

EnginLink™ Update *Bulletin*

April 14, 2026

Q1 2026 REVIEW AND FORECAST



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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 first quarter of 2026.

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Commercial Vehicle Outlook

Medium and heavy truck production in North America is expected to increase by 9.4% this year compared with low 2025 production. While class 8 truck production is expected to increase by 11.3% this year as order rates for class 8 trucks improved strongly from December – February.

To get the full story, contact us today.



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I. Executive Notes



Technology on Display at CONEXPO 2026

CONEXPO 2026 wrapped up in Las Vegas a few weeks ago. Several members from Power Systems Research (PSR), including myself, attended the show. True to form, CONEXPO once again demonstrated massive size and the ongoing vibrance of the global construction industry.

When I attend a large show such as CONEXPO, I compare and contrast the current show against the last show three years earlier. Many of the products on display were much the same, but there were also some themes and trends that were prominent in 2026. Here are some key themes/trends that I took away from the show:

- Battery-Electric is suitable but only for the right applications. Equipment powered solely by Battery-Electric may have found its niche in smaller equipment and some medium-sized machines, depending on the application and duty cycle. The need for full electric must fit the specific use case as

the cost of a battery electric machine will most often be more expensive than a machine powered by diesel.

- Hybrid power rather than a full electric solution seemed to be most favored. In 2023, there were a greater number of OEMs showing full electric powered prototypes; this year, while there were electric machines present, the focus seemed to be more on hybrid solutions utilizing a combination of an IC engine and battery electric powertrain.
- Smarter Machines. Smart Machines proactively offer on-board problem solutions and fuel-saving steps; they don't just identify and signal problems, they begin addressing them immediately.
- A diverse range of Alternative Power has become a reality in equipment. Equipment at the show demonstrated a mix of battery power, hydrogen powered IC engines and traditional diesel power.
- AI is being utilized to maximize effectiveness. OEMs are using AI to increase safety and productivity, which is an important tool in managing a job site and also managing a fleet of equipment that may be operating across several locations. Large OEMs like Komatsu and Caterpillar quite prominently promoted these

Author



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tools leveraging AI to maximize fleet operational efficiency.

- **Connected Fleets.** Connected Technology, where equipment fleets can be monitored from a central location to optimize equipment utilization, evaluate operator productivity and proactively monitor potential issues and help prevent downtime, also were popular items at the show.

Overall, when I compare CONEXPO 2026 to CONEXPO 2023 it is evident that advancements in several areas of technology have been applied to the equipment on display. The advancements in technology within the powertrain and drivetrain enhance the overall experience for end users who invest in an OEMs brand of equipment. This translates into a better overall ROI to the construction fleet in terms of maximizing the value delivered for the machine cost and in meeting environmental and carbon footprint considerations.

Today, there are many forces at play in the current environment for the worldwide production of powered

equipment. As we move forward, Power Systems Research will continue to monitor developments and reflect this knowledge in our data and intelligence. Our mission is to keep you as informed as possible while we support your market planning and forecasting initiatives.

As we prepared this Q1 2026 update, we incorporated the important insights gathered during the first quarter to provide our best outlook for 2026 as well as our five-year forecast.

We hope you find this database update of value 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.

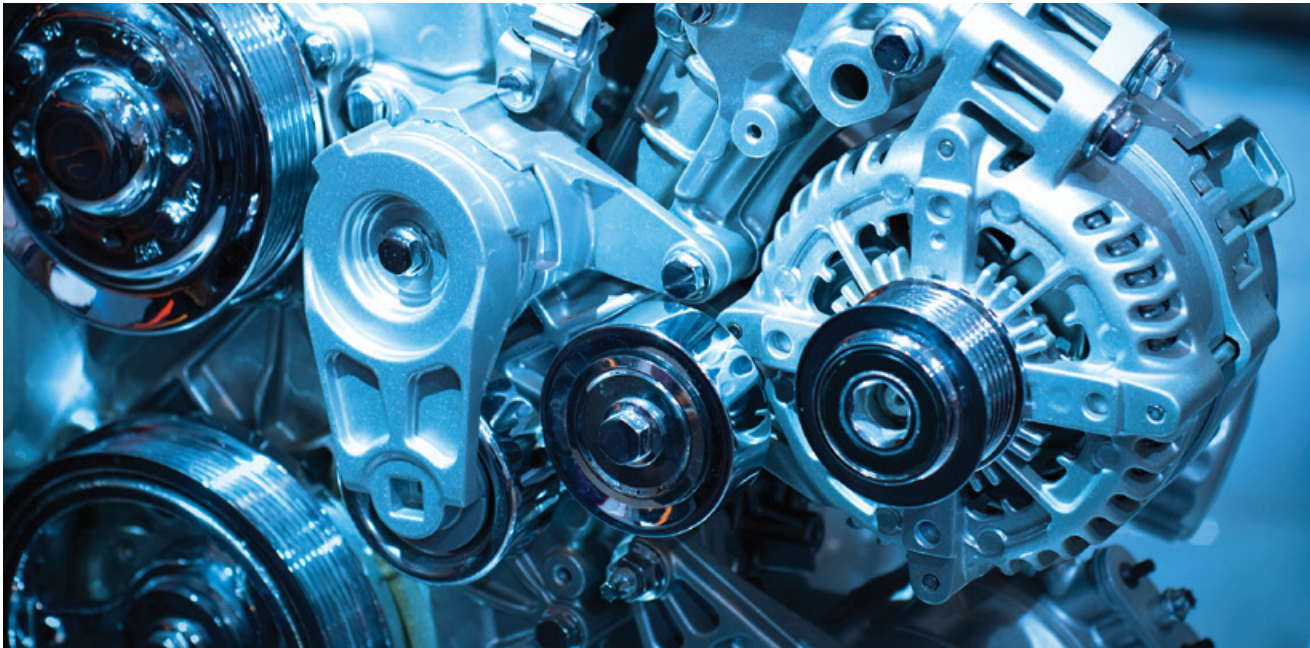
EnginLink™ is continuously updated; this Update Bulletin reflects changes made to EnginLink™ during the previous quarter. Included in this Update Bulletin are EnginLink™ database notes listing significant data modifications and an explanation of our research and forecast methodology. Additional Power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

  **Perkins** **PERKINS** and **CUMMINS** showcased it's engines, at CONEXPO, designed to run on various low-carbon fuels, including hydrogen, HVO, and natural gas, aiming to provide flexible, lower-emission solutions without sacrificing performance. Cummins next generation X15, and Perkins 2600 Series were showcased at the venue.

 **FPT ISUZU** **FPT** showcased it's multi-fuel XCursor 13. **Isuzu** also presented its multi-fuel engine concepts based on its established engine architecture. This was also at CONEXPO.

 **HYUNDAI** introduced a new engine at **CONEXPO** also. The is **H2ICE**. Hydrogen engine. In-line 6-cylinder, 11.1L displacement, Euro 6 (Zero-CO2), EPA Tier 4 Final, EU Stage V.

EnginLink™ Update Editor



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

Engine Models Added

Manufacturer	Model
Deere	6090H1550 also known as JD9P
Hatz	F Series
Hyundai	DX08
Komatsu	DBA127
Kubota	V5009

Major Manufacturers with Data Updates

- Caterpillar
- Cummins Engine Company
- Deere
- Deutz
- Fiat Powertrain
- Honda Motor Company
- Isuzu Motors
- Suzuki
- Tohatsu
- Yanmar Co. Ltd.



IV. Forecast Trends

Global

Overall Solid Growth Expected Through 2031



SUMMARY. Despite today's global uncertainties led by the wars in Ukraine and Iran and the chaotic US tariff policies, the global economy looks as though it will produce overall solid growth through 2031. The Medium and Heavy Vehicles and the Marine Propulsion Segments are the only segments expected to decline in both 2026 and 2031, but they are both likely to grow during the remaining years. The average market growth rate is at a solid +3.2% and the market is forecast to grow +42.150 million units by the end of the forecast period.

AGRICULTURAL. The Agricultural sector is showing consistent signs of good growth in the range of +1.2% to +3.1%. The average growth rate remains at +2.4% and the market is expected to grow by +548,000 units by the end of the forecast period. Most of this growth comes from China (averaging +3.2%) and India (averaging +1.6%) with Japan showing 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 +5.3% in 2026 and then continue growing well until an expected recession in 2030 (with -1.7%). The average growth rate remains at +2.3% and the market is seen growing by +128,000 units by the end of the forecast period. Of the major countries, China adds most of the volume with +70k by the forecast end.

INDUSTRIAL. Industrial is expected to remain positive throughout most of the forecast period with average growth rate remaining at a solid +3.1% and the market grows by +929k by the end of the forecast period. Of the

Despite today's global uncertainties led by the wars in Ukraine and Iran and the chaotic US tariff policies, the global economy looks as though it will produce overall solid growth through 2031.

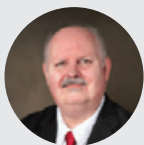
big two manufacturing countries, only China continues positive growth throughout the period, averaging +4.8%, while the USA declines in 2030 but still averages +2.1%. The next fastest growing major region is India with average growth of +5.6%.

LAWN & GARDEN. Lawn & Garden remains positive in all forecast years except 2030 when it is expected to decline by -2.5%. The average growth rate remains at +2.3% and the market grows by +3,150,000 by the end of the forecast period. The USA is the largest producer for this sector with almost half 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 whole forecast period.

LIGHT COMMERCIAL VEHICLES. This segment is expected to remain positive throughout the forecast period with the average growth rate remaining at a good +2.8%. The market is expected to grow by +1,898,000 by the end of the forecast period. Of the top two countries (China and USA) China remains positive throughout the period and adds +570,000 units while the USA shows mixed growth/decline figures throughout most of the forecast and ends the forecast period with a decline of +217,000 units.

MARINE AUXILIARY/MARINE PROPULSION. After a difficult 2025, this segment is expected to grow throughout the remainder of the forecast period with

Author



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

Global: Positive Outlook for Most Segments

Continued from page 7

the average growth rate remaining at +1.8%, and the market growing by +75,000 by the end of the forecast period. Japan is the largest producer in this segment with over half the volume and is expected to grow by an average of +2.6% and add +56,000 units.

MEDIUM & HEAVY VEHICLES. This segment is expected to decline in 2026 and 2031 but grow for the remaining years. The average growth rate remains at +2.0% and the market is forecast to grow +477,000 by the end of the forecast period. None of the big three production countries remain positive throughout the period but China adds +277,000 with average growth rates of +1.8%.

PASSENGER CARS/MINIVANS & SUVs. Generally, 2025 is expected to remain a solid year for these segments with a growth averaging +3.3% (Minivans +5.5% and Passenger Cars at +2.3%) and the market grows by +13,252,000 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 and USA both averaging +4.9%.

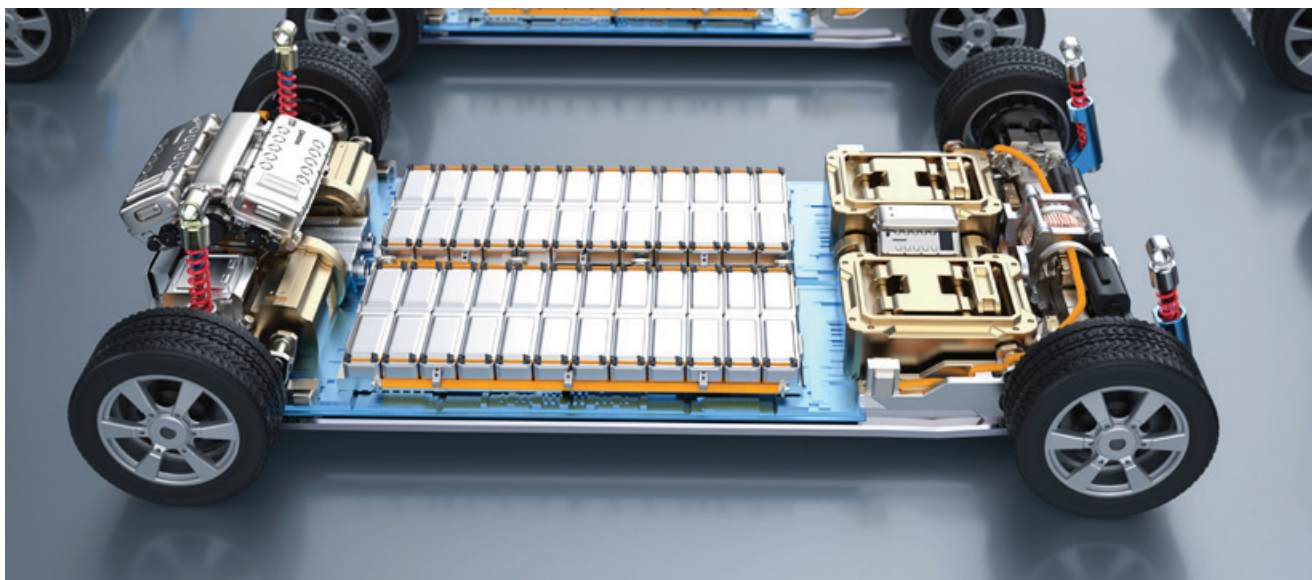
POWER GENERATION. Power generation is expected to continue to grow strongly during the whole of the forecast period with growth ranging from +2.0% to +4.4%. The average growth rate remains solid at +3.1%

and the market is expected to grow by +1,363,000 by the end of the forecast period. The top 2 power generation countries (China and United States) show mixed result with China averaging +4.4% and USA averaging -2.4%.

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 by +3.6% and adding 20,329,000 units by 2030. 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 who 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 are expected to grow at a rate between +4.8% and +8.9%, with an average growth rate of 7.4%. The segment is expected to add an extra 28,874,000 units by 2031. The Internal Combustion vehicles on the other hand are growing much slower with changes ranging from -1.2% to +1.7% and averaging +0.9%. **PSR**



North America

Economy Weakening and Growth Is Slowing

NA **SUMMARY.** The North America economy is showing signs of weakening, with slowing growth, persistent inflation, and a stagnant labor market. GDP growth slowed to 0.7% in Q4 2025. While equity markets remain near record highs, consumer sentiment is low due to high costs for essentials.

Real GDP grew at a meager 0.7% annual rate in Q4 2025, decreasing significantly from previous, strong quarters. The labor market is slowing, with the unemployment rate at 4.3% in March 2026, a slight increase from late levels of 2025. Inflation remains stubborn, increasing 0.9% in March of 2026, largely due to soaring energy costs. Rising government debt, policy uncertainties, and high costs for food and housing are growing concerns for consumers. Some observers estimate that more than 70% of the tariff costs have been passed onto customers/consumers.

The Federal Reserve has maintained interest rates, citing concerns over rising inflation and trade policy uncertainties. Manufacturing, however, in some segments, shows strength.

The ongoing war with Iran has really pushed up energy costs and has driven US gasoline prices to over \$4 per gallon. Wall street economists have raised recession odds for 2026 to between 30-40%.

North American total production, when including all market segments together, is estimating to dip -0.4% in 2026 over 2025. Production in 2026 for many of market segments, including agricultural, marine auxiliary, marine propulsion, minivans & SUVs, passenger vehicles, and power generation will decline this year.

Real GDP grew at a meager 0.7% annual rate in Q4 2025, decreasing significantly from previous, strong quarters.

However, some segments are showing growth. These include construction, industrial, lawn & garden, and medium & heavy vehicles. The forecast for 2027 is 3.5% overall for market growth.

AGRICULTURAL. Agricultural machinery production in North America is estimated to be down -5.2% for 2026. Agricultural machinery production in the U.S. is expected to face continued headwinds in 2026. Factors in this scenario include weakened farm income and financial strains. High interest rates and financing costs are not helping either.

Dealer lots, particularly for high-horsepower equipment, remain filled with inventory that is moving slowly. The high-interest environment makes it more expensive for dealers to carry this inventory, discouraging them from ordering new products from manufacturers.

Renewed trade tensions and tariffs on materials such as steel, aluminum, and components—ranging from 10% to 25%—have increased manufacturing costs. These costs are being passed down to farmers, who are already dealing with high input costs for fertilizer and fuel. A lack of confidence in the agricultural economy and uncertainty surrounding future farm policy, including the absence of a new, long-term Farm Bill, has encouraged farmers to “cut costs to the bone” and defer major purchases.

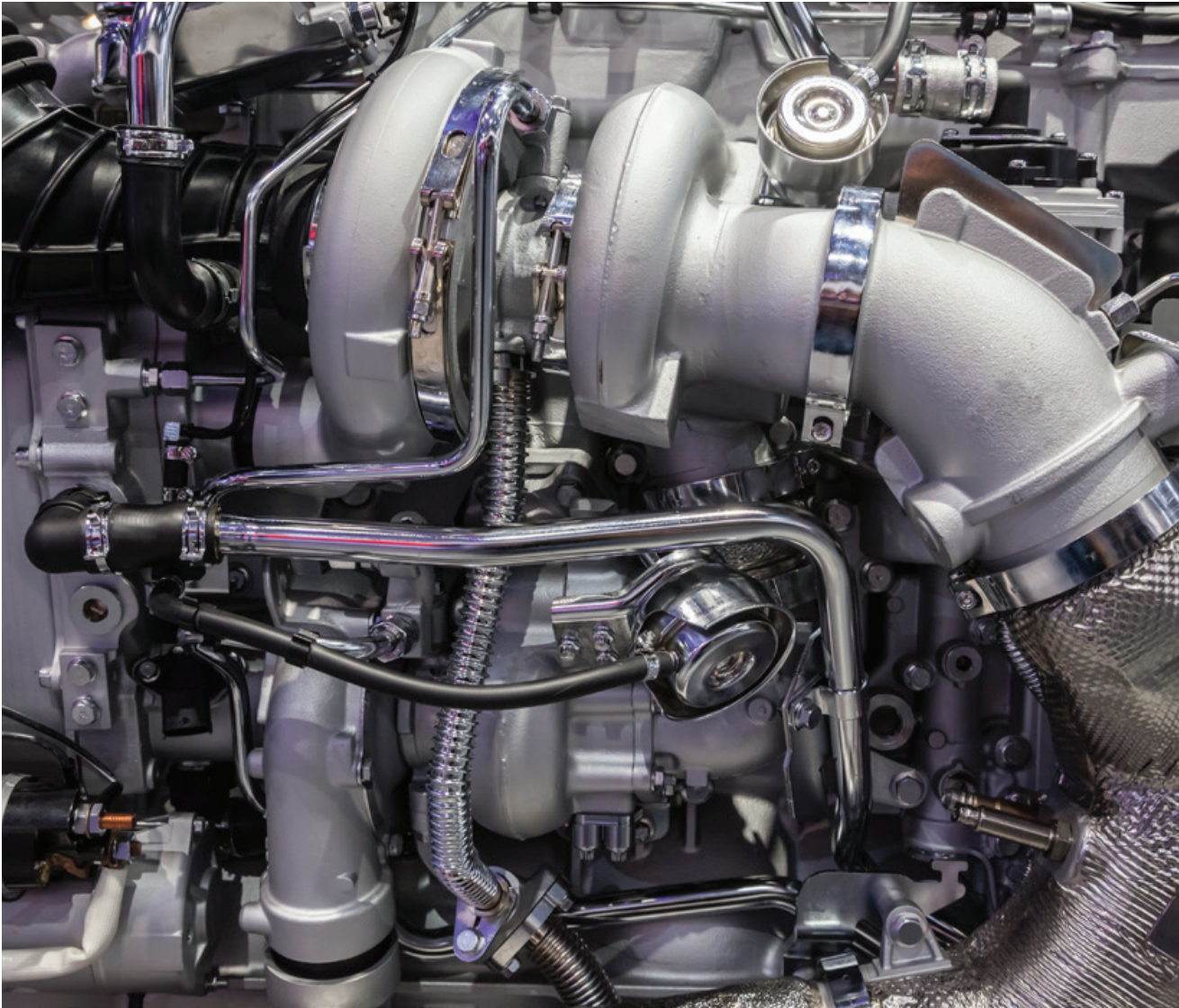
The market is expected to stabilize and eventually grow by 2027, as technology adoption increases and economic circumstances improve. The current estimate is about 2%.

CONSTRUCTION. Production of construction equipment in North America is expected to grow by almost 1% this

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North America: Economy Weakening and Growth Is Slowing

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year. Construction equipment production is expected to rise in 2026, driven by a surge in demand for data centers, and AI-related infrastructure.

Federal and state funding for large-scale infrastructure projects and a shift in domestic manufacturing is also fueling growth. Due to high purchase prices and longer, lead times, there is a surge in demand for rental and used equipment, encouraging manufacturers to maintain production to feed these markets.

MEDIUM & HEAVY VEHICLES. Medium and heavy truck production in North America is expected to increase by 9.4% this year compared with low 2025 production. While class 8 truck production is expected to increase by 11.3% this year as order rates for class 8 trucks improved strongly from December – February.

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. However, a protracted conflict in the Middle East would put significant downside pressure on truck demand primarily due to higher fuel cost, supply chain disruptions and an overall concern about the state of the economy moving forward throughout the year. **PSR**

Europe

Geopolitical Factors Affect Europe Economy

E **SUMMARY.** As of the time of writing this article, Mar. 23, 2026, the European industrial core is grappling with a landscape defined by “Strategic Solitude.” Geopolitical tensions have ceased to be temporary disruptions and have instead become the permanent architecture of the wider European economy.

Our baseline forecast for 2026 initially projected a mild growth of 2–3% in production volumes across the machinery spectrum—from light automotive to heavy industrial equipment and gen-sets. This optimism was reinforced by a robust end to 2025 and a surge in January–February 2026 registrations. However, this recovery now stands on a knife-edge following the catastrophic escalation of the war in Iran.

The landscape is dominated by two overlapping conflicts. In the East, the war in Ukraine remains a “frozen” but high-intensity struggle, with European capitals increasingly anxious that a “New Yalta” is being negotiated between Washington and Moscow. Simultaneously, the direct confrontation between Israel and Iran has evolved into a prolonged regional war.

The consequence for many regions, including Europe, is something we can call “Energy Tax”: With the Strait of Hormuz effectively restricted, Brent crude has surged past \$110 per barrel. For European machinery, this acts as a direct tax on production, spiking the cost of petrochemical feedstocks and smelting.

Should the Iran war persist through 2026, the baseline growth will likely flip into a -2% to -4% contraction. The diversion of “Dual-Use” machinery components to defense needs, combined with hyper-inflation in

logistics, would effectively stall the civil industrial recovery.

Should the Iran war persist through 2026, the baseline growth will likely flip into a -2% to -4% contraction.

The return of Donald Trump has replaced traditional diplomacy with a predatory trade doctrine. While a headline deal in late 2025 ostensibly capped most EU export tariffs at 15%, the strategic reality is far more punishing. Following the February 2026 US Supreme Court ruling that limited previous executive authorities, the US administration pivoted to Section 122 and Section 301 investigations to reconstruct its protectionist wall.

The most critical blow remains the 50% “Metal Content” Surcharge. By shifting the tax from the finished machine to its structural raw inputs, the US has created a bureaucratic nightmare for European exporters:

- **The Effective Rate:** For “metal-dense” equipment like excavators or heavy tractors, where steel and aluminum account for the bulk of the value, the effective duty is pushed toward 35–42%, far exceeding the 15% baseline.
- **Forced Relocation:** This surcharge is not merely a tax; it is a strategic lever designed to force the onshoring of production. Legacy giants like Volvo CE and Liebherr are being pushed to move primary assembly to US soil to bypass the “Proof of Smelt” audits, threatening to hollow out the European manufacturing base.

In response to this deteriorating security and trade environment, European institutions have launched an unprecedented “Fortress Europe” industrial pivot. The “ReArm Europe Plan” and the Readiness 2030 White Paper (March 2025) represent a tectonic shift toward strategic autonomy.

Author



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Emiliano Marzoli and Natasa Mulahalilovic contributed to this report.

Europe: **Geopolitical Factors Affect Europe Economy**

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Supported by the \$172.5 billion (€150 billion) SAFE Instrument, the EU is now aggressively funding a unified defense industrial base. This is no longer just about military hardware; it is a revitalization of the entire machinery sector, as the lines between civil and defense production blur.

Economically, the continent shows signs of a fragile, “two-speed” stabilization. While 2024 ended poorly, the latter half of 2025 saw a timid recovery in manufacturing and infrastructure. However, the trade wars mean inflation remains stubbornly high, trending closer to 3% as the “Green Transformation” and rearmament efforts compete for resources.

The UK economy mirrors this modest recovery, with 2025 GDP growth at 0.8% and a projected 1.6% for 2026. While the UK benefited from a separate “Economic Prosperity Deal” with Washington in June, it remains vulnerable to the broader global instability and high input costs.

Germany remains the critical variable. The federal government elected in February 2025 has moved to dismantle the “debt brake,” launching a massive \$575 billion (€500 billion) investment fund for green infrastructure. This, combined with a gradual reduction of the corporate tax rate to 10% by 2032, is designed to spark a domestic industrial renaissance.

However, as we look toward 2026, these “timidly positive” forecasts face formidable headwinds. The confluence of a “frozen” Ukraine, an active war in the Middle East, and a predatory US trade policy creates a high-stakes environment where European industrial survival depends on the speed of its pivot toward self-reliance.

AGRICULTURAL. The cautious optimism for the second part of 2025 did not become reality. Instead, we have seen close to a two-digit decline in production of agriculture machinery. We have seen some recovery in this segment in this first quarter. 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

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Europe: **Geopolitical Factors Affect Europe Economy**

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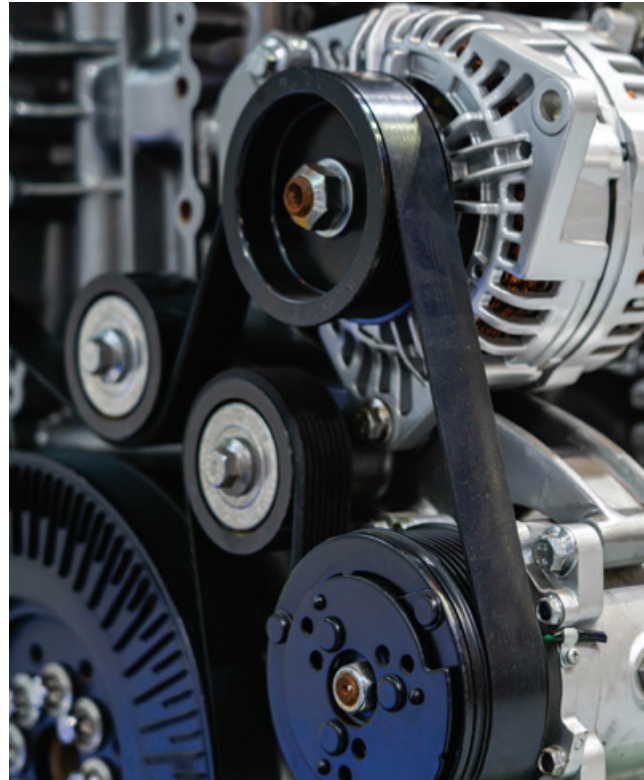
year. Instead, we are now having to deal with all these moving parts and the impact of oil price increases, with heavy uncertainty.

According to the CEMA (European Agricultural Machinery Association) barometer, we are starting to see some decline in the responses from key industry players. They are saying that the next six months will be a tougher business climate than the previous six months that was already declining. This could still be reverted and avoided depending on the outcome but there are still many players expressing some concerns, insecurity, uncertainties over tariffs, and socio-political tensions.

CONSTRUCTION. This segment is following a trend similar to what we are seeing in the Agricultural Segment; we see a downward trend although to a lesser extent. We expect the mirroring of trends will continue as we were expecting some recovery early to mid-2026. The recovery was going to be fuelled by government expenditures and higher business activity, especially in the residential and private sectors, reported by CECE (Committee for European Construction Equipment) and other trade associations.

However, we are probably going to see a slowdown in the very short term. There was already a long list of uncertainties and potential risks that could negatively impact the recovery. Unfortunately, these have increased in numbers and are more present than ever before. On top of the socio-economic global situation, possible labour shortages needed to fill so many incentivised positions.

The same risks are applicable to Construction as to the other segments: tariffs being tricky to navigate depending on steel and aluminum content of the machinery as the US was the primary export country putting around 2.8 Billion Euros at risk from EU manufacturers. Additionally, the operational and compliance burden of the new taxes is really taking its toll on the few companies that have tried to continue to export to the US. Companies have reported that the extra costs are already expressed in millions of Euros.



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 therefore isn't affected much 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. This segment has been experiencing similar trends to both the Agricultural and Construction segments on a more subdued level. Although it is also going to be a negative year overall, it won't be as affected as much as Ag and Construction. Although in 2020 this segment was boosted by increased online ordering, this time will be different as these

Europe: **Geopolitical Factors Affect Europe Economy**

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uncertainties and tariffs probably will not spare any of the applications within this segment. As a result, we are expecting to see a negative correlation for 2026, at least as long as these uncertainties are prevalent.

LIGHT COMMERCIAL VEHICLES. The Light Commercial Vehicle (LCV) segment is currently the “bright spot” in European production, following a difficult 2025 where EU registrations fell by 8.8% to roughly 1.4 million units. This slump was a result of SME “investment inertia” caused by high interest rates and uncertainty over Euro 7 implementation.

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.

PLEASURE BOATS. The ongoing conflict in the Middle East is expected to create continued pressure on the global pleasure boating industry in the coming months. Rising energy prices, logistical disruptions, and increased insurance costs are likely to affect boat manufacturers and consumers.

In the short term (2026–2027), higher oil and gas prices will increase production and transportation costs across the boating supply chain. Essential materials used in boat construction—such as aluminum, fiberglass, and composite resins—require significant amounts of energy for production. As a result, boat manufacturers may face higher material costs and reduced margins. At the same time, disruptions in key maritime routes could lead to delays in the delivery of components, engines, and finished boats.

The Light Commercial Vehicle (LCV) segment is currently the “bright spot” in European production, following a difficult 2025 where EU registrations fell by 8.8% to roughly 1.4 million units.

Supply chain and logistics risks are also rising. Heightened geopolitical tensions in the Persian Gulf are pushing maritime insurance premiums upward. Shipping companies may reroute vessels or increase freight rates, which could slow global trade and raise logistics costs. These factors may result in longer production timelines and higher final prices for boats.

If operating costs for boat owners continue to rise—particularly due to higher fuel prices—demand for certain segments, such as medium-sized motorboats and yachts powered by fossil-fuel propulsion technologies, may soften. However, demand for smaller boats, fuel-efficient models, and regional boating tourism could remain more resilient.

Over the medium term, the industry may adapt by diversifying supply chains, increasing regional sourcing of materials, and investing in more energy-efficient production methods. Manufacturers may also focus more strongly on sustainable propulsion technologies and hybrid systems in order to reduce dependence on fossil fuels.

Overall, the recreational boating industry is likely to experience higher costs and logistical uncertainty in the near future. While large manufacturers may absorb part

Europe: **Geopolitical Factors Affect Europe Economy**

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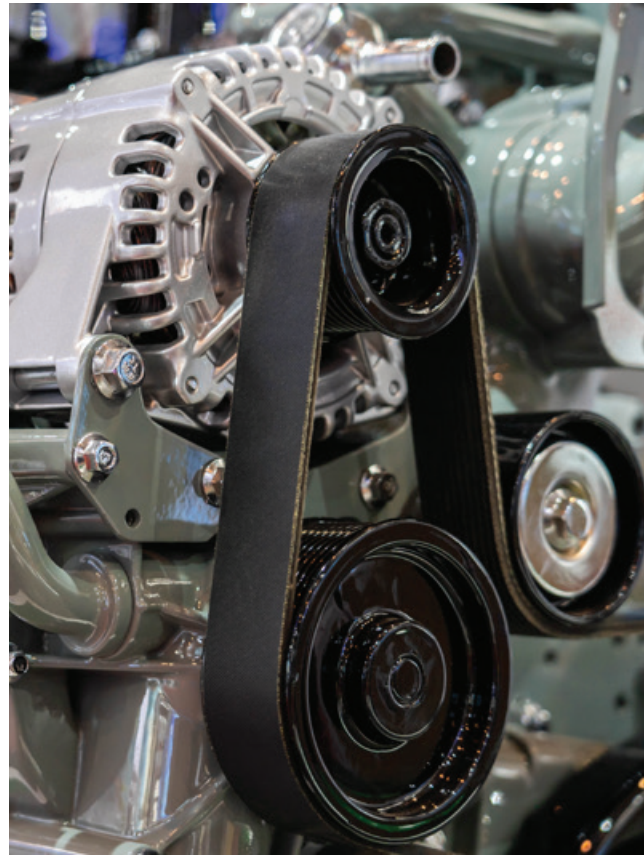
of these pressures, the sector may see gradual price increases and a strategic shift toward more resilient supply chains and energy-efficient boat designs.

The year 2026 will likely be particularly challenging for European pleasure boat manufacturers, with production volumes potentially decreasing by 5–10% compared to 2025, depending on the manufacturer's profile. At the same time, electric and hybrid boat production is expected to gain popularity, with demand increasing by 10–15% compared to 2025.

PASSENGER CARS, MINIVANS & SUVs. In a historic pivot on Dec. 17, 2025, the European Commission officially scrapped the requirement for a 100% reduction in CO2 emissions from new cars by 2035. This de facto ban on the internal combustion engine (ICE) has been replaced by a 90% reduction target. This 10% “survival window” is a direct concession to the reality that the European passenger car industry is in a state of managed decline. By allowing a mix of hybrids, e-fuels, and high-efficiency ICE vehicles to remain on the market past 2035, the EU is attempting to prevent the total collapse of its domestic manufacturing base, which has seen production fall by an alarming CAGR of -8% since 2019.

The human and physical cost of the industry became visible in December 2025, when Volkswagen closed its Dresden plant, marking the first factory shutdown in the company's 88-year history in Germany. This was mirrored by Stellantis, which implemented rolling three-week furloughs across six European plants in late 2025 to manage a glut of unsold inventory.

The production data for 2025 confirms the severity of this contraction. Total EU car production is expected to end the year at approximately 10.8 million units, a 2.6% decline from the 11.1 million units produced in 2024. While SUVs continue to dominate the market with a 48% share, even this once-bulletproof segment has plateaued for the first time in two decades. Looking ahead to 2026, we expect a timid recovery of roughly 1.9% to 2% in volume (reaching ~11 million units), but this growth is artificially propped up by the “90%



target” pivot. This forecast remains fragile; if the US implements further threatened duties on “metal content” (as seen in the machinery sector), 2026 could see another year of negative growth, keeping Europe nearly 20% below pre-pandemic levels.

While new CO2 emission rules legally entered into force in January 2025, the “billions in fines” once feared by OEMs have been mitigated by a May 2025 amendment allowing for three-year averaging (2025–2027). This “flexibility” essentially allows manufacturers to over-emit in 2025 and compensate in later years, effectively delaying the impact of the 93.6 g/km target.

Simultaneously, the Euro 7 standards have finalized their transition into a “follower” position. While the first implementing regulations were published in September 2025, they focus more on tire and brake wear rather than stricter tailpipe NOx limits, which remain untouched. By postponing significant engine changes until 2029, the EU has prioritized the short-term survival of the ICE-heavy German and Italian manufacturers over global environmental leadership.

Europe: **Geopolitical Factors Affect Europe Economy**

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The “Sino-European” Transformation. The threat from China has moved from the sea to the soil. BYD’s Szeged (Hungary) plant began trial production in February 2026, with serial production of the “Dolphin Surf” slated for Q2 2026. By producing in the EU, Chinese brands are bypassing the 17% additional anti-subsidy duties.

In response, Volkswagen and Stellantis issued a rare joint open letter in February 2026, calling for a “Made in Europe” industrial policy. They are lobbying for purchase subsidies that favor not just local assembly, but locally manufactured battery cells and powertrains—a move aimed squarely at neutralizing the “Trojan Horse” plants in Hungary and Turkey.

POWER GENERATION. Throughout 2024 and 2025, the demand and production of Gen-Sets have stabilized and are expected to increase slightly through the next three years. However, due to the recent Iran conflict and the resulting higher oil prices, the industry’s long-term outlook faces increased uncertainty and instability.

Other drivers of change in the Gen-Set industry might come from a sudden end to the Ukraine-Russia war, the start of the country’s rebuilding, and from changes in EU industrial and energy policies that tend to have a globalized effect (“Brussels Effect”).

In the short term, the market view is shaped by the ongoing war in Ukraine and the massive reconstruction effort that will follow once hostilities cease. During the conflict, emergency and mobile Gen-Sets are critical to keep basic services, hospitals and key infrastructure running, which supports steady demand for smaller and medium-sized units. Once large-scale rebuilding begins, this temporary demand will shift toward higher-capacity, more permanent installations, as Ukraine needs reliable backup and flexible generation to support a modernised grid and new industrial projects. This sequence, emergency supply today, reconstruction tomorrow, suggests a sustained, if changing, source of demand for Gen-Set manufacturers over the next few years.

At the same time, the EU’s environmental, industrial and energy initiatives, such as the Clean Industrial

Deal and the 2026 Energy Work Programme, reinforce a policy environment that steadily favours low-carbon, efficient power solutions, which directly affects the future role of Gen-Sets.

Throughout 2024 and 2025, the demand and production of Gen-Sets have stabilized and are expected to increase slightly through the next three years.

The Work Programme confirms energy as a continued priority for 2026 and builds on the Clean Industrial Deal and Affordable Energy Action Plan, signalling forthcoming updates to key laws such as the Renewable Energy and Energy Efficiency Directives. In parallel, the EU Taxonomy and its sustainable finance updates define which generation activities qualify as environmentally sustainable, and the EU’s 2040 climate target sets tighter greenhouse gas thresholds for gas-fired electricity, making it harder for high-emission fossil-based backup to access green finance.

Together, these instruments do not ban Gen-Sets but push the market away from conventional diesel towards HVO-ready, gas- or hydrogen-capable units and hybrid generator-battery systems that can better fit within a decarbonising, taxonomy-aligned investment landscape.

As mentioned, a major factor in the unpredictability and heightened uncertainty in oil prices and supply is the recent conflict in Iran, with the country attacking other Middle East countries that are vital for oil production, such as Qatar, Kuwait, Saudi Arabia and the United Arab Emirates. Since the start of the conflict in February 2026, oil production in these countries has significantly decreased or stopped entirely, making exports more difficult as Iran has blocked the Strait of Hormuz. Because many Gen-Sets run on diesel, which is derived from oil, a shortage affects the industry through general price increases, potential decreases in usage to conserve fuel, and an overall drop in demand.

Looking further ahead, an expected global economic downturn around 2030 will spill over into the Gen-Set market with a lead time of roughly one year. Because

Europe: Geopolitical Factors Affect Europe Economy

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Power Gen-Sets are relatively easy to assemble, face lower market-entry barriers, and serve highly cyclical end-markets such as construction and manufacturing, the segment tends to react quickly to changes in business confidence and investment. This would mark the turning point after a period of moderate growth, with more resilient demand concentrated in higher-value niches such as data centers, critical infrastructure and specialised low-carbon solutions.

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 bifurcating into two distinct potential futures, complicated by a fresh geopolitical shock and an imminent policy “cliff edge.”

We forecast a 2.9% increase in production volumes for 2026, confirmed by a robust start to the year. Registration data for January and February 2026 shows a double-digit recovery across major markets, with the UK up 15.5%, Spain up 18.0%, and France up 14.7%. This “bounce back” is partly a technical correction against the exceptionally weak start of 2025, but it is also fueled by “Urban Mobility Defense.”

As cities implement stricter Sustainable Urban Mobility Plans, manufacturers are ramping up production of high-margin, Euro 5+ compliant models and “Smart/Connected” bikes to meet renewed consumer interest in space-efficient transport. This scenario assumes that European plants stabilize their supply chains after the -12.7% collapse of 2025, successfully replenishing dealer inventories that were flushed during the KTM-Bajaj restructuring.

Conversely, a scenario where production volumes decrease by a further 5% to 8% remains a looming threat. This case is built on the “Trade War” and the predatory nature of the US 50% “Metal Content” Surcharge. If this



duty remains unresolved, the cost of exporting a steel-dense motorcycle to the US—a primary export market—becomes economically impossible. In this environment, European OEMs may follow the lead of Harley-Davidson and move EU-bound production to Southeast Asia, Turkey, or India to bypass reciprocal tariffs.

Compounding this is the “Black Swan” of the prolonged Iran War. With the Strait of Hormuz effectively closed, energy costs have spiked, with Brent crude hovering above \$110 per barrel. For manufacturers, this acts as an “invisible tax”, and for consumers, it could result in an abrupt halt in consumption.

RAILWAY. Demand in this segment is less affected by current market trends as contracts are usually reach out several years. We are seeing a slow but steady increase continuing into 2032. As a result, we are seeing a high percentage of contracts being fulfilled, although the numbers are still relatively low compared to other segments. Incentives are still very present for the push to reduce CO2 emissions for 2030 for many member states and outside of Europe demand. **PSR**

China

2026 GDP Growth Projected at 4.3%



SUMMARY. China's GDP growth in 2026 is projected at approximately 4.3%, within a range of 4.2%-4.5%. On the investment front, while real estate continues to drag, equipment purchase and high-tech manufacturing investment maintain double-digit growth, with industrial upgrading and infrastructure filling gaps partially offsetting downward pressure.

Overall investment growth is expected to recover to around 2%. Consumption is witnessing moderate recovery; retail sales grew 3.7% in 2025, and employment improvement and subsidy policies may push 2026 growth to 4%-5%, though weak income expectations constrain rebound momentum, and consumption's GDP contribution is likely to hold at about 3 percentage points, still below pre-pandemic levels.

Inflation remains low, with CPI at zero in 2025 and expected to rise moderately to around 1% in 2026; core CPI should stay within 1.2%-1.5%, as deflation pressures ease marginally without fundamental change. The external environment is complex but manageable: despite U.S.-China tariffs at 30% and pressured exports to America, market diversification and transshipment trade helped exports grow 5.5% in 2025 with a record \$1.19 trillion trade surplus.

2026 export growth may slow to 3%-4% but resilience remains, while Middle East conflicts have limited impact on China as a net energy importer. Policy support is strengthening, with 2025 fiscal stimulus at roughly 1.6% of GDP expected to expand in 2026. Combining World Bank (4.0%) and IMF (4.5%) forecasts, the baseline scenario suggests 4.2%-4.5% growth—approaching 5% if new U.S.-China agreements or stronger consumption

stimulus materialize, or dipping to 3.5%-4.0% should trade wars escalate or global demand contract.

Key risks include unpredictable U.S. tariff policies, spreading global protectionism, and Middle East conflict escalation.

On the investment front, while real estate continues to drag, equipment purchase and high-tech manufacturing investment maintain double-digit growth, with industrial upgrading and infrastructure filling gaps partially offsetting downward pressure.

AGRICULTURAL. China's agricultural machinery market in 2026 is undergoing a structural transformation driven by dual forces of policy precision guidance and industrial upgrading. The agricultural machinery market will continue to benefit from the resonance of policy dividends and demand upgrades.

The subsidy policy will continue the 2024-2026 three-year framework, focusing on "premium-machine premium-subsidy" to promote the penetration of high-end agricultural machinery. Under the dual pressures of emission upgrades and electrification, traditional fuel-powered agricultural machinery will continue to decline, and the proportion of new-energy products is expected to exceed 15%.

The growing trend of land-scale management and labor force reduction is expected to continuously release demand for high-horsepower, intelligent equipment, and the export market will maintain strong growth. However, the industry needs to be vigilant against risks such as demand being pulled forward, inventory buildup, and trade barriers in emerging markets.

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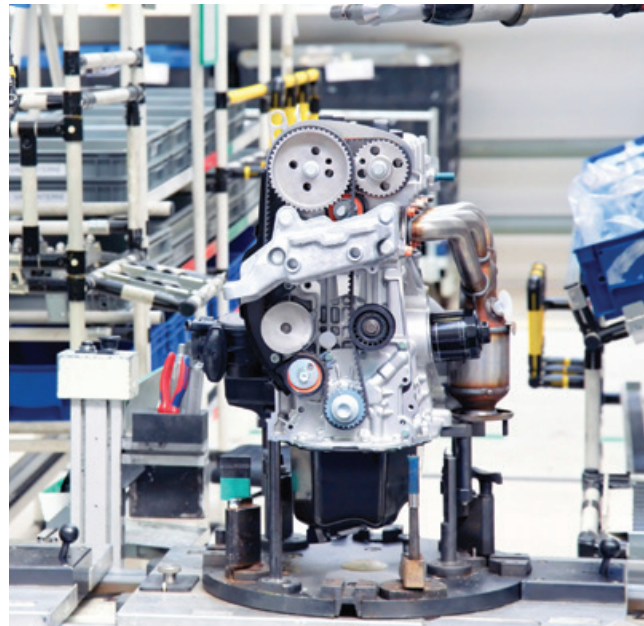
The focus of competition has shifted from price wars to a comprehensive contest of technological advancement and after-sales service systems; electrification and intelligence will become the key tracks for enterprises to build differentiated advantages.

Subsidy Policy: China's agricultural machinery subsidy policy has shifted from "universal" to "precision-guided," with simultaneous optimization of fund scale and structure: The central government has allocated \$3.84 billion USD (26.5 billion RMB) for purchase and application subsidies, an 8% year-over-year increase, and has earmarked an additional \$218 million USD (1.5 billion RMB) for scrappage and replacement. It focuses on supporting high-specification models such as power-shift, GNSS-guided, and new-energy tractors, and through the "premium-machine premium-subsidy" mechanism, the subsidy cap has been raised to 55% of the sale price.

Emission Upgrade: Several emission upgrade policies are being advanced. The comprehensive implementation of the National IV emission standard has forced enterprises to accelerate technological iteration, promoting the transformation of diesel engines toward low-emission, high-efficiency directions, while also creating market space for new-energy agricultural machinery.

Market Demand: The land-scale management rate has exceeded 35%, and the continuous reduction of agricultural labor force has released rigid demand for high-horsepower, multi-functional agricultural machinery, driving domestic sales of tractors to 620,000 units (+7%) and harvesters to 200,000 units (+11%). Export value has surpassed \$10.46 billion USD (72 billion RMB) with a growth rate of over 12%, with ASEAN, Africa, and Central Asia accounting for 68% of the incremental volume.

Electrification: The electrification trend is reshaping the competitive landscape of the industry, becoming the core engine for the product structure's evolution toward high-end and intelligent. New-energy tractors, electric plant-protection drones, and other products, with their zero-emission and low-noise characteristics, are rapidly penetrating scenarios such as orchards and



facility agriculture, enjoying an additional 25% subsidy incentive, driving their annual growth rate to exceed 50%. Domestic brands have achieved breakthroughs in replacing foreign monopolies in sub-sectors such as CVT continuously variable transmission tractors and electric harvesters through cost advantages and technological innovation. Sales of 200-horsepower power-shift and CVT tractors have doubled again, with their market share exceeding 15% for the first time. Products under the "large-medium-small intelligent line," such as driverless tractors and compact machines for hilly terrain, are rising simultaneously, accelerating the industry's green and intelligent transformation.

CONSTRUCTION. In 2026, China's construction machinery market is expected to demonstrate a development trend of "steady progress with improved quality and efficiency" under the dual influence of policy-driven initiatives and demand upgrades. The market scale is projected to approach \$159.83 billion USD (1.1 trillion RMB), with intelligent, digitalization technologies (such as 5G and AI-driven unmanned equipment), and new energy transformation serving as core drivers, propelling the product structure toward high-end and large-scale upgrades.

Meanwhile, the Belt and Road Initiative continues to accelerate the export of high-value-added equipment, gradually advancing the industry into a new stage characterized by green low-carbon practices and

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technological leadership. The recovery of global construction activities and growth in emerging market demand will further expand the market scale, with industry concentration rising significantly.

Domestic Market. Domestic market growth is primarily driven by policy support and equipment renewal demand. The continuation of ultra-long-term special treasury bonds and local government special-purpose bonds is expected to accelerate infrastructure investment, facilitating major projects such as the Yarlung Zangbo River hydropower plant and western desert photovoltaic bases, thereby boosting sales of electric loaders and mini excavators.

The equipment renewal policy may release latent demand, with Stage III equipment entering its replacement window. Scrapage subsidies and low-interest loans are expected to push the renewal share of domestic sales to over 50%, and the penetration rate of electric/5G autonomous models is projected to jump to 30%.

Export Market. The overseas export market has shifted from “commodity overflow” to “value enhancement.” Export volume is expected to surpass \$65 billion USD, with emerging markets in Africa, Latin America and Central Asia growing by over 15%. Chinese equipment continues to gain market share through price advantages (15-20% lower than competitors) and delivery efficiency (30 days vs. 90 days for European OEMs).

Electric loaders and mining trucks are performing excellently in field trials in Chile and Australia, reducing diesel costs by 60% and meeting environmental standards without premium pricing, thereby driving electric/hybrid equipment to account for over 35% of export value.

Regional strategies are differentiated: Africa and Latin America expand through EPC financing and local CKD factories; Europe and North America face carbon regulation pressures, with electric equipment orders surging; CKD nodes in Mexico, Poland, and Indonesia, along with 24/7 cloud parts centers, shorten delivery times to seven days and keep foreign exchange risks under control within regional balance sheets. Export compound growth is projected at 12-15%, with overseas

revenue share rising from 40% to 48%, providing natural hedging for the industry.

Technological Upgrading. Equipment using intelligent technology and new energy power are reshaping industry competition patterns. 5G remote-controlled excavators and unmanned mining truck fleets have achieved commercial-scale application, improving operational efficiency by over 30%.

The recovery of global construction activities and growth in emerging market demand will further expand the market scale, with industry concentration rising significantly.

Hydrogen fuel cell stackers and pure electric aerial work platforms are rapidly penetrating port and municipal scenarios. Domestic enterprises have broken foreign monopolies in core components such as high-pressure hydraulic systems and intelligent control systems, with localization rates exceeding 85%. The industry concentration (CR5) is expected to approach 80%, with leading enterprises establishing differentiated advantages through full-lifecycle service solutions and digital operation platforms.

Overall Market Outlook The domestic market will maintain steady growth supported by special bond issues for infrastructure and the equipment replacement wave triggered by emission standard upgrades. The export market faces pressure from global economic fragmentation but benefits from cost-performance advantages and localized service networks.

In 2026, the industry will fully enter a new development cycle characterized by “high-end products, intelligent operations, green energy, and global services,” with technological iteration speed and after-sales response capability becoming core competitive dimensions.

INDUSTRIAL. China’s forklift market is expected to reach a scale of \$20.41\$–\$23.33\$ billion USD (RMB 140–160 billion) in 2026, representing a year-over-year growth of 18–22%.

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The trend toward electrification is accelerating; the market share of electric forklifts is projected to exceed 75%, with a lithium-ion battery penetration rate surpassing 55%. Hydrogen fuel cell forklifts will enter the small-batch commercialization phase, forming a preliminary dual-drive pattern of “lithium-ion + hydrogen” in specific scenarios such as heavy-load logistics and cold-chain warehousing.

Intelligent upgrades also are accelerating; the proportion of intelligent forklifts (including AGVs and unmanned technology) is expected to rise to 32%, with technological breakthroughs focused on high-precision navigation, multi-machine collaborative scheduling, and 5G+ industrial internet deep integration.

The export market is performing strongly: export value is projected to reach 68 billion USD, with a year-over-year growth of 15%, with emerging markets such as Southeast Asia, Africa and Latin America showing prominent growth exceeding 18%.

China’s forklift industry is undergoing an accelerated transformation toward electrification and intelligent applications. On the electrification front, electric forklifts are projected to capture over 75% of total sales by 2026, with lithium-ion battery forklifts firmly established as the market mainstream, thanks to their superior energy density, extended service life, and faster charging capabilities. The cost-performance ratio of lithium battery systems has improved by 20% compared to 2024, driving penetration in mid-low tonnage segments to exceed 70%. Concurrently, hydrogen fuel cell forklifts are expected to enter the commercial pilot phase in 2026, with demonstration operations launched in ports, airports and large distribution centers, forming a “lithium battery + hydrogen energy” complementary market landscape in heavy-load and continuous-operation scenarios.

In terms of intelligent operations, fueled by the rapid expansion of smart warehousing systems and the surge in e-commerce logistics automation, market demand for Automated Guided Vehicles (AGVs) and unmanned forklifts continues to surge.

Unmanned forklift sales have maintained robust growth exceeding 45% annually, with market size expected

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to surpass \$2.19 billion USD (15 billion RMB). Through the deep integration of AI, IoT, digital twin and 5G technologies, capabilities such as intelligent dispatching, remote monitoring, predictive maintenance and autonomous obstacle avoidance are being realized, comprehensively addressing the automated operational requirements of smart warehousing, unmanned factories and dark warehouse scenarios. The localization rate of core components such as laser radars and high-precision sensors has exceeded 75%, significantly reducing intelligent forklift costs.

China's forklift export market continues to show strong momentum, with export value projected to reach US\$ 68 billion in 2026, up 15% year-over-year. Growth is particularly robust in emerging markets such as Southeast Asia, Africa and Latin America, with expansion rates anticipated exceeding 18%.

Regional strategies are precisely targeted. Southeast Asia is benefiting from manufacturing relocation and warehouse automation upgrades, with electric forklift demand surging 25%; Africa and Latin America are achieving rapid scale-up through EPC financing, mining equipment bundling sales and local CKD assembly plants; Europe and North America are experiencing surging electric equipment orders driven by carbon border taxes and zero-emission warehouse regulations, with Chinese brands' market share in the electric segment approaching 35%.

While Mexico, Poland, Indonesia and Vietnam have leveraged CKD hubs, regional spare parts centers and localized service teams to compress delivery cycles to 5-7 days, enhancing supply chain efficiency while keeping foreign exchange risks manageable through regional currency settlement. The average export unit price has risen by 12%, reflecting the shift toward high-value electric and intelligent products.

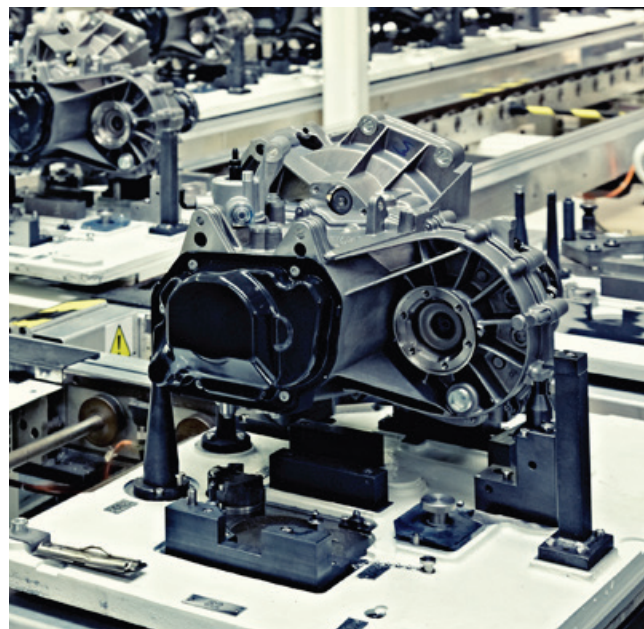
LAWN AND GARDEN. China's gardening machinery market in 2026 presents a three-dimensional landscape of "domestic demand upgrade + export differentiation + technological iteration." The domestic market, driven by an urbanization rate exceeding 71% and upgraded gardening consumption, sees annual demand growth

of over 10% for products like robotic lawnmowers, lithium battery hedge trimmers and intelligent irrigation systems, with smart connected devices and cordless platforms becoming mainstream trends.

The export market shows significant differentiation: European and American markets have seen electric product share break through 60% under stringent carbon regulation and battery energy storage cost reduction, while emerging markets such as Southeast Asia, the Middle East and Latin America are accelerating electrification transition with penetration expected to exceed 35% driven by photovoltaic-energy storage integration and environmental policy tightening.

Industry technology is shifting from fuel power to high-efficiency brushless motors, solid-state batteries and intelligent IoT ecosystems, with domestic companies leveraging their lithium battery production capacity advantages (accounting for over 75% of the global total) and vertical supply chain integration to break the high-end monopoly of European and American brands in the professional-grade segment.

The 2026 market forecast indicates that electrification dividends will continue to be released, with the electric share in European and American markets steadily rising above 65% and the electrification process in emerging markets accelerating to 40% penetration; intelligent product penetration will further increase, with AIoT technology, autonomous navigation and voice control



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becoming standard configurations, driving the smart gardening equipment market to surpass 25 billion RMB.

Export scale will continue to expand with value exceeding \$12 billion USD, but potential problems include international carbon tariffs, EU battery passport regulations and patent barriers in core motor control algorithms. Overall, the industry will maintain double-digit growth driven by domestic sales of high-end equipment, increased use of intelligent equipment and differentiated overseas expansion, with global market share of Chinese brands approaching 45%.

MEDIUM AND HEAVY VEHICLES. China's medium- and heavy-duty truck market in 2026 is characterized by four distinct features: First, policy-driven effects continue to evolve, as the National IV scrappage-and-replacement policy expands to cover more operating vehicle categories and regional subsidies for new energy heavy trucks are enhanced, directly unlocking massive replacement demand from the existing fleet of over 8 million units.

Second, new energy vehicles demonstrate sustained exponential growth, with annual sales expected to exceed 350,000 units—a year-over-year surge of 60%—and penetration definitively crossing the 35% threshold, with some leading OEMs achieving 40-45% in their sales mix.

Third, exports have become a critical growth pillar, with Chinese brands leveraging superior cost-effectiveness and localized service networks to accelerate replacement of European and American brands in Southeast Asia, Latin America and the Middle East, a trend expected to continue for 5-10 years with export volume surpassing 450,000 units.

Fourth, significant structural adjustment is nearing completion, shifting from traditional diesel dominance to a “new energy + natural gas + high-efficiency diesel” ternary structure, with new energy moving from the mainstream to the leading position in specific segments.

The 2026 market forecast shows a market structure that will shift from policy-stimulated growth to market-

driven organic expansion, with new energy penetration accelerating in segmented markets such as resource transport, muck hauling, sanitation vehicles and inter-city logistics, where total cost of ownership advantages becomes decisive.

Export scale will continue to expand with value exceeding \$12 billion USD, but potential problems include international carbon tariffs, EU battery passport regulations and patent barriers in core motor control algorithms.

Overall new energy penetration will stabilize above 35%, with pure electric units accounting for 28%, fuel-cell reaching 5% and hybrid at 2%. Technologically, AIoT has become standard configuration, ADAS L2+ functions are penetrating the 6x4 logistics segment rapidly, Level 4 autonomous driving achieves scaled commercial deployment in ports, mining areas and highway freight corridors, and intelligent fleet management platforms reduce operational costs by 15-20% through predictive maintenance and route optimization.

Supply chains are undergoing fundamental transformation as electrification demands higher service standards, with battery-swapping networks exceeding 8,000 stations nationwide, and enabling 3-minute energy replenishment.

At the same time, the hydrogen refueling infrastructure has expanded to over 500 stations along major freight corridors. Traditional fault diagnosis methods are being replaced by remote monitoring and digital twins, making localized service capabilities and battery lifecycle management critical competitive factors.

Finally, risks and opportunities coexist—vigilance against trade friction risks such as international carbon tariffs, battery passport regulations and intellectual property disputes is needed, while seizing incremental opportunities in overseas blue ocean markets, Belt

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and Road infrastructure projects and the global energy transition wave.

PASSENGER CARS. China's passenger car market in 2026 is undergoing profound structural transformation, with new energy vehicles (NEVs) demonstrating increased penetration and solidifying mainstream dominance.

Under the dual-carbon targets, environmental policies continue prioritizing green and low-carbon development, not only directly reducing NEV purchase costs through extended tax exemptions and R&D subsidies, but also indirectly weakening ICE vehicle competitiveness via expanded driving restrictions, purchase limitations in mega-cities, and increasingly stringent National VII emission standards, pushing ICE vehicles to exit the mainstream market faster than anticipated.

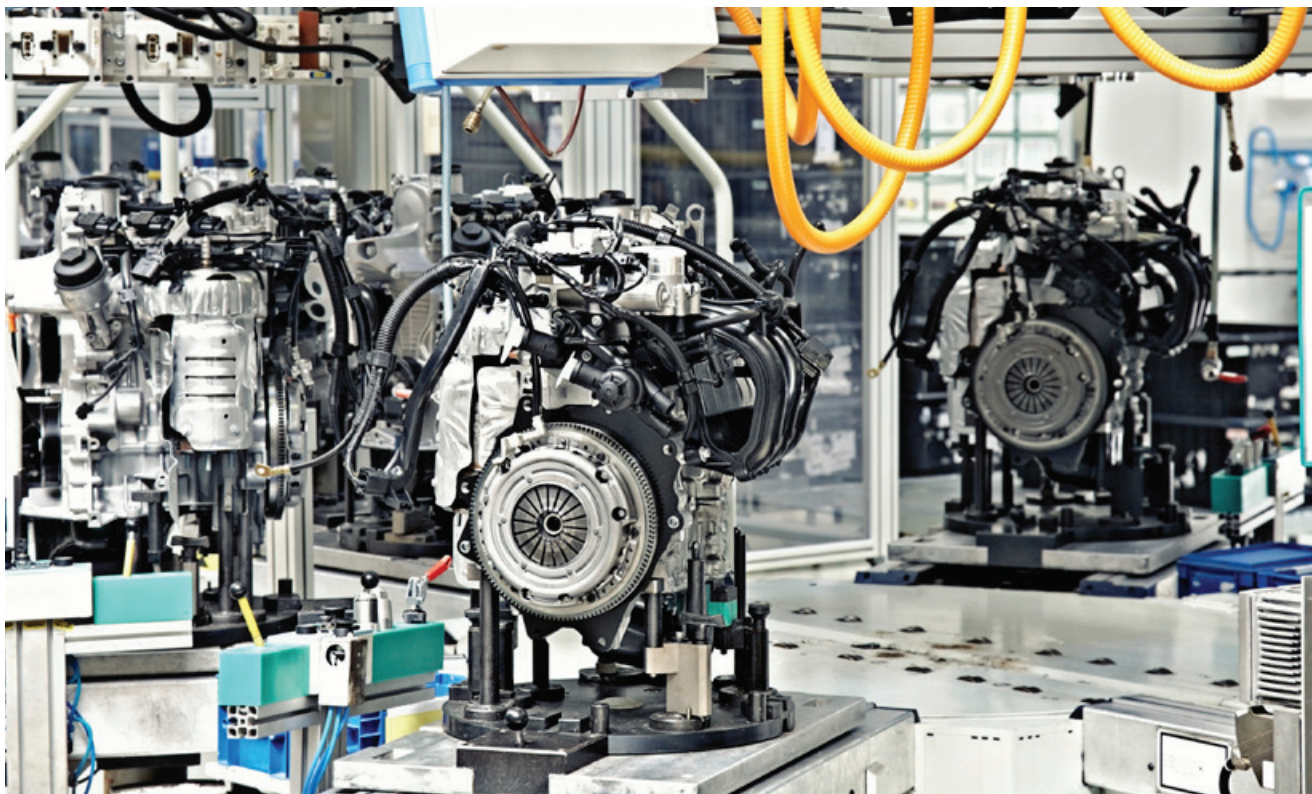
On the technology front, pure electric vehicles achieve breakthroughs across the \$11,666-\$36,457 USD (80,000-250,000 RMB) price segment thanks to sub-0.15 RMB/km operating costs and L2+ intelligent

driving experiences becoming standard, while extended range and plug-in hybrids continue expanding in premium markets above USD \$43,740 (300,000 RMB) and regions with inadequate charging infrastructure, leveraging their "no range anxiety" advantage and intelligent cockpit differentiation.

The market landscape features accelerated "stock replacement" and "incremental penetration" dynamics, with NEV penetration expected to exceed 60% in 2026. Domestic brands command over 65% market share through vertical integration and intelligent driving advantages.

Looking ahead to 2026, market growth momentum has definitively shifted from policy-driven to being driven by technology and market forces. Power battery energy density exceeding 250Wh/kg supports the popularization of 800V high-voltage platforms and semi-solid-state battery applications, making 10-minute charging for 500km range a mass-market reality and bringing parity with ICE vehicles.

Enhanced intelligent capabilities increase vehicle premium potential, with L2+ ADAS becoming standard equipment on models above \$14,583 USD (100,000



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RMB) and urban NOA (Navigate on Autopilot) penetrating the \$21,800\$–\$29,200\$ USD (150,000–200,000 RMB) segment.

Exports are the second growth curve and have become a strategic imperative. In Belt and Road markets and emerging economies, Chinese NEV passenger cars have rapidly gained ground through cost/performance advantages and localized production, with export volume expected to surpass 7 million units.

However, enterprises must navigate complex trade barriers including EU carbon border taxes, anti-subsidy investigations, data security reviews and emerging battery passport regulations. The domestic market has shifted from “incremental competition” to “intense stock competition,” forcing automakers to build competitive moats through product differentiation, software-defined vehicle capabilities and full-lifecycle service ecosystem development to prepare for fully market-oriented competition in the post-subsidy era.

Overall, the 2026 passenger car market continues evolving along three dimensions—intelligent, premium, and global, forming a new pattern of coordinated development driven by “domestic demand upgrade + overseas expansion,” with industry consolidation accelerating and the number of active passenger car brands expected to contract by 20-30%.

POWER GENERATION. The gen-set market will meet a significant structural divergence: high-horsepower diesel gen-sets, and natural gas gen-sets are expected to maintain stable growth, driven by both the energy structure transition (coal-to-gas conversion) and the demand for backup power generation to support renewable energy sources.

Conversely, small gas gen-sets face significant volatility risks due to their over-reliance on export markets, putting pressure on market stability. Especially in the small horsepower segment, the North American market, as a global core battlefield, has entered a mature phase. The stable but competitive growth rate of 3% over the next two years highlights market saturation.

In contrast, the high-horsepower diesel and natural gas gen-set markets have a relatively clear competitive landscape due to the rigid demand for industrial electricity and technical barriers, making the overall outlook more positive.

The market is driven by “traditional rigid demand + energy transition,” with technological changes and regional policies becoming key variables.

In Belt and Road markets and emerging economies, Chinese NEV passenger cars have rapidly gained ground through cost/performance advantages and localized production, with export volume expected to surpass 7 million units.

RECREATIONAL PRODUCTS. China’s motorcycle market in 2026 is projected to show a marked trend of accelerated structural changes from a marginalized industry to a niche mobility solution.

In the domestic market, traditional gasoline-powered motorcycles—supported by relatively low prices and well-established maintenance networks—will likely continue to see stable demand in rural areas, agricultural applications and small-to-medium-sized cities, though their share is expected to contract below 45%.

However, due to increasingly stringent National IV emission standards, expanded urban riding restrictions and growing consumer awareness of sustainability, overall growth is decelerating with annual sales projected at 12-13 million units.

In contrast, electric motorcycles stand to benefit from rising urban short-distance travel needs, refined government subsidy policies targeting lithium battery replacement of lead-acid models, and technological advancements such as sodium-ion battery commercialization, 150km+ range capabilities and broader charging infrastructure integration with the



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national EV charging network. Their share is expected to surge past 55% in first- and second-tier cities, as well as penetrate rapidly in county-level markets, though they face intensified price competition and serious challenges with product homogenization and battery safety concerns.

On the export side, gasoline-powered motorcycles remain competitive in emerging markets like Southeast Asia, Africa and Latin America, thanks to cost advantages, mature manufacturing processes and localized CKD assembly plants; export volume is expected to stabilize at 9-10 million units.

Nevertheless, manufacturers must closely monitor tightening Euro 5+ emission standards, ABS mandate requirements and carbon border adjustment mechanisms, proactively upgrading products and ensuring compliance through fuel injection technology and lightweight materials.

Electric motorcycle exports will profit from worldwide electrification trends, Southeast Asian government EV

transition programs and China's strengths in battery technology and vehicle manufacturing, with export growth projected at 25-30% annually and total volume exceeding 1.5 million units.

However, companies must bolster brand development, obtain ECE, UL and regional safety certifications, and establish localized after-sales service systems to meet diverse international market demands and overcome anti-dumping investigations in key markets.

Overall, by 2026, China's motorcycle market will be driven "traditional stabilization + electric acceleration." Domestically, the market structure is undergoing substantial adjustment, with electric motorcycles gaining decisive momentum while gasoline-powered models retreat to functional and recreational niches.

In exports, product compliance, brand differentiation and new energy transition capabilities will be crucial, alongside continued efforts to explore emerging markets and premium segments.

The industry is witnessing consolidation with leading enterprises leveraging vertical integration advantages to capture market share. **PSR**

Far East (Japan and South Korea)

Production Shifts from Unit Volume to Operating Value

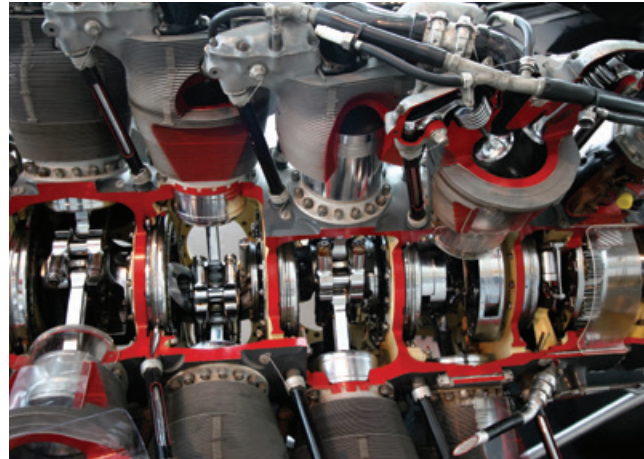
JK **JAPAN SUMMARY:** In Q1 2026, the Japanese market showed signs of a partial pullback following the surge in equipment replacement seen in the latter half of 2025. Conditions do not currently support growth in production or sales volumes. However, rather than demand disappearing entirely, it is more accurate to view the situation as one in which capital investment decisions are being made more cautiously based on whether equipment is “immediately necessary.”

Demand from small-scale users remains sluggish in the agricultural and construction machinery sectors. However, equipment adoption continues in applications where operations cannot be halted. Examples include professional farming, construction equipment rental companies, BCP-compliant facilities, data centers, and ports and logistics.

Regarding exports, the market is not currently experiencing growth driven by increased volume. Instead, there is a growing trend toward securing profits through high-output models, advanced electrical and control systems, and comprehensive supply packages that include maintenance contracts and after-sales service.

Overall, Q1 2026 in the Japanese market can be described as a period in which the trend of factors such as machine performance, overall system reliability, utilization rates, and maintenance support systems, rather than simply increasing unit sales, became more pronounced.

SOUTH KOREA SUMMARY: The South Korean market is too small for domestic demand alone to influence market trends. The structure in which exports and overseas project orders significantly impact business performance remains.



Construction machinery, ships, and engines are strongly influenced by global capital investment cycles. However, as of early 2026, the strategy has become clearer. Rather than mass-producing standard models, the focus is on strengthening high-value ships and main engines, retrofitting existing vessels, and aftermarket operations.

In the construction machinery sector, symbolized by the HD Group’s brand reorganization, there are efforts to maintain multiple brands while standardizing development, procurement, engines, and service systems. The goal is to achieve scale and profitability.

Investment in next-generation technologies, such as hydrogen and electrification, continues. The strategy of securing profits from existing products while allocating capital to future technologies is expected to persist.

AGRICULTURAL. Japan. Although demand for agricultural machinery temporarily increased in 2025 due to a rise in rice-related demand, this trend did not continue into the first quarter of 2026. Although demand remains, not everyone can afford to replace their machinery. Purchases are concentrated among large-scale operations, such as core farmers, corporate agricultural entities, and regional farming organizations.

At the sales level, proposals are increasingly focused on selling not just the machines themselves but also bundled packages that include maintenance contracts,

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Far East: Production Shifts from Unit Volume to Operating Value

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remote management systems, and straight-line assist features. Rather than simply increasing unit sales, the emphasis is on demonstrating ways these solutions can effectively improve machine utilization rates and reduce labor requirements.

Exports vary significantly by region and remain highly susceptible to exchange rate fluctuations and local agricultural conditions, including those in ASEAN markets.

CONSTRUCTION. Japan. The Japanese domestic construction equipment market remains weak, and demand has not fully recovered. The construction industry continues to face labor shortages, project delays, and rising material costs. Consequently, there is a strong tendency to prioritize extending the service life of existing equipment or replacing only necessary models rather than purchasing new machinery.

This cautious approach to capital investment persists, particularly in general civil engineering and private construction. Conversely, equipment replacement continues in sectors where work cannot be halted, including construction equipment rental companies, infrastructure maintenance, disaster recovery, and ICT construction.

Regarding exports, the market is not growing through volume expansion. Instead, the focus is on selling high-specification machines that are profitable. In addition to small machines, package proposals that include fuel-efficient models, remote management functions, and specifications for mining applications are becoming more important. Demand in the North American market remains crucial, and exchange rates and North American construction investment trends are driving manufacturers' performance.

South Korea. In South Korea's construction equipment market, the focus is on expanding exports and the impact of industry consolidation rather than on recovering domestic demand. The real estate market remains sluggish domestically, and construction investment continues to stagnate. The shortage of

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Far East: Production Shifts from Unit Volume to Operating Value

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large-scale projects remains unresolved. The merger of HD Hyundai Construction Equipment and HD Hyundai Infracore is standardizing development, procurement, engines, and sales networks. This merger is expected to reduce costs and improve profitability significantly.

In terms of exports, infrastructure development in emerging economies and resource- and mining-related demand remain crucial. Korean manufacturers are seeking to increase their order volume by competing on price and strengthening their parts supply systems and after-sales service capabilities.

MARINE. Japan. In early 2026, discussions in the merchant marine engine sector shifted from determining the next primary fuel to incorporating designs that can accommodate diverse fuel choices and improve the efficiency of existing vessels. Since the long-term fuel outlook remains uncertain for shipowners, there is a growing trend of considering designs for new builds that can accommodate future use of multiple fuels, such as LNG, methanol, and ammonia. Japan lags behind South Korea and China in new shipbuilding volume but maintains a strong presence in reliability-focused designs, including main engines, auxiliary machinery, control systems, and operational optimization.

Efforts to comply with EEXI and CII, improve fuel efficiency, upgrade auxiliary machinery, and retrofit vessels for future dual-fuel conversion are ongoing, both for newbuilds and as part of equipment upgrades to extend the service life of existing vessels and ensure regulatory compliance.

In the outboard motor market, inventory levels have normalized, and the overheated conditions seen during the pandemic have completely subsided. However, this does not mean that demand has collapsed. The small- and medium-horsepower segments are recovering in the European and American markets, and high-horsepower models remain important as highly profitable products.

Japanese manufacturers' strength lies not only in engine performance but also in their integrated proposals, which include navigation systems, electronic controls,

and service networks. While there is significant interest in electrification for coastal applications and small boats, it has yet to reach a point where it can replace the main markets.

In terms of exports, infrastructure development in emerging economies and resource- and mining-related demand remain crucial.

South Korea. The South Korean merchant ship and marine engine market is entering a phase in which it will convert its accumulated order backlog into actual sales and profits. The high proportion of high-value vessels, particularly LNG carriers, is driving demand for marine equipment, including main engines, auxiliary engines, and shaft generators. Additionally, the demand for retrofitting, including refurbishing and upgrading the performance of existing vessels, continues at a steady pace.

Furthermore, cooperation with the United States in the shipbuilding sector and expansion of ship maintenance operations are viewed as positive trends for the South Korean shipbuilding and marine equipment industry in the medium to long term.

However, price competition with Chinese shipyards persists in the standard merchant ship sector, and new shipbuilding investments could be postponed if the global economy slows down. For this reason, Korean manufacturers are emphasizing not only equipment for new ships, but also expanding recurring revenue streams, such as retrofitting existing vessels and providing after-sales service.

INDUSTRIAL. Japan. Although the forklift market is experiencing sluggish growth in terms of unit sales, companies are still investing in logistics facilities. Investment is shifting from replacing individual vehicles to comprehensive logistics systems that include warehouse automation, material handling systems, and software integration. E-commerce logistics and large-scale distribution centers are increasingly adopting forklift operations that integrate with automated warehouses and AGVs.

Far East: Production Shifts from Unit Volume to Operating Value

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Electric forklifts are becoming commonplace, and operational proposals, including charging management, utilization of operational data, and maintenance contracts, are key differentiators among manufacturers.

Therefore, market trends cannot be fully explained by engine-powered forklift sales alone. They must be viewed as part of the capital investment in warehouse automation and comprehensive logistics solutions.

POWER GENERATION. Japan. Demand for stationary and emergency generators is expected to continue into early 2026. This demand is driven by business continuity planning (BCP) measures and the need to ensure a reliable power supply. Data centers, hospitals, factories, and logistics facilities tend to allocate budgets for upgrades and maintenance because even equipment that is not normally in operation can significantly impact operations during power outages.

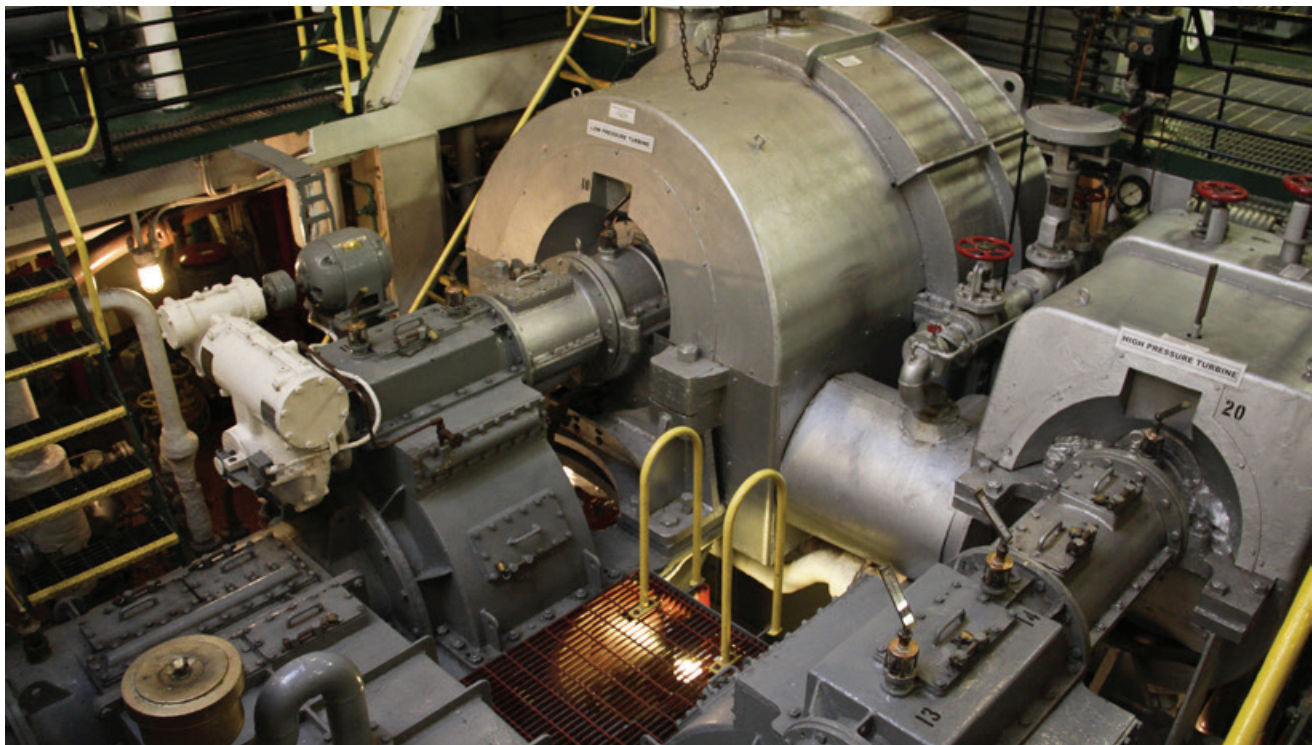
Demand for portable generators is limited to construction sites and events and is susceptible to fluctuations caused by disasters and weather conditions. In the domestic market, meanwhile, emergency power

supplies, rental applications, and maintenance services remain the primary areas of demand.

Demonstrations of hydrogen fuel cells and distributed power sources are progressing; however, diesel and gas generators are expected to remain the core of emergency power supplies due to reliability, instantaneous response, and compatibility with existing equipment.

RECREATIONAL PRODUCTS. Japan. In the first quarter of 2026, the motorcycle market is adjusting to restructuring following the discontinuation of 50cc moped production. Rather than replacing the demand for small-displacement models directly, the domestic market is likely to become increasingly polarized between a shift toward the 125cc class and stable demand for mid-to-large-sized models, which are more popular among enthusiasts.

Domestic production in Japan will likely be supported more by an increase in the proportion of high-value-added models destined for export than by a recovery in unit sales. Regarding electric motorcycles, regulatory frameworks, usage classifications, and price levels have yet to be fully established. Thus, the market has not reached the stage where electric motorcycles can significantly replace internal combustion engine models in the short term. **PSR**



Southeast Asia

Investment and Facilities Reorganization Push Recovery

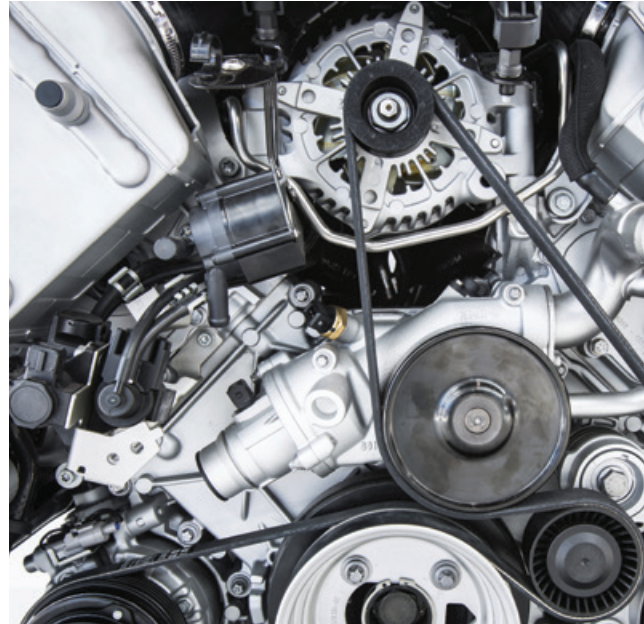
A **SUMMARY.** As the first quarter of 2026 winds down, Southeast Asia's manufacturing sector is experiencing a broad recovery in orders and production. However, the nature of this recovery varies significantly from country to country. In countries with high export ratios, a rebound in orders from the U.S. and Europe, coupled with shifts in the supply chain, is providing a tailwind.

Conversely, countries that rely on domestic demand are more impacted by factors such as interest rates, household financial burdens, and the timing of fiscal spending on equipment utilization and inventory decisions. The current situation in major countries is summarized below.

Indonesia: Since the start of the year, the manufacturing sector has maintained an expansionary trend, with production supported by solid domestic demand and investment in food, motorcycles, general-purpose machinery, and downstream resource-related sectors.

While sales of automobiles and motorcycles are recovering, this recovery is not uniform. There is a disparity between mass-market models intended for the domestic market and those intended for export or commercial use. In the agricultural sector, policies promoting food self-sufficiency have become more pronounced. Demand for agricultural machinery is shifting from reliance on subsidies to machinery that is used.

Malaysia: Although the manufacturing sector improved in January, it slowed in February, suggesting that the recovery's momentum remains unstable. However, this does not mean that demand has vanished. Stable exchange rates continue to benefit industries that rely on



CKD (completely knocked down) and component imports. The market's focus has shifted from increasing volume to the extent to which companies can capture export-oriented assembly and high-value-added processes.

Philippines: Notable improvements in the manufacturing sector occurred in Q1 2026. Factory activity in February reached its highest level in eight years, confirming a recovery in domestic demand and new orders. However, the sector's reliance on imported materials remains high, leaving it vulnerable to profitability decline if energy prices or logistics costs increase. Regarding policy, efforts to strengthen the agricultural machinery, food processing, and light manufacturing sectors continue, though short-term production remains susceptible to macroeconomic fluctuations.

Thailand: Although the manufacturing sector has been recovering since the beginning of the year, an analysis of trends in the automotive, motorcycle, and construction machinery sectors reveals that they are not uniformly aligned, even within the same country. Domestic sales of automobiles have begun to recover, but exports remain weak. Similarly, exports play a stronger role in supporting

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Southeast Asia: Investment and Facilities Reorganization Push Recovery

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production than domestic sales in the motorcycle sector. Construction investment remains weak in the residential sector, but demand for machinery persists in industrial parks, data centers, and public infrastructure. In short, rather than experiencing a full-scale recovery, Thailand has entered a phase in which performance varies by application and import/export sector.

Vietnam: In Q1 2026, the manufacturing sector was the strongest in the region. The processing and assembly industries posted double-digit growth during the first two months of the year, with significant increases in both exports and imports. Although the trade balance temporarily slipped into a deficit due to increased imports, this is more a result of upfront investment in raw materials and equipment than a sign of slowing demand. This strongly indicates that production capacity is increasing. Demand for machinery should be viewed not merely as demand for low-wage assembly work, but as broad investment encompassing electronics, components, logistics, and automation-related sectors.

Cambodia: Although the country's foundational capabilities remain limited, investment approvals in early 2026 were robust, and new investments, including those in special economic zones (SEZs), are on the rise. The assembly and light manufacturing industries continue to cluster, primarily due to Chinese firms, and the region is still viewed as a potential hub for future growth. However, constraints in power supply, logistics, and human resources persist. Currently, the region functions primarily as a hub for low-cost assembly and labor-intensive processes rather than as a base for mass production.

Southeast Asia will be on the path to recovery, though the nature of that recovery will vary significantly by country. Indonesia and the Philippines are seeing improvements driven by domestic demand. Thailand is experiencing strong sector-specific differentiation. Meanwhile, Vietnam is seeing a simultaneous recovery in exports and an expansion of production capacity. Meanwhile, Malaysia is experiencing a mix of improvement and slowdown, and Cambodia continues to lay the groundwork, driven by investment approvals.

AGRICULTURAL: During the first quarter of 2026, a broad strong replacement cycle has not been experienced by the agricultural machinery market across the entire region. Rather, demand patterns vary depending on policy, crop profitability, and farm size.

The processing and assembly industries posted double-digit growth during the first two months of the year, with significant increases in both exports and imports.

In Indonesia, policies that prioritize food self-sufficiency continue to drive demand for basic machinery, such as tractors, combines, and pumps. However, the government is stepping up inspections of the utilization of previously distributed machinery. It is likely that the government's focus will shift from the number of units distributed to the number of units being used.

In Thailand, farmer debt and cash flow constraints suppress broad-based demand, making uniform growth difficult; however, replacement demand remains among contract service providers and large-scale farmers.

In Vietnam, the demand for improving the efficiency of export crops and processing continues amid a shortage of rural labor. However, small-scale farmers rely more heavily on external services than on purchasing machinery, which makes it difficult to gauge market strength based solely on the number of individual machines sold.

In the Philippines, the development of mechanization standards is progressing; however, attention is beginning to shift toward the operational aspects of procurement and distribution. In the short term, institutional development takes precedence in this market.

Overall, the agricultural machinery market in the region is not growing uniformly. It is divided into three markets: policy-driven, service provider-driven, and export crop-driven. Moving forward, this divergence is expected to intensify.

Southeast Asia: Investment and Facilities Reorganization Push Recovery

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CONSTRUCTION: Examining the construction machinery market in the first quarter of 2026 across Southeast Asia as a whole, the trend is shifting toward “selective demand” rather than “recovery.” Indonesia remains the region’s largest market, with resource development, smelting, road and port construction, and IKN-related projects serving as underlying factors. However, actual demand is highly susceptible to budget execution and resource prices, so equipment sales are inconsistent.

In Thailand, residential and private construction remains weak; however, demand for medium-sized equipment continues in industrial parks, data centers, and public infrastructure. The rental and used equipment markets also maintain a strong presence.

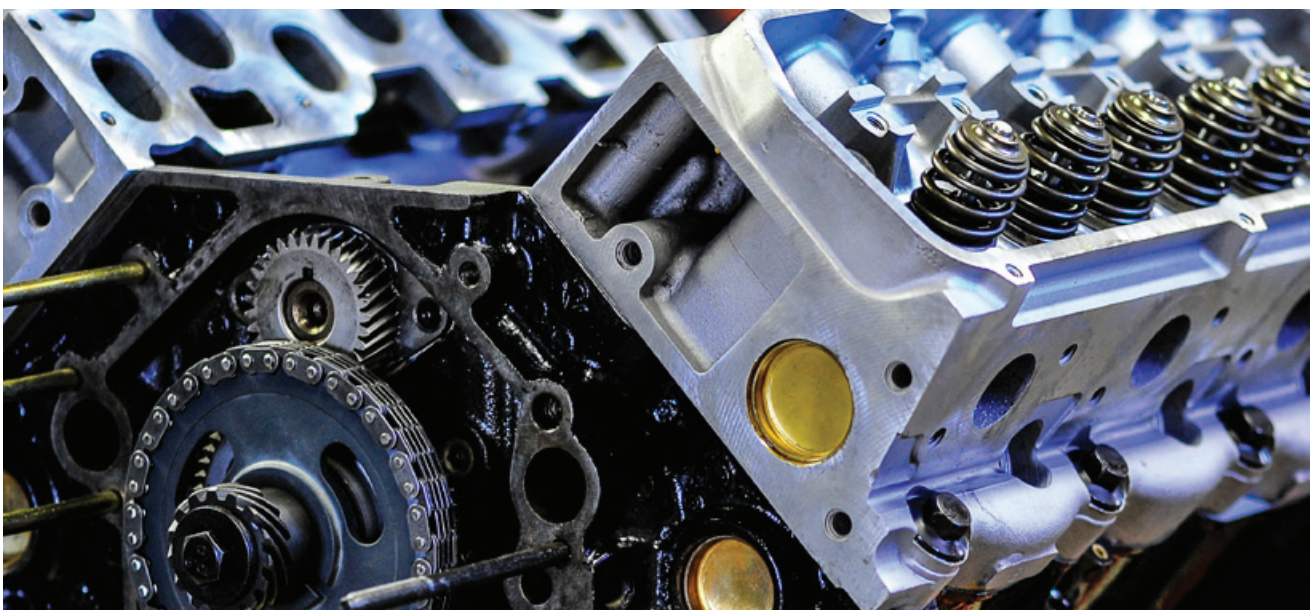
In Vietnam, public investment and industrial park development support demand. However, rising fuel, material, and logistics costs squeeze profits, meaning increased demand for machinery does not directly translate into improved earnings. Therefore, rather than viewing the regional construction machinery market as one driven by unit volume growth, it is more accurate to view it as one where demand is concentrated in stable sectors such as mining, resources, industrial parks, public works, and data

centers, while revenue from rentals, parts, and services is increasing in these areas.

RECREATIONAL PRODUCTS: ICE vehicles continued to dominate in the first quarter of 2026, though the distribution of sales by country shifted slightly. In Indonesia, for example, domestic sales in the first two months of the year exceeded last year’s levels, and CBU exports are growing as well. This indicates that the country’s strength as a mass-market hub remains intact. However, pressure from Chinese brands and emerging EVs is intensifying in the low-price segment. This makes it increasingly difficult for traditional Japanese mass-market models to account for the entire market.

In Vietnam, VAMM-based sales declined slightly in 2025, but the competitive landscape in the actual market—including EVs—is evolving. Japanese manufacturers still dominate, but electric motorcycles and Chinese brands are gaining ground. The market is becoming increasingly segmented by price range, application, and powertrain rather than by volume.

Thailand’s role as an export and production hub is more important than domestic market growth. Exports continue to underpin production in early 2026. Therefore, rather than a complete shift to EVs, it is more accurate to view the regional motorcycle market as tripolar: Indonesia dominates in terms of volume, while Vietnam is notable for shifts in the competitive landscape. Thailand remains an important export hub. **PSR**



India

Automotive Sector Production-Led Realignment Across Segments



SUMMARY. India's economic landscape continues to demonstrate remarkable resilience, with strong domestic consumption, rising manufacturing activity, and sustained public and private capex anchoring growth even as global conditions remain uncertain.

The country's structural drivers—formalization, digital transformation, healthy bank balance sheets, and improved tax buoyancy—have strengthened the medium-term economic narrative, positioning India as a key growth engine among major economies.

However, this trajectory is unfolding against a complex geopolitical backdrop, most notably the ongoing conflict between US/Israel and Iran, which has intensified volatility in global energy and commodity markets. Tensions around the Strait of Hormuz, the world's most critical chokepoint for crude and LNG flows, have led to intermittent supply disruptions, pushing up crude prices and freight rates.

For India, a major energy importer, higher oil prices translate into inflationary pressures, increased subsidy burdens, and potential fiscal constraints, while also raising operating costs for energy-sensitive sectors such as transportation, infrastructure, and manufacturing. These war-related shocks coincide with ongoing realignments in global supply chains, further challenging procurement and logistics planning for Indian industries.

Despite these headwinds, India's macroeconomic foundation remains steady, supported by a broad-based investment cycle, stronger export diversification, and increasing global interest in India as a strategic manufacturing alternative. How effectively India manages this dual reality of domestic strength and



external volatility will be critical in shaping economic outcomes in the coming quarters.

MOTORCYCLE AND SCOOTERS. India's two-wheeler industry in Q1 2026 reflected a gradual normalization in production, supported by improving rural demand and steady export traction. Following a period of inventory correction, OEMs have recalibrated production volumes in line with retail sales, resulting in leaner dealer inventories and more disciplined dispatch cycles. Rural markets, a key demand driver, are showing early recovery, particularly influencing output in the commuter motorcycle segment.

On the supply side, easing component constraints and stable input availability have enabled smoother plant utilization. Export markets across Africa and Latin America continue to anchor production, offsetting variability in domestic demand. A notable structural shift is the accelerating scale-up of electric two-wheelers, with OEMs investing in dedicated EV production lines

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India: Automotive Sector Production-Led Realignment Across Segments

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and localization. Initiatives such as battery-as-a-service models and in-house cell manufacturing are improving cost efficiency and supporting scalable output.

Regulatory pressures under BS6 Phase 2 norms have also led to selective portfolio rationalization, impacting production mix. Overall, the sector remains cautiously optimistic, with a clear pivot toward flexible manufacturing and export-linked growth strategies.

THREE WHEELERS. India's three-wheeler industry in Q1 2026 demonstrated strong production momentum, driven by sustained demand in last-mile mobility and a sharp uptick in exports. Domestic demand remains anchored in urban and semi-urban passenger movement, along with steady growth in cargo applications linked to e-commerce and intra-city logistics. This has enabled OEMs to maintain healthy production schedules with relatively high-capacity utilization.

A defining shift in the segment is the rapid electrification of three-wheelers, with electric variants accounting for an increasing share of total output. OEMs are investing in dedicated EV assembly lines and localized sourcing to improve cost structures and scale production efficiently. This transition is further supported by government incentives and state-level EV policies, accelerating adoption across both passenger and cargo use cases.

Export markets, particularly in Africa and South Asia, continue to play a critical role in sustaining production volumes. Overall, the segment remains one of the fastest-growing in the industry, with production increasingly aligned toward electrification and export-led demand.

PASSENGER CARS, MINIVANS & SUVs. India's passenger vehicle segment, particularly cars and SUVs, continues to see a structural production realignment, with SUVs driving the bulk of incremental output. The share of utility vehicles in total production has risen significantly, prompting OEMs to recalibrate manufacturing lines toward higher-margin platforms. This shift is also influencing supplier systems, with increased demand for electronics, safety systems, and larger powertrains.

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India: Automotive Sector Production-Led Realignment Across Segments

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Domestic demand remains stable, though production strategies are increasingly aligned with export opportunities and evolving consumer preferences. Capacity expansion remains a key theme, with OEMs investing in flexible manufacturing systems capable of handling ICE, hybrid, and electric platforms.

A notable development is the entry of new global players such as VinFast, which has established an EV manufacturing facility in Tamil Nadu with an initial capacity of ~50,000 units, scalable to 150,000 units annually. This adds incremental capacity and intensifies competition in the electric SUV space.

Regulatory pressures, including stricter emission norms, continue to drive portfolio rationalization, accelerating the shift away from small cars toward SUVs and premium offerings, reshaping overall production mix.

COMMERCIAL VEHICLES. India's commercial vehicle segment, spanning light commercial vehicles (LCVs) and medium & heavy commercial vehicles (M&HCVs), is witnessing a measured production cycle, closely linked to infrastructure activity, freight demand, and fleet utilization trends. M&HCV production remains relatively stable, supported by ongoing government-led infrastructure spending and replacement demand, though growth has moderated compared to previous high-base periods. Fleet operators are showing cautious procurement behavior, leading OEMs to align production with actual freight movement.

In the LCV segment, production continues to benefit from last-mile delivery and e-commerce-driven logistics, sustaining steady volumes. However, rising ownership costs and financing constraints have led to selective demand softness in certain sub-segments, prompting tighter production planning.

A key structural shift is visible in alternative fuel adoption, particularly LNG and electric buses and trucks, with OEMs investing in dedicated assembly capabilities to cater to evolving regulatory and fleet requirements. Additionally, partnerships around fleet electrification and pilot deployments in urban logistics are gradually influencing production pipelines.

Emission norms and regulatory frameworks are playing a critical role in shaping product configurations and cost structures, especially in the M&HCV space. Overall, the segment reflects a balanced production approach, with OEMs prioritizing utilization efficiency, replacement cycles, and infrastructure-linked demand visibility over rapid capacity expansion.

Regulatory pressures, including stricter emission norms, continue to drive portfolio rationalization, accelerating the shift away from small cars toward SUVs and premium offerings, reshaping overall production mix.

CONSTRUCTION EQUIPMENT. India's construction equipment industry is witnessing steady production momentum, supported by sustained infrastructure spending across roads, mining, and urban development projects. Government-led investments in highways, railways, and irrigation continue to provide strong visibility for equipment demand, enabling manufacturers to maintain stable production schedules and high-capacity utilization levels.

Earthmoving equipment, particularly excavators and backhoe loaders, continues to dominate production volumes, driven by their widespread application across projects. At the same time, mining equipment demand has strengthened, supported by increased activity in coal and mineral extraction, contributing to incremental output in higher-capacity machines.

OEMs are also focusing on expanding and localizing production capabilities, with investments in advanced manufacturing, telematics integration, and fuel-efficient equipment. Export markets are gradually gaining importance, with India emerging as a competitive manufacturing hub for select equipment categories.

Regulatory developments, including the transition toward stricter emission norms such as CEV Stage V, are influencing product upgrades and cost structures, prompting OEMs to recalibrate production lines. Overall,

India: Automotive Sector Production-Led Realignment Across Segments

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the industry reflects a project-led production cycle, with output closely aligned to infrastructure execution timelines and mining activity, rather than short-term demand fluctuations.

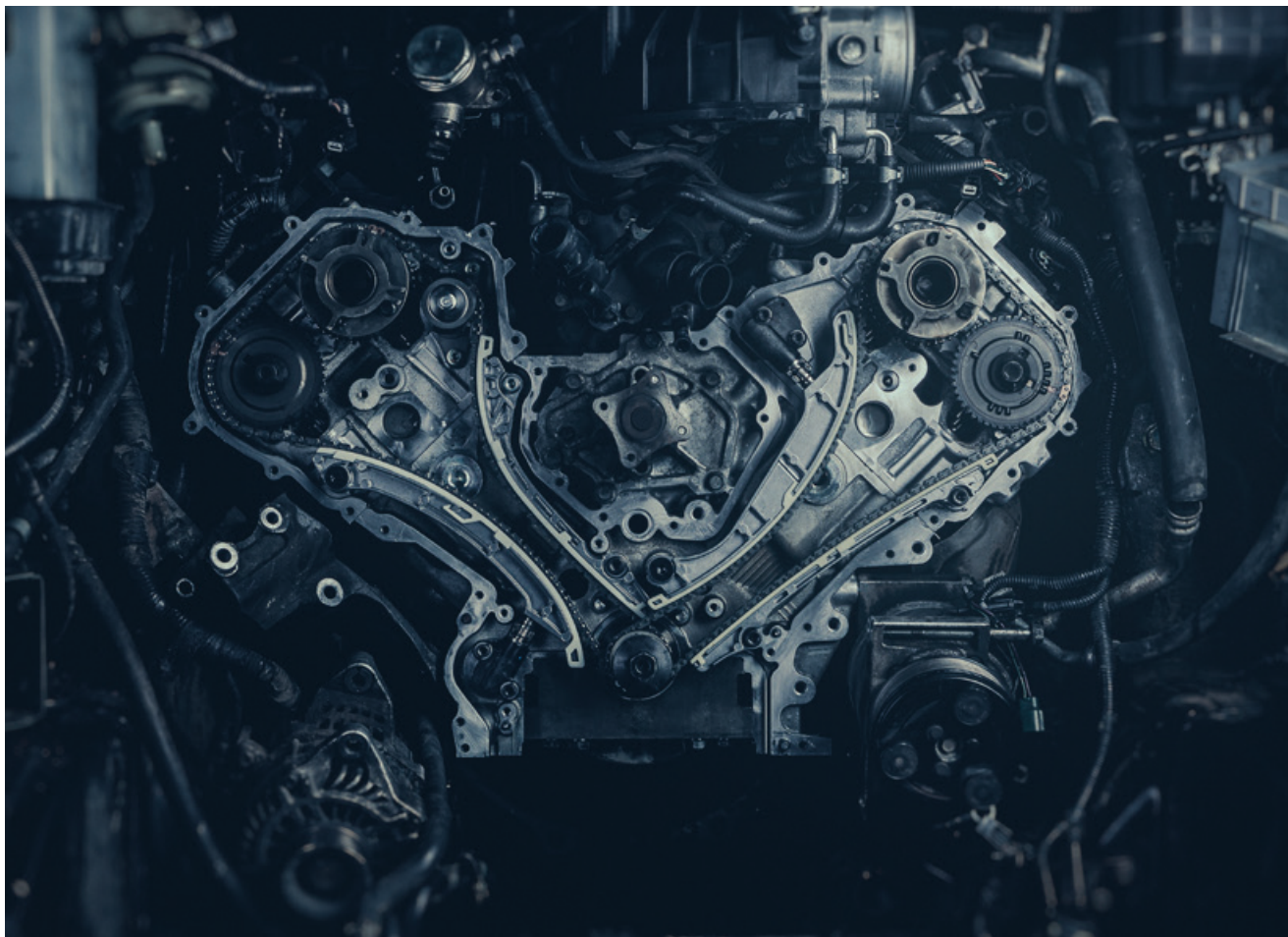
AGRICULTURE. India's agricultural tractor industry continues to reflect a strong yet normalizing production cycle, following a record high base in the previous year. Total production crossed 1.1 million units, supported by robust rural sentiment, favorable monsoon conditions, and policy support such as GST reduction, which improved affordability and accelerated farm mechanization.

However, at this time production growth is moderating as demand stabilizes, prompting OEMs to adopt calibrated output planning aligned with seasonal

cycles and replacement demand, which constitutes a significant share of volumes. At the same time, capacity expansion remains a key theme. Tractor manufacturers are expected to incur USD 600 million to USD720 million (₹5,000–6,000 crore) in capex over the next few years, focused on capacity augmentation, product development, and regulatory compliance readiness.

OEM-led initiatives are also shaping the production landscape. For instance, CNH Industrial is scaling up capacity at its Greater Noida facility and targeting a significant increase in domestic volumes, reflecting confidence in long-term demand. Additionally, players like Mahindra are investing in integrated manufacturing facilities with dedicated tractor production lines, further strengthening capacity.

Looking ahead, upcoming TREM V emission norms and evolving farm economics are expected to influence product mix and production strategies, reinforcing a policy- and monsoon-linked production cycle. **PSR**



South America/Brazil

Financial Tightness Continues to Anchor the Cycle

SA **SOUTH AMERICA SUMMARY.** The macroeconomic backdrop in South America remains broadly stable entering 2026, but with clearer downside risks and slower growth momentum than expected late last year. Regional GDP is now projected to expand by around 2.2% in 2026, reflecting still-tight financial conditions, cautious investment sentiment, and uneven domestic demand across major economies.

High interest rates, restricted credit availability, and fiscal uncertainty continue to shape capital allocation decisions across most equipment and vehicle segments. External factors have also gained relevance since year-end. Ongoing geopolitical tensions in the Middle East are expected to keep oil prices elevated through 2026, reinforcing inflationary pressure across the region and delaying monetary easing cycles in financing-sensitive sectors.

Brazil remains the regional anchor but enters 2026 with a softer trajectory. Growth is expected to moderate to around 2%, with inflation largely under control but still above the midpoint target and monetary policy remaining restrictive. The outlook assumes gradual rate cuts are contingent on fiscal credibility and market confidence. At the same time, the 2026 election cycle adds uncertainty and reinforces cautious corporate investment behavior, particularly in capital-intensive sectors. Recent confidence shocks affecting institutional and financial system perceptions also contribute to slower investment decision cycles.

Argentina continues the expected recovery. GDP is projected to grow about 4% in 2026, supported by macro stabilization and improving business sentiment. Inflation is expected to continue declining, albeit more

The macroeconomic backdrop in South America remains broadly stable entering 2026, but with clearer downside risks and slower growth momentum than expected late last year.

gradually, while the central bank maintains positive real interest rates to anchor expectations. External balances are likely to soften modestly with recovering domestic demand, but exports linked to energy, mining, and agriculture remain supportive of activity.

Overall, the regional macro environment reinforces the narrative of 2026 as a transition year, with stabilization prevailing over expansion and stronger growth prospects pushed toward the post-election period.

REGIONAL PRODUCTION OUTLOOK. Regional view: No broad-based expansion is expected before 2027. Near-term performance will continue to be driven by mix changes, project execution, and selective end-markets rather than aggregate volume growth. The balance of risks has shifted slightly to the downside since year-end, reflecting external inflation pressures and slower easing in financial conditions.

Production expectations remain broadly stable versus late-2025 assumptions. In 2026, stabilization is expected across most segments, with relatively stronger performance in areas less exposed to financing costs and more tied to exports, rental activity, infrastructure execution, and project-based demand.

In Brazil, replacement demand continues to anchor volumes across most segments, with limited fleet expansion expected in the near term. Argentina continues absorbing incremental regional production as macro conditions improve and selective reallocations support intra-regional trade.

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South America/Brazil: Financial Tightness Continues to Anchor the Cycle

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MEDIUM & HEAVY VEHICLES. The MHV outlook entering 2026 remains cautious, with demand still primarily constrained by financing conditions despite supportive freight fundamentals. Early-year performance has come in below expectations, and, despite the introduction of the Move Brasil incentive program, sales momentum remains limited across most heavy segments.

Maintaining a flat sales trajectory for 2026, as previously projected, continues to depend on the expected reduction in interest rates during the second half of the year and the absence of additional external shocks. High borrowing costs remain the key limiting factor for fleet renewal decisions, particularly in heavy and extra-heavy trucks.

Freight activity, stable GDP growth, and strong agricultural output continue to provide a demand floor, while replacement cycles anchor production planning across the region. Brazil remains primarily replacement-driven, with limited fleet expansion expected in the near term. Argentina continues to play a counter-cyclical role through improving business sentiment and selective production support.

Bus production visibility has weakened somewhat following the suspension of the new Caminhos da Escola

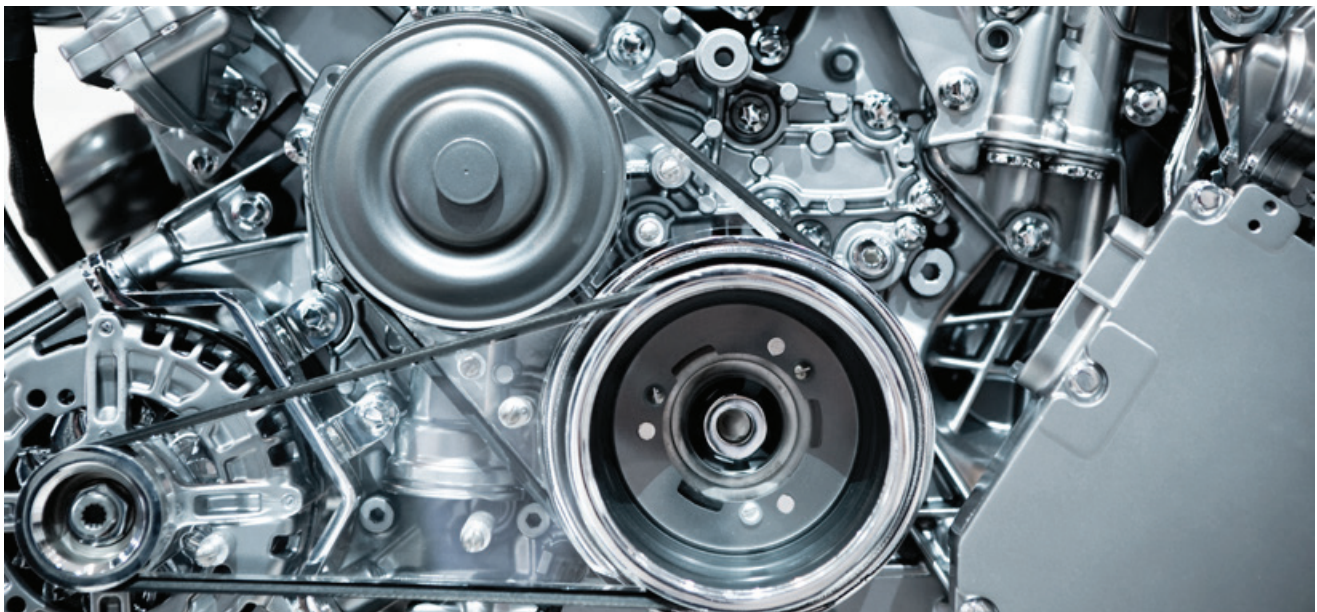
procurement round, which is expected to delay part of the demand into later periods and compromise 2026 volumes. The electric bus outlook remains broadly unchanged, with adoption progressing gradually under revised municipal timelines rather than through accelerated fleet conversions.

LIGHT COMMERCIAL VEHICLES. LCV production in South America remains relatively resilient, supported by urban logistics, services activity, and fleet-based demand. Replacement cycles and operational needs continue to sustain volumes into 2026 despite restrictive financing conditions.

Argentina remains a strategic pickup manufacturing hub structurally tied to Brazilian demand, while Uruguay continues to operate as a complementary assembly base for vans and light utility vehicles through exports.

Looking ahead, announced investments in new mid-size pickup platforms are expected to reshape the competitive landscape. These launches should compete more directly with passenger vehicles in certain use cases while expanding the segment's production base over the medium term.

Electrification continues to gain attention in last-mile applications, but adoption remains gradual. Cost pressures, acquisition price sensitivity, and TCO considerations continue to limit near-term scale, with early



South America/Brazil: Financial Tightness Continues to Anchor the Cycle

Continued from page 39

uptake concentrated in B2C delivery fleets and broader penetration dependent on further cost optimization.

PASSENGER CARS, MINIVANS & SUVs. The regional light-vehicle outlook remains constructive but constrained by financial conditions. In Brazil, elevated interest rates continue to limit a faster demand recovery despite stable labor market conditions and resilient replacement demand.

Local production growth increasingly reflects execution factors rather than demand expansion. Ramp-ups at recently installed plants - particularly among Chinese OEMs - continue to support output growth and progressively substitute imports across SUV and electrified segments.

Policy developments remain relevant to portfolio evolution. Several ethanol-hybrid launches expected through 2026 under the MOVER framework reinforce mix shifts toward higher-efficiency powertrains without materially altering short-term volume trajectories.

AGRICULTURAL EQUIPMENT. The agricultural equipment outlook remains broadly unchanged since late publish. Full-year production and sales results slightly exceeded expectations, but the market remains predominantly replacement-driven amid constrained financing conditions. Price escalation of Agricultural Supplies, such as fertilizers and pesticides, with the Conflict in Middle East may compromise Farmers cash and investment ability.

Expectations for gradual improvement throughout 2027-2031 as credit conditions ease incrementally, without signaling a sharp recovery. Regulatory visibility remains limited, with no material developments regarding PROCONVE MAR II timelines, reinforcing cautious planning across OEMs and suppliers.

CONSTRUCTION EQUIPMENT. Construction equipment demand in Brazil ended 2025 slightly above expectations, and recent market surveys support a baseline scenario of stable production volumes in 2026. The segment continues in a normalization phase following several

strong years, with utilization rates, parked fleets, and disciplined capital allocation limiting short-term upside rather than signaling a downturn. Replacement demand, rental expansion, and infrastructure-linked activity remain the main demand anchors.

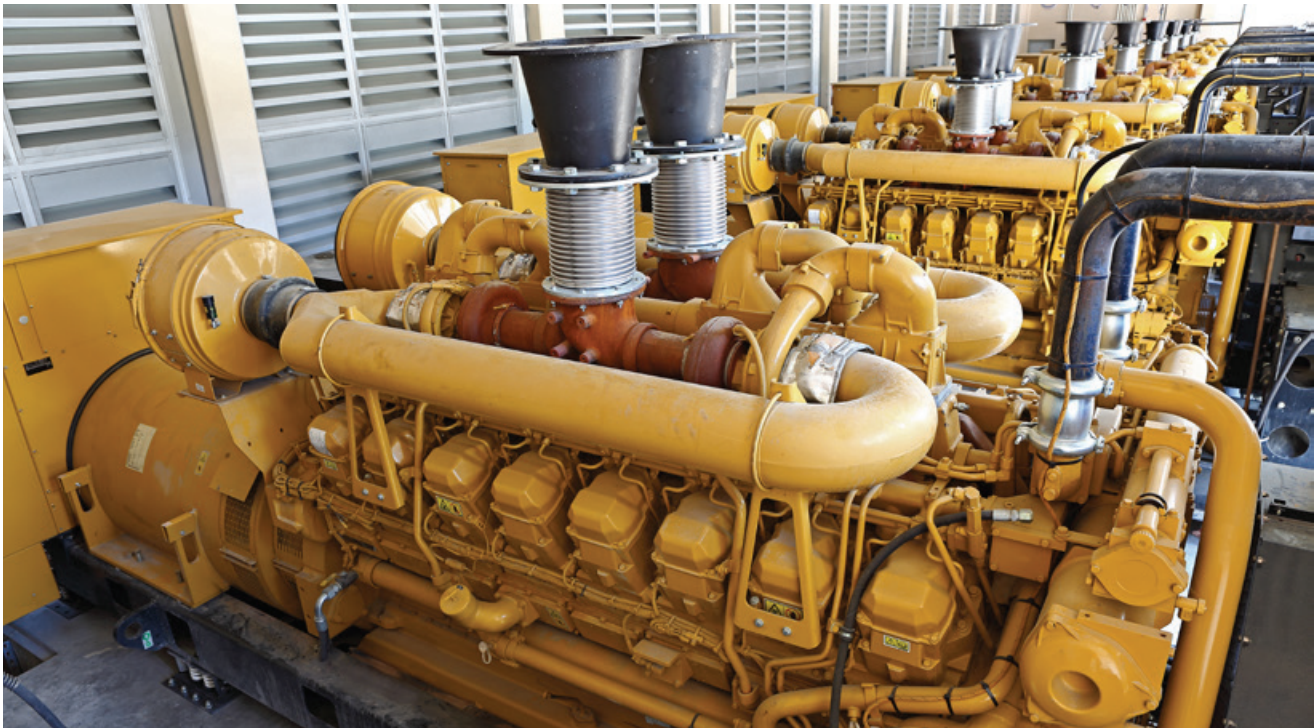
In Brazil, elevated interest rates continue to limit a faster demand recovery despite stable labor market conditions and resilient replacement demand.

Recent surveys with distributors and dealers also reinforce expectations for modest sales growth in both 2026 and 2027, supporting a gradually improving outlook even as near-term production remains broadly stable. Looking ahead, a gradual return to modest and sustainable growth is expected from 2027 onward, aligned with improving financing conditions and a more supportive macro cycle.

INDUSTRIAL EQUIPMENT. The industrial equipment outlook entering 2026 remains stable to slightly positive, with demand anchored in core industrial activity, infrastructure maintenance, Oil & Gas, mining, and project-driven investments. Since late 2025, the macro backdrop has shifted modestly, with elevated oil prices contributing to inflationary pressure across the region and reinforcing cautious capital allocation cycles in financing-sensitive applications.

Brazil continues to function as the primary production and demand hub, while Argentina, Colombia, Chile, and Peru contribute selectively through project execution rather than broad-based industrial expansion. Across segments, demand remains closely tied to confirmed investments and operational requirements rather than capacity expansion.

Within industrial equipment, forklifts continue to follow a differentiated trajectory. Stable demand is supported by logistics, warehousing, and rental fleet replacement, while electrification continues advancing through lithium-ion adoption and productivity-driven fleet upgrades. Local production remains structurally constrained by import competition, particularly from



South America/Brazil: Financial Tightness Continues to Anchor the Cycle

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lower-cost suppliers, with mix evolution playing a more relevant role than volume growth.

POWER GENERATION. The power generation equipment market in South America continues to outperform the broader industrial cycle entering 2026, supported by ongoing data center expansion in Brazil and Chile and sustained demand for backup power solutions. Elevated oil prices and broader energy market volatility have reinforced reliability concerns across sectors, sustaining demand for standby and distributed generation solutions.

Large-scale data center applications remain primarily supplied through imported high-power engines and complete gen-set solutions, limiting direct upside for local engine manufacturing volumes. However, these projects continue generating significant opportunities for regional players through engineering, integration, installation, commissioning, and long-term service contracts.

Oil & Gas activity in Brazil and Argentina and mining demand across Brazil, Chile, and Peru continue to support mid-range power solutions more likely to be assembled or

supported locally. Overall, the segment remains project-driven, with production planning closely aligned with confirmed orders and service-driven opportunities rather than cyclical industrial demand swings.

RECREATIONAL PRODUCTS. The motorcycle segment across South America remains resilient entering 2026, supported by strong fundamentals in Brazil and steady urban mobility demand across the region. In Brazil, production remains near multi-year highs, reflecting sustained use in personal mobility, delivery operations, and fleet-based applications.

While elevated interest rates and inflationary pressure continue to shape household purchasing power, motorcycles remain comparatively accessible, supporting stable to moderately expanding volumes through 2026. Colombia continues to contribute incremental growth supported by local assembly capacity and urban demand trends, while Argentina maintains stable volumes driven by mobility needs despite ongoing macro volatility. Paraguay remains a smaller but steadily expanding market supported by rising affordability and penetration.

Overall, the regional motorcycle outlook remains stable with moderate growth potential, anchored by Brazil and supported by structural demand drivers rather than cyclical expansion. **PSR**

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.

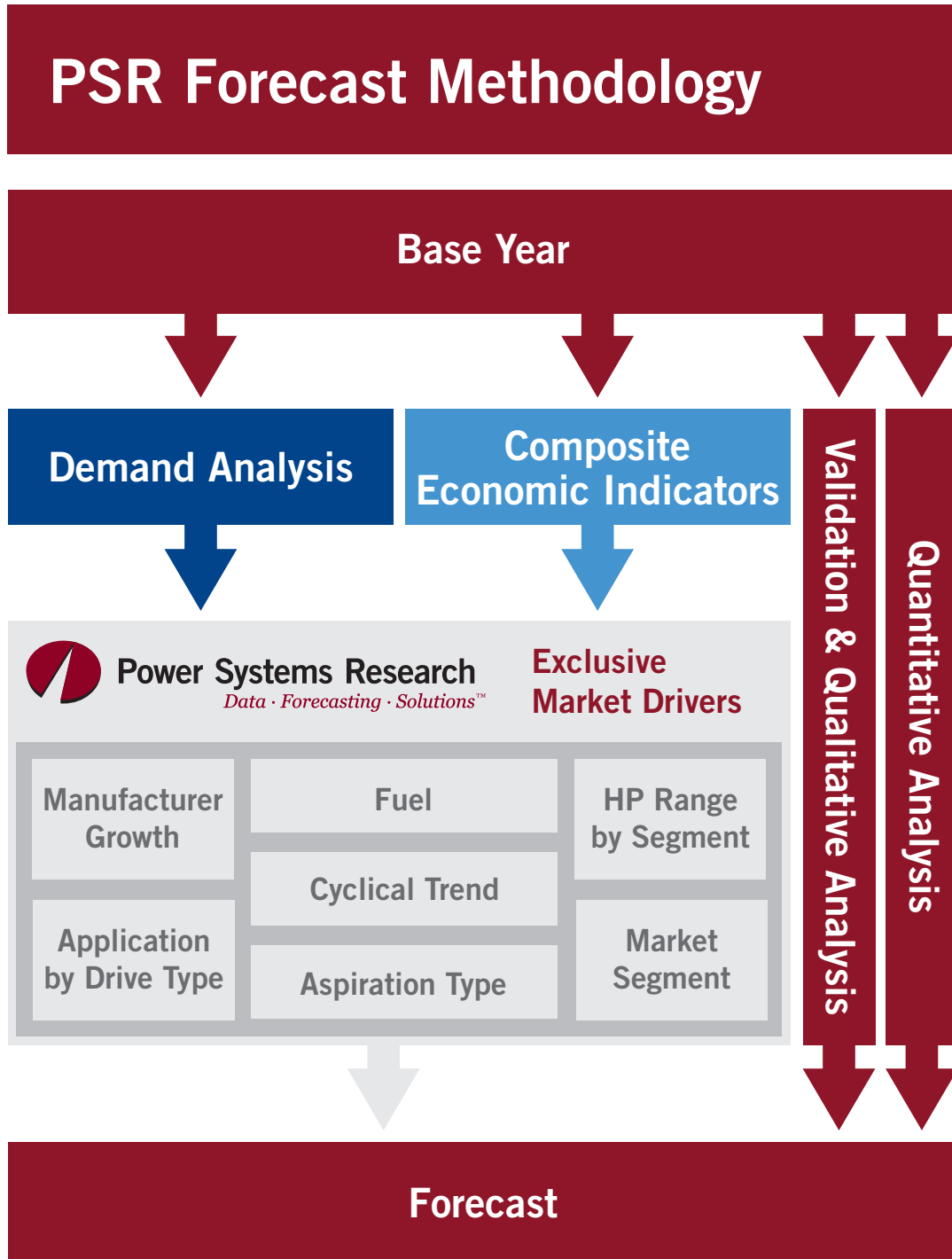
PSR RESEARCH METHODOLOGY



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



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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.



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