower operating costs and their suitability for indoor logistics operations.

New-equipment demand from general industry will remain cautious through the end of the year, while logistics, rental, and electric applications provide the main areas of growth.

South America/Brazil: Overall Production Outlook Is Positive

Continued from page 40

POWER GENERATION. Data centers, mining, oil and gas, and critical-infrastructure projects continue to provide Power Generation with stronger order visibility than most equipment markets. Supported by these project-related applications, South American production is on course to grow by approximately 9.2% in 2026.

Brazilian data-center capacity is expanding rapidly, increasing demand for large backup-power systems and redundant generation capacity. Mining and industrial projects also require on-site and emergency power solutions, while distributed backup applications create opportunities across a broader range of industries.

Most growth is tied to specific investments, infrastructure projects, and confirmed orders rather than broad economic activity. This provides greater visibility than in equipment markets that depend primarily on consumer or dealer financing.

A significant share of high-power generating sets is imported. Consequently, growth in regional demand and sales will remain higher than the direct impact on South American production.

RECREATIONAL PRODUCTS. Motorcycles remain the main production highlight in South America, supported by affordability, urban mobility, and delivery applications across all three major markets. Following double-digit growth in Brazil and strong expansion in Argentina and Colombia, regional production is forecast to increase by approximately 8.6% in 2026.

Brazilian production increased by approximately 10% through July, while registrations continued to grow at a double-digit rate. Argentina and Colombia are also recording strong market expansion, supported by local assembly and urban transportation demand.

Affordability, delivery services, urban mobility, and lower fuel and operating costs relative to passenger vehicles remain the primary drivers. Motorcycles continue to provide an accessible transportation alternative despite restrictive consumer-credit conditions.

Growth rates should gradually normalize during the final months of the year, but production is expected to remain strongly positive in all three major markets.

RAILWAY. Brazilian railway equipment production is expected to remain positive during 2026, at 7.5% growth.

> *Motorcycles remain the main production highlight in South America, supported by affordability, urban mobility, and delivery applications across all three major markets.*

Freight-concession investments, mining, agricultural logistics, and the expansion of export corridors support demand for locomotives and freight wagons. Passenger-rail projects provide additional growth from a smaller production base.

Current industry projections indicate growth in locomotives, freight wagons, and passenger cars during the year. Long-cycle fleet investments and confirmed orders make railway production less sensitive to short-term changes in interest rates and consumer demand.

Mining and agricultural transportation will remain the principal drivers through the end of 2026 and over the medium-term forecast period.

LAWN & GARDEN. Localization and manufacturing-footprint changes, rather than a comparable expansion in consumer demand, are driving the Lawn & Garden outlook. New locally produced models, additional OEM coverage, and capacity expansion are expected to raise Brazilian production by approximately 25.6% in 2026.

New products introduced during 2026 will provide additional support from 2027 onward. Near-term production growth is therefore driven primarily by localization, capacity, and portfolio changes rather than a comparable expansion in underlying consumer demand.

Because Lawn & Garden contains a high number of relatively small units, changes in local production and database coverage can materially affect the regional production growth percentage. **PSR**

North America

More of the Same Economy from Q2 2026

SUMMARY. Moderate growth is paired with elevated consumer weariness over persistent inflation, elevated interest rates, and high fuel prices.

Real GDP growth remains steady, moderate at around 2.3% annual growth. The unemployment rate is holding at 4.1%, which is quite healthy. Job creation has slowed somewhat, but higher wage sectors and AI infrastructure investments are remaining constant. The Federal Reserve recently raised the fund rate to 3.75%-4% to combat inflation. Core inflation is at 3.4%, remaining above the Fed's targeted rate of 2%. Energy costs (oil and gas) remain high and our impacting household purchasing power.

AGRICULTURAL. North American agricultural machinery production is down in 2026 by 6%. The market is hitting a bottom tier but is showing very early signs of a cyclical turnaround. High input costs, inflation, tariffs, and volatile commodity prices have pushed farmers into a wait-and-see mode.

We see low demand in most of 2026. Manufacturers are working down high inventory levels and OEMs are also rolling out low interest financing options. Long term growth drivers are looking good, starting in 2027.

CONSTRUCTION. Production of construction equipment in North America is expected to be flat this year. Construction equipment production will show some growth in 2026. The North American construction equipment market is experiencing steady growth driven by major infrastructure funding and manufacturing reshoring, alongside a notable shift toward rentals and smart tech. Some bipartisan infrastructure bills are helping for things like building bridges and highways.



MEDIUM & HEAVY VEHICLES. Medium and Heavy truck production in North America is expected to increase by 13.4% this year compared with low 2025 production. Class 8 truck production is expected to increase by 13.8% this year as order rates for class 8 trucks improved strongly throughout much of the year. Improvement in freight rates and freight demand along with tightening truck capacity and some level of truck pre-buy ahead of the 2027 GHG emission regulations is expected to drive increased truck production this year.

While truck sales have been down for much of this year, production levels are expected to be strong in the second half of the year. The primary risk to the 2026 production forecast is if the truck fleets cancel or postpone truck purchases this year. However, at the time of this writing few if any truck orders have been cancelled due to the high price of diesel fuel or increasing interest rates. **PSR**

Author



Jim Downey is Vice President-Global Data Products at Power Systems Research.

V. Research Methodology

Power Systems Research (PSR) Research Methodology

Research begins with the gathering of information from primary and secondary sources. Next, the PSR analyst team reviews and validates all data against industry benchmarks. If our analysts discover anomalies in the data, additional research and validation is performed before publishing.

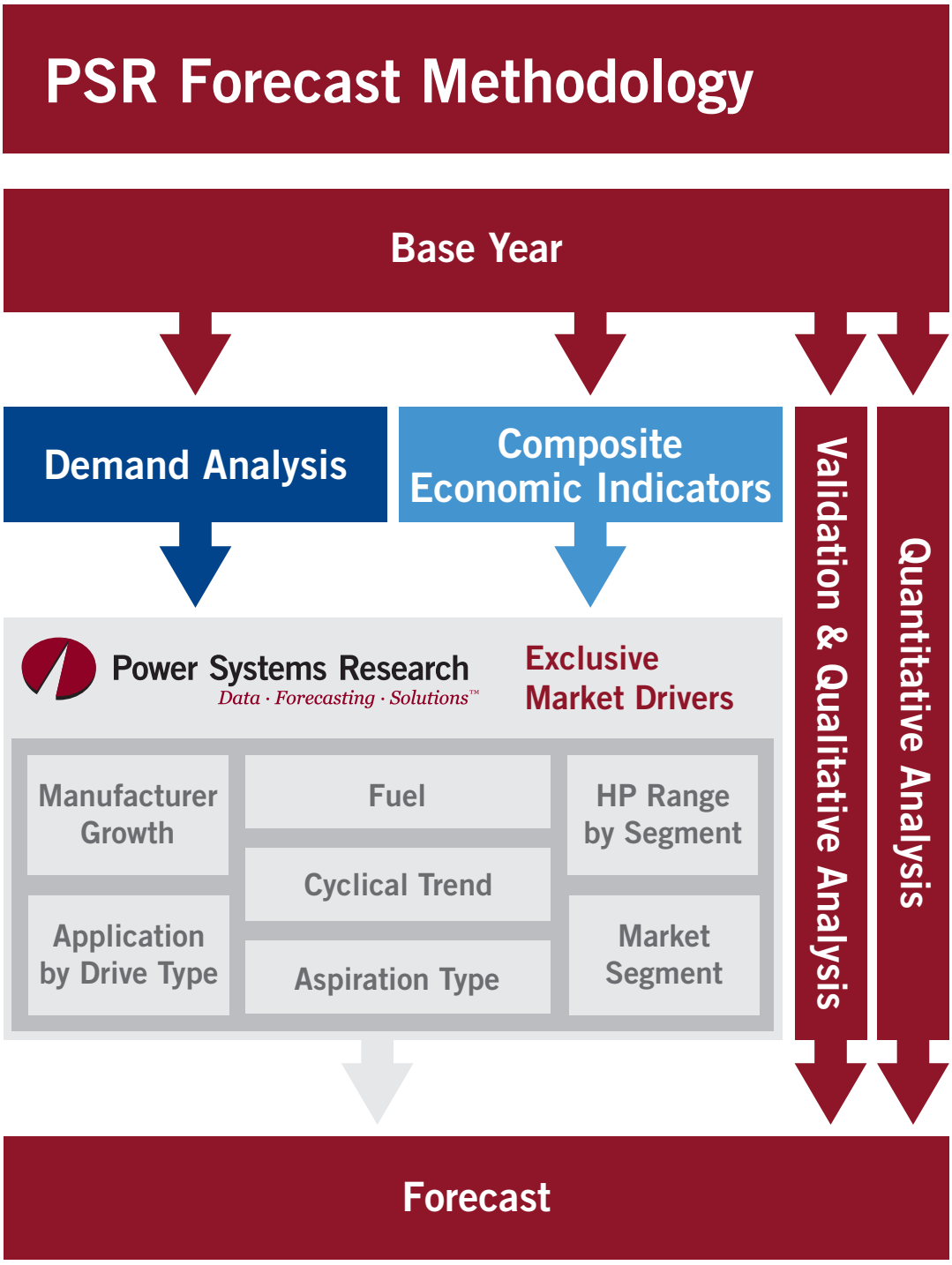
PSR RESEARCH METHODOLOGY



VI. Forecast Methodology

Power Systems Research (PSR) Forecast Methodology

The analysis begins with the Base Year and key historical data then adds current and future economic indicators and market demand. Next, our exclusive market drivers are entered and the Power System Research proprietary algorithm is applied. Extensive analysis and discussion by our PSR Analyst team validates and produces the forecast.



VII. Contact Information



CONTACT US

Purchasing and Inquiries

Headquarters
St. Paul, USA
+1 651 905 8400
info@powersys.com

European Headquarters
Brussels, Belgium
+32 2 643 2828
infobr@powersys.com

Detroit, USA
+1 248 444 0545
infode@powersys.com

Frankfurt, Germany
+49 160 1807 044
infoge@powersys.com

Beijing, China
infocn@powersys.com

Pune, India
infoin@powersys.com

Campinas, Brazil
+55 19 3305 5657
infosa@powersys.com

Tokyo, Japan
+81 90 9139 0934
infojp@powersys.com

About Power Systems Research

Power Systems Research (PSR), established in 1976, is the leading source of data, analysis and forecasting on the global production of engines and engine-powered equipment, including class 8 vehicles. One of its databases, EnginLink,™ includes production figures down to the model level for OEMs in key market segments, such as commercial vehicles. PSR's global research network includes eight offices and stretches across 200 countries and four continents.

Power Systems Research
Data · Forecasting · Solutions™