EnginLink™ Update *Bulletin*

September 30, 2025

Q3 2025 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 third quarter of 2025.

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Highlights

Inside

Commercial Vehicle Outlook

Production of Medium and heavy trucks in North America is expected to decline by 15.8% in 2025, compared with 2024, according to research by Power Systems Research (PSR).

Analysts cite a number of reasons for this anticipated production decline this year. The freight market remains soft and dealer truck inventories are at relatively high levels, so OEMs are expected to reduce production.

The commercial truck market in North America remains in a "wait and see" mode regarding truck sales this year. Uncertainty about the economy and the impact of the trade tariffs moving forward is causing hesitancy among fleets.

To get the full story, contact us today.

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I. Executive Notes

Components & Consumables Modules Provide Enhanced Data Insights

In this column, we will highlight the information available from our database component modules. Especially for those clients who are new or tend to maintain a consistent scope year-to-year, you may not be aware of the current scope of coverage available with our component modules.

Our Component Module data covers components and consumables and relates their attributes down to model level within ***EnginLink***, ***OE Link™***, ***CV Link™*** and/or ***PartsLink™*** as applicable. There are three key types of components modules available: specifications, components and consumables. Here is a brief overview of the available module types:

Specifications: Engine Oil Specifications, Engine Oil Capacity, Engine Oil Change Intervals, Engine Oil Consumption, Emissions and Electrical System Voltage.

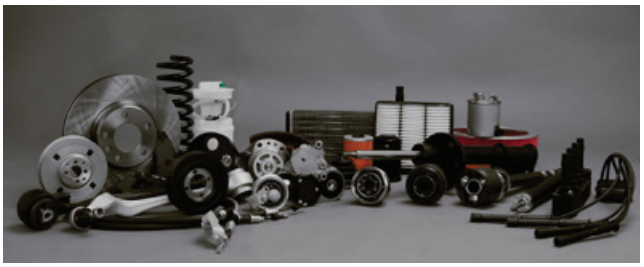
Components: Brake Type, Cylinder Block Material, Cylinder Head Material, Fuel Injection Equipment (FIE), Generators (Alternators), Axle Configuration, Transmissions and Turbos.

Consumables: Batteries, Spark/Glow Plugs and Tires.

You can find the fields associated with each of these module types as well as further information at the following link:

PSR Components & Consumables Module Directory

When relating components and consumables information to our data, many clients find this information valuable in estimating the market for



components as well as for gaining insight into product details and specifications. If you are interested in learning more, please inquire with your Power Systems Research (PSR) account manager.

As we finish the third quarter of 2025, we are confident that this Update Bulletin will offer you a chance to corroborate and validate your overall picture and complement the existing data and the information you are receiving from Power Systems Research.

If you need information on any of these points, please reach out to your account manager and they will be able to help you gain further clarification.

Today, there are many forces at play in the worldwide production of powered equipment. As we move forward, you can be assured that 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 Q3 2025 update, we incorporated important insights we have gathered during the third quarter to provide our best outlook for 2025 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.

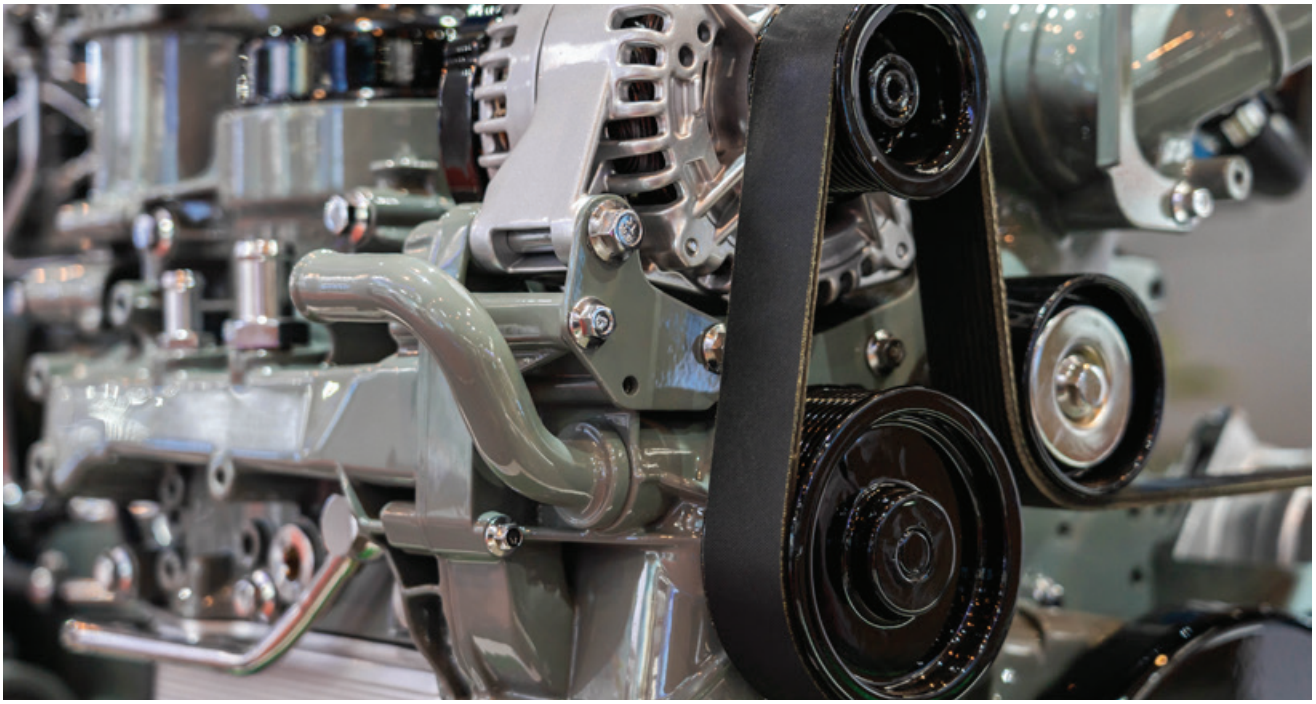
If you are facing new challenges or issues that require data-driven solutions, talk to us. We can be an important resource.

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

Author

Joe Zirnhelt is President and CEO of Power Systems Research.

II. Introduction



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

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

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

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

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

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

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

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

III. EnginLink™ Database Update Notes

Engine Manufacturer News and Notes

Cummins Inc. and **Komatsu Ltd.** have signed a memorandum of understanding (MOU) to collaborate on the development of hybrid powertrains for surface haulage heavy mining equipment. Cummins and Komatsu will add hybrids to their product roadmaps of power technology solutions for progressive decarbonization in large mining haul truck applications.

General Motors is preparing to launch its new sixth-generation Small Block V8 engine, investing millions in its Tonawanda, New York, and Flint, Michigan, engine plants to produce the upgraded powertrains for the 2027 Chevrolet Silverado and GMC Sierra full-size trucks and SUVs.

Mercedes-AMG is developing a new, powerful, and more efficient V8 engine with a flat-plane crankshaft, set to be more powerful than its current 4.0-liter twin-turbo V8. This new V8 will be able to meet strict Euro 7 emissions standards and is expected to debut around 2026.

Major Manufacturers with Data Updates

- Caterpillar
- Cummins Engine Company
- Deere
- Deutz AG
- FPT Industrial
- Honda Motor Company
- Kawasaki Heavy Industries
- Kubota Corporation
- Toyota Motor Corporation
- Volvo Group

EnginLink™ Update Editor

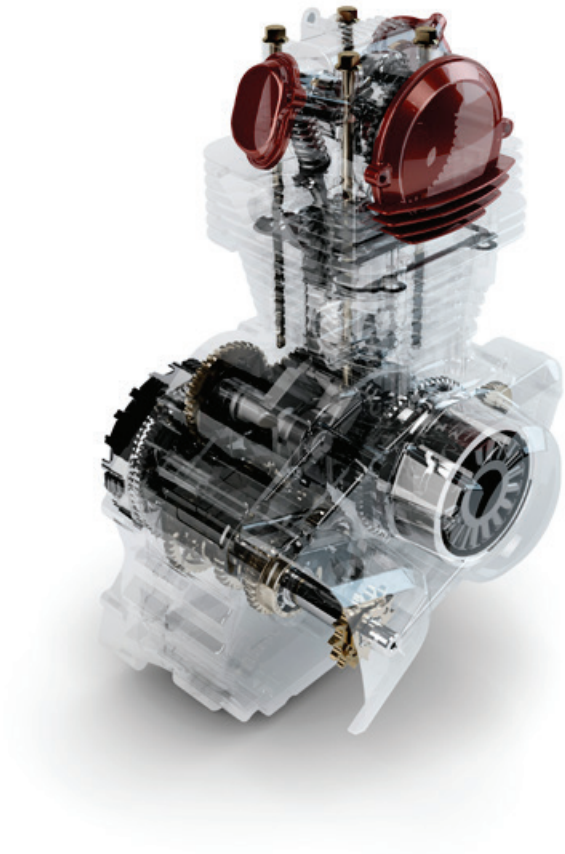
Jim Downey is Vice President-Global Data Products at Power Systems Research.

Engine Models Added

Manufacturer	Model
Baudouin (Weifang) Power Co., Ltd	4M06
Generac	21.9L
Cummins	QSK60-GS3, KTA50-G23, QSK60-G23
Harbin Dongan Auto Engine Co., Ltd	DAM15B G/CNG, DAM15B G/LPG
Perkins	403J-11G
Piaggio Veicoli Europei S.P.A.	MC49-EU4
Polaris Industries	MC1250-111 HP

New Engine Manufacturers & Name Changes in EnginLink™

No Updates This Quarter



IV. Forecast Trends

Global

Moderate Growth Expected Despite Geopolitical Issues

AGRICULTURAL. The Agricultural sector is showing consistent signs of good growth with around growth of +3.0% in 2025 before falling back in 2028 to +0.9%. The average growth rate remains at +2.3% and the market grows by +506k by the end of the forecast period. Most of this growth comes from China (averaging +3.3%) and India (averaging +2.5%) with Japan declining at an average rate of -0.8% over the forecast period

CONSTRUCTION. The global construction equipment sector is expected to grow by +2.7% in 2025 and then grow well for three years before dropping back to barely positive growth in 2029 and negative growth in 2030. The average growth rate remains at +2.0% and the market grows by +130k by the end of the forecast period. Of the major countries, China adds most of the volume with +74k by the forecast end.

INDUSTRIAL. Industrial starts the forecast period with a negative -0.3% but is expected to remain positive throughout the rest of the forecast period with average growth rate at a solid +2.3% and the market grows by 798,000 units by the end of the forecast period. The big two manufacturing countries remain in positive growth throughout the period with China averaging +3.9% and USA averaging +2.0%. However, the fastest growing major region is India with average growth of +5.3%.

LAWN & GARDEN. Lawn & Garden remains positive in all forecast years except for 2029 when it is expected to decline by -0.3%. The average growth rate remains at +1.9% and the market is expected to grow +2,711,000 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-3.6% contributes significantly to the 2030 market decline. Of the big five producers only China and Japan remain positive throughout the whole forecast period.

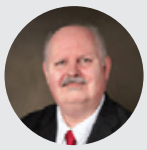
> *The global construction equipment sector is expected to grow by +2.7% in 2025 and then grow well for three years before dropping back to barely positive growth in 2029 and negative growth in 2030.*

LIGHT COMMERCIAL VEHICLES. This segment is expected to remain positive throughout the forecast period (except for 2025) with the average growth rate remaining at a good +2.0% and the market is expected to grow by +1,529,000 units by the end of the forecast period. Of the top two countries (China & USA) China remains positive throughout the period and adds +548,000 while the USA shows a mixed growth/decline figures throughout most of the forecast but still end the forecast period with decline of -65k

MARINE AUXILIARY/MARINE PROPULSION. This segment is expected to grow throughout the forecast period with the average growth rate of +1.9%, while the market grows by +87,000 by the end of the forecast period. Japan is the largest producer with over half the volume and is expected to grow by an average of +2.8% and add +53,000 units in volume

MEDIUM & HEAVY VEHICLES. This segment is expected to decline at the start and end of the forecast period. The average growth rate remains at +1.5% and the market grows by +379,000 by the end of the

Author



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Global: Moderate Growth Expected Despite Geopolitical Issues

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forecast period. Of the big three production countries, only China remains positive throughout the period with growth rates ranging from +2.9% to +4.8% and adding 223,000 in volume.

PASSENGER CARS/MINIVANS & SUVs. Generally, 2025 is expected to remain a solid year for these segments with a growth only topping +1.9%. Despite this, the average growth rate remains healthy at +2.9% (Minivans +3.4% and Passenger Cars at +2.4%) and the market grows by +101.698m 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 averaging +4.07% and USA +3.0%. Germany starts the forecast period off with a decline of -4.9% in 2025 before returning to growth for a few years

POWER GENERATION. Power generation is expected to continue to grow strongly during the whole of the forecast period with growth ranging from +2.1% to +4.0%. The average growth rate remains solid at +2.9% and the market grows by +1,210,000 by the end of the forecast period. The top 2 power generation countries (China and United States) show mixed result with China averaging +4.3% and USA averaging -2.5%

RAILWAY. Global railway production is expected to grow strongly throughout the forecast period with an average growth rate of +5.8% and increase in size by just under +2,000. The market is dominated by China (60% of the production) which is forecast to have an average growth rate of +3.5%.

RECREATIONAL PRODUCTS. This segment continues to grow strongly with volumes growing an average +3.7% and adding 21,614,000 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 which dominate the market (over 80% share) The key factors to better performance in recreational products are affordable personal transportation, significant demand for these products, the impact of electrification and higher consumer spending with more disposable income.

ALTERNATIVE POWER. After growth of +5.7% in 2025, Battery Electric Vehicles are expected to grow at between +7.2% and +8.5%, with an average growth rate of 7.1%, and add an extra 26,131,000 units by 2030. The Internal Combustion vehicles on the other hand are growing much slower with changes ranging from 0.1% to +1.7% and averaging +1.0%. **PSR**

North America

Slowing Growth, Weakening Labor Market

SUMMARY. The US economy is experiencing slower growth, inflation issues, and a labor market which is weakening. Forecasts for 2025 are showing subtle and below trend real GDP growth. Annual growth is projected to 1.9%. Inflation has climbed, pushed by goods exposed to higher tariffs rather than broader price demands. These tariff related impacts on inflation should be short lived. The Federal Reserve cut the interest rate by a quarter point in September 2025.

Factors affecting the North American economic picture include increased student loan debt, a frozen housing market, and the softening job market, as mentioned previously. Technology investment is helping to offset some of the limiting factors and has boosted economic activities. AI is a prime example.

North American total production, including all market segments, is expected to be down close to -3% in 2025 over 2024. The expectation for 2025 production is that many of the market segments (Agricultural, Construction, Industrial, Medium/Heavy Vehicles, and Recreational Products) will be down over 2024. A few segments are showing some growth; these include Lawn & Garden, Power Generation, and Railway. The forecast for 2026 is 2.2% for market growth.

AGRICULTURAL. Agricultural machinery production for 2025 is currently forecasted to decline -1.9% from 2024. Crops (cash receipts) were down in 2024 10% over 2023 and will be down again in 2025. The war in Ukraine is still having a dramatic negative effect on wheat and fertilizer exports and also is contributing to a slowdown in this segment. Current trade policy could also hurt this market in North America. Power Systems Research (PSR) anticipates 2026 will see an increase for this segment with a growth rate of 3.3%.

Author

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CONSTRUCTION. PSR is forecasting that in 2025 equipment production will drop by about -2.6%. Construction equipment's undeveloped demand is a factor as well as higher costs and some lingering supply chain issues. The impact of tariffs is also a contributing factor. However, government expenditures for infrastructure expansions should help with new equipment demand, as well as lower interest rates. PSR expects growth again in 2026. 2026 growth rates are projected to be up 3%.

INDUSTRIAL. The Industrial segment follows similar growth patterns that the Construction segment does. Industrial equipment production is expected to slow down in 2025 by 3.8% but rebound in 2026 by 2.6%. With predominant backorders, this segment is predicted to continue to increase. As mentioned earlier, the trade policy within North America currently may have a negative effect on the market. PSR is projecting a growth rate of 2.6% in 2026 over 2025.

MEDIUM & HEAVY VEHICLES. Medium and Heavy truck production in North America is expected to decline by 15.8% this year compared with 2024. The commercial truck market in North America remains in a "wait and see" mode with regard to truck sales this year. Uncertainty about the economy and the impact of the trade tariffs moving forward is causing hesitancy among fleets.

Many fleet owners also believe the EPA will modify or outright cancel the phase 3 GHG emission regulations

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thus significantly reducing the cost of the MY 2027 vehicles and effectively eliminating any significant 2026 truck pre-buy. At the time of this writing, PSR believes there will be no significant truck pre-buy through the rest of this year and a significantly reduced pre-buy if any, in 2026. Demand is expected to be strong in 2027 – 2029 as the fleets replace their aging trucks purchased in the 2022 – 2024 time-cycle.

RECREATIONAL PRODUCTS. Production of recreational products is expected to be down this year, 2025. Production is projected to decline by -1% this year compared to 2024. The rec products market has seen a decline in consumer spending in recent years. This segment is facing challenges including a weak retail in environment, overproduction, and high dealer inventories. This is leading to lower sales. 2026 should see a return to growth by at least 2 to 3%. **PSR**

Europe

Geopolitical Factors Affect Europe Economy

SUMMARY. Geopolitical tensions remain one of the major factors affecting the wider European economy. More than three years have passed since Russia invaded Ukraine, and progress towards a comprehensive peace remains elusive, largely stalled by the irreconcilable demands of both sides.

The war remains fierce, and Russia continues shelling Ukrainian lands, while NATO has stepped up its air defenses along the alliance's eastern flank with a new force, Eastern Sentry, following a recent Russian drone incursion into Polish airspace.

Furthermore, the Middle East has plunged into a new, alarming phase of conflict. Beginning June 13, 2025, Israel launched extensive aerial bombardments across Iran, targeting key infrastructure. Iran has swiftly retaliated with waves of ballistic missile and drone attacks against Israel, hitting targets in cities like Tel Aviv and Haifa, causing casualties and significant damage to infrastructure, including an oil refinery.

This escalating direct confrontation between Israel and Iran, alongside the ongoing conflict in Gaza and its spillover effects into neighbouring countries such as Lebanon and Syria, creates an extremely volatile environment. The situation intensifies disruptions in raw material supplies and trade routes, particularly impacting energy markets and shipping through critical waterways like the Strait of Hormuz, with profound implications for the global economy and European industrial production.

The current global political landscape, marked by President Donald Trump's second term in the United

States, has introduced renewed uncertainty regarding international trade and alliances. Following his January 2025 inauguration, President Trump implemented new tariff policies, including a 10% baseline tariff on most imports and higher "reciprocal" tariffs.

After intense negotiations, the EU and US announced a new trade deal in late July. While the agreement initially appeared to provide a degree of certainty with a maximum 15% tariff on most EU exports to the US, the foundation of this deal has since been eroded by the US government's actions.

In a unilateral move after the deal was signed, the US announced that the 50% tariff on steel and aluminum would remain in place and would also apply to the metals' content in machinery. This change effectively undermines the spirit of the agreement and reintroduces significant uncertainty for a key component of European industrial production. This action once again highlights the unpredictability and unreliability of the current US government's trade policies, making it difficult for European businesses to plan and invest with confidence. The escalating trade friction creates significant challenges for European businesses, complicating planning, investment, and potentially impacting economic growth.

In direct response to the deteriorating security environment, European institutions are making an

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Emiliano Marzoli and Natasa Mulahalilovic contributed to this report.

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unprecedented push for the rearmament of the continent. The European Commission, alongside the newly constituted European Parliament (following the June 2024 elections), and the European Council, have jointly launched ambitious initiatives like the "ReArm Europe Plan" and the White Paper for European Defence – Readiness 2030 (March 2025).

These strategies aim to significantly bolster European defence capabilities and strengthen the continent's defence industrial base through measures such as the Security Action for Europe (SAFE) Instrument, which plans to provide up to $172.5 billion USD (€150 billion) in loans for common procurement, encouraging national defence spending, and fostering cross-border industrial partnerships.

Despite these significant external pressures, the European economy is showing more tangible signs of stabilization in mid-2025. While 2024 ended worse than initially expected, a slight improvement is forecast for the remainder of 2025. The manufacturing industry is likely to show a small percentage increase in the latter part of the year, and key markets like housing and infrastructure development are picking up thanks to more stable, albeit still elevated, interest rates.

Nevertheless, inflation is yet to consistently reach the European Central Bank's 2% target, and the complex geopolitical and trade environment suggests it may trend closer to 3% throughout the year.

The UK economy has also shown a modest recovery, with real GDP growth expected at 0.8% for 2025 and 1.6% for 2026. However, this is largely driven by household spending and faces headwinds from high inflation, which is expected to remain above the Bank of England's 2% target through 2026.

The UK's manufacturing sector has also been hit hard by high input costs and a challenging global environment. The new trade deal between the US and EU and continued geopolitical uncertainty, while not directly involving the UK, still weigh on British exports and overall business confidence.

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Looking ahead to 2026, the European Commission projects a modest acceleration in economic growth, with EU real GDP expected to reach 1.5% and the Euro area at 1.4%. This anticipated pickup is driven by a rebound in private consumption as real wages continue to recover, coupled with a stronger recovery in investment, supported by ongoing EU funding programs. The labor market is also expected to remain robust, with unemployment falling to a new historic low.

For the UK, forecasts project continued growth of around 1.6% in both 2026 and 2027. The labor market in both the EU and UK is expected to remain robust.

Several factors are poised to influence a mild revival in orders during 2025, including the economy's resilience, recent ECB monetary policy adjustments, and clarity from the concluded European Parliament elections. We'll closely monitor the market, particularly given the difficult economic environment in Germany, a key European industrial market.

The newly elected German government, following the February 2025 federal election, plans an ambitious program to revitalize the economy. Beyond reforming the debt brake for increased public spending, a significant focus is on a $575 billion USD (€500 billion) special investment fund for infrastructure, climate protection, and green transformation over the next twelve years. Furthermore, the government approved a $52.99 billion USD (€46 billion) tax break package for companies, designed to stimulate the economy from 2025-2029 through preferential depreciation, a gradual corporate tax rate reduction to 10% by 2032, and enhanced research incentives.

The confluence of ongoing geopolitical conflicts, escalating trade protectionism, and internal economic adjustments creates a highly uncertain environment. These formidable headwinds significantly increase the downside risks, casting a shadow over the otherwise timidly positive forecasts for Europe's industrial production and overall economic outlook.

AGRICULTURAL. Some momentum has already appeared in the market during H1 2025, and the outlook for this year, even though not very good, is slightly better than 2024. This should translate into an uptick in sales and production for 2025, although it might take a few months to fully manifest itself, as many players are still expressing some concerns. Low overall market confidence could delay the recovery. Although we know what the tariffs should be, which should help the market, we are still seeing more threats from the US to increase these tariffs as pressure to get the EU to bend to their ways.

> *Looking ahead to 2026, the European Commission projects a modest acceleration in economic growth, with EU real GDP expected to reach 1.5% and the Euro area at 1.4%.*

Nevertheless, the last few months has been highlighted by a slight uptake in business activity and higher business activity expectations for the next six months reported by the CEMA (European Agricultural Machinery Association) barometer could indicate some light at the end of the tunnel.

CONSTRUCTION. This segment is following the same trend that we see in the Agricultural Segment. Demand, similar to the agricultural segment, declined in 2024. We are seeing this decrease across many business activities, especially in the residential and private sectors. We are seeing a clear decrease in activity reported by CECE (Committee for European Construction Equipment) and other trade associations. The overall trend is likely to mimic Agricultural, and we can expect it to recover slightly in 2025, but it seems that it will take a few months for it to be felt. It's possible that the recovery process could take longer due to a possible shortage of labor to fill so many incentivised positions.

The same risks are applicable to Construction as to the other segments, tariffs being tricky to navigate as the US

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was the primary export country. Similarly to the CEMA, the CECE's members have reported the possibility of slightly higher revenue and order intake for the next six months.

LAWN AND GARDEN. We are seeing a slowdown overall due to lower demand, especially on the residential consumer side. The same risks could be reduced by the electrification shift that is increasingly prevalent throughout the EU. The overall segment slowed in 2024, partly due to the lower sales and order intakes.

There was hope that the consumer side of this segment would be balanced by professionals and new homeowners which bring a certain level of elastic demand. Unfortunately, this was not the case for 2025, but we are seeing some signs that a small recovery will take place this year but not quite enough to offset the decrease from last year.

Furthermore, 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. This trend, while small, should continue to be fuelled by the many electrification incentives being pushed into 2025 for many member states.

INDUSTRIAL. This segment has been experiencing similar trends to both Agriculture and Construction on a more subdued level. Although it is also going to be a negative year overall, it won't be as impacted as Ag and Construction. We expect this trend to turn around in 2026 showing an overall slight recovery, not yet catching up to 2023 levels. We saw a few applications outperform others such as forklifts and terminal tractors, which are likely to see some slowdowns to come due to the new tariffs and economic situation.

MARINE PROPULSION. This segment will remain relatively flat overall in 2025 as it starts to feel the effects of reduced demand. We expect this segment

to taper off as the year continues. There are still some issues that must be resolved before recovery can regain full momentum. We expect this slowdown to continue throughout 2025, but to pick up around the end of the year.

PLEASURE BOATS. The European pleasure boat market is clearly facing numerous challenges, including inventory overhang, economic uncertainty, exchange rate fluctuations, stock market volatility, tariffs, high interest rates, rising marina fees, and unclear regulations. All European countries, including Turkey, are experiencing a market slowdown in 2025, with no significant recovery expected by year-end. Builders such as Beneteau, Hanse Yachts, and others have reported sales declines of more than 10% in the first half of the year.

Sales of motorboats in the 5–9-meter range, priced up to €200,000, are particularly difficult, as potential buyers are increasingly price-sensitive. The medium-sized motorboat market faces strong competition from the second-hand sector. Prices of new boats have risen by 35–40% over the past few years due to higher material and labor costs, while interest rates have also climbed. As a result, many potential buyers are turning to more affordable alternative markets.

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The luxury superyacht segment has shown resilience. Buyers in this category are less sensitive to inflation and supply chain disruptions. Although order volumes have declined compared to the exceptionally strong post-Covid years, this return to normalization is not viewed negatively. Many superyacht builders are focusing on sustainable technologies, investing in hybrid systems and high value builds over volume.

The sailing boat market, however, is in crisis, as younger generations of boaters show little interest. Traditional sailing boat manufacturers are therefore seeking innovations that make navigation easier and more appealing for new customers.

Export-oriented manufacturers are under pressure. The most important export market for European builders is the United States, where tariffs have negatively impacted sales and created significant financial uncertainty.

The electric and hybrid sector depends heavily on government regulations. The most advanced requirements for non-fossil boating—both inland and offshore—are being implemented in Italy, the Netherlands, and Scandinavian countries. Advances in battery technology, the development of charging infrastructure, and rising environmental awareness are driving rapid growth in this segment of the marine industry.

Looking ahead, the marine leisure industry remains cautious about market growth in 2026. Inventory needs to be cleared, and inflation along with other economic factors must stabilize across all regions to restore buyer confidence. For now, no expert can accurately predict when the wind will truly shift. Most manufacturers have decreased their 2025 production level and have adopted A “wait and see” strategy for the near term. The first half of 2026 will most probably remain calm with no significant positive new boat sales movements in motor and sailing segments. Electric boats market will grow by 5 to 10% thanks to the specific and very local environmental requirements.

PASSENGER CARS, MINIVANS & SUVs. The European passenger vehicle market continues to navigate a complex and challenging environment in mid-2025. While total new car registrations in the EU saw a slight decline of 1.2% in April 2025 year-to-date compared to the same period last year, this masks a significant underlying transformation. Production of passenger vehicles decreased by 2% in 2024, the CAGR compared to 2019 is an alarming -8%, or some 400,000 vehicles. This trend will continue in 2025, with large groups like Volkswagen and Stellantis announcing production cuts in the next 12 months.

Export-oriented manufacturers are under pressure. The most important export market for European builders is the United States, where tariffs have negatively impacted sales and created significant financial uncertainty.

In addition, new average CO2 emissions rules have entered in force in January 2025, with a potential (unlikely) effect of billions of euros in fines towards OEMs that will not be able to lower their average fleet CO2 emissions. However OEMs are allowed to buy credits from other OEMs, and this should enable them to avoid expensive fines.

The Euro 7 emissions standards soap opera has come to an end. With the latest developments, EU lawmakers have agreed to leave limits on toxic NOx and the mass of particles emitted from new cars untouched. Furthermore, the new standards have been postponed until 2029. The new regulations put the EU in a follower position on environmental standards, behind the more stringent US EPA tier 3 Final and China 6b standards. The latest developments highlight the way in which the car industry is regaining its weight and power after a few years of weakness following Dieselgate in 2014.

While BEVs increased their market share to 15.3% in April 2025 YTD, the overall market for new car registrations saw a decline, and the growth in BEV sales

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has been slower than initially anticipated by some. Affordability, charging infrastructure disparities, and macroeconomic conditions continue to be significant barriers to wider EV adoption.

Concurrently, Chinese and, to a lesser extent, Indian manufacturers, are rapidly penetrating the European market. In Q1 2025, Chinese brands saw a remarkable 87% increase in passenger car sales in Europe (EU, EFTA, UK) compared to Q1 2024, despite the overall market contraction. They are offering increasingly cheap and practical EVs, along with internal combustion engine (ICE) and plug-in hybrid (PHEV) options to appeal to a broader audience.

BYD, a leader in battery and EV production, is actively developing its production facility in Szeged, Hungary, with an expected opening in October 2025. This move, along with another planned facility in Turkey, aims to establish local production to mitigate potential future EU tariffs and to offer "Made in Europe" EVs, further intensifying competition.

POWER GENERATION. Gen-Set production and demand in Europe was hurt by the pandemic. However, the sector quickly rebounded in 2022. Demand remained positive in 2023, but we saw signs of a decrease in the last months of last year. 2024 will turn negative for this segment, when final numbers are available, but this is not a surprise, given the unprecedented levels gained during 2022 and 2023.

However, with a rebound in investments towards the end of the year, Gen-Set demand will start to pick up, and in 2025 the segment will return to a timid growth, followed by a more robust performance in 2026.

RECREATIONAL PRODUCTS. The segment was taken by storm at the end of November 2024: KTM AG, Europe's largest motorcycle manufacturer, is currently facing significant financial challenges that have led to a strategic restructuring plan. Its parent company, Pierer Mobility AG, confirmed the successful completion of the restructuring plans in mid-June 2025.

This was largely facilitated by the extensive involvement of India's Bajaj Auto International Holdings B.V., which acquired a majority stake in May 2025, preventing the liquidation of the Austrian manufacturer.

The crisis stemmed from a massive decline in demand, high inventory levels, and quality problems that led to an insolvency filing in November 2024. Production at the main Mattighofen plant was interrupted in December 2024 but began restarting in phases from March 2025, with all four production lines expected to be back in operation by summer 2025.

As part of the recovery plan, KTM has been deliberately reducing its production volume, with a 26% decrease in 2024 compared to 2023, aiming to reduce global inventories by about 40,000 units. This destocking effort continued into Q1 2025. While sales for the current fiscal year are expected to decline due to these production losses, the focus is on bringing supply and demand back into balance.

The European two-wheeler market (motorcycles and scooters) is undergoing a period of adjustment. After several years of growth, Q1 2025 saw a significant decline in sales in Western Europe (including the UK), down by 16.6%. This sharp drop is largely attributed to a strong push for self-registrations by OEMs in late 2024 to clear Euro 5 stock ahead of new noise limits. Manufacturers have been focused on selling off these pre-registered vehicles, impacting new year sales.

Despite this initial downturn, the broader economic outlook for Europe is one of modest recovery, with GDP growth projected to accelerate to 1.5% in the EU for 2025 and 1.8% for 2026. This economic improvement is expected to support a gradual market recovery for motorcycles and scooters in 2025-2027.

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

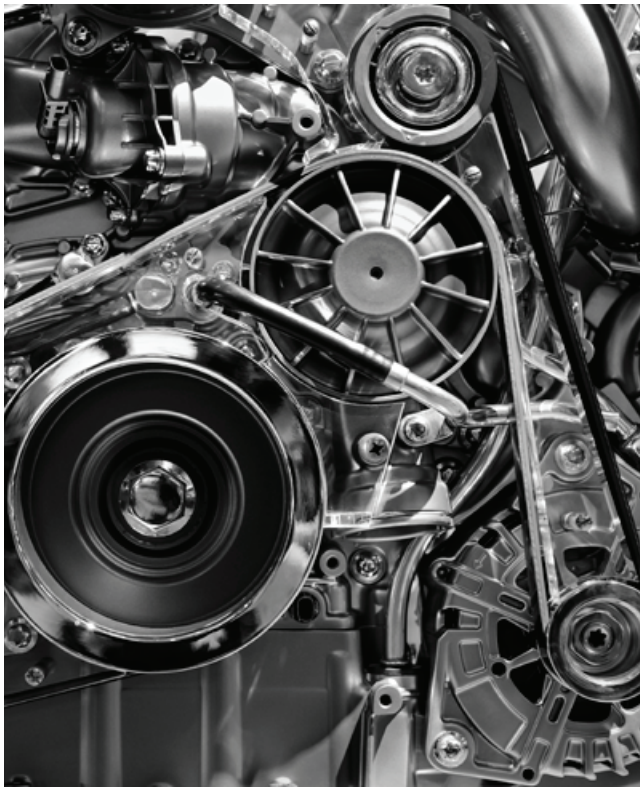
2025 GDP Growth Projected at 4.5%-5.2%

SUMMARY. In 2025, China's GDP is forecast to grow 4.5%–5.2%, with consumption the main engine. Subsidies and "trade-in" rebates should lift retail sales about 4.8% and services sales above 5%, accounting for roughly 60% of the expansion. However, still-constrained job and income expectations keep the marginal propensity to spend below pre-COVID levels.

GFP is expected to see a moderate yet stable trajectory through 2025 and into 2026. While the economic structure is continuously improving, challenges such as insufficient domestic demand and the ongoing real-estate adjustment, along with a persistently turbulent external environment, pose risks to sustained and stable growth. Based on these assessments, GDP growth in 2026 is forecast at around 4.2%.

Real estate remains a drag—floor-space sold may fall another 3–5% and property investment by approximately 10%, suppressing durable-goods demand. Fiscal policy will offset part of the slump: the headline deficit is set to rise to 3.8%, augmented by $590.52 billion USD (RMB 4.2 trillion) in special bonds and $140.6 billion US dollars (RMB 1 trillion) in fresh long-maturity infrastructure bonds, adding an estimated 0.25 % to GDP.

External tariffs and conflict risks are the biggest wildcards: if the U.S. raises China tariffs 5–20% later this year, export growth could drop 1% and GDP about 0.15%; possible EU follow-up and Red Sea shipping disruptions could push full-year export growth down from an early high to 2–3%. Netting these forces—consumption support plus fiscal easing covers roughly 70% of the property drag, but weaker foreign demand



turns net exports negative—GDP is most likely to land around 4.8%.

AGRICULTURAL: In 2025, China's agricultural machinery market subsidy policy shifts from "broad-based" to "precision-guided," with both the volume and structure of funds upgraded. The land-scale management rate is set to exceed 32%, releasing steady demand for high-horsepower, multi-function machines.

Driven by this structural need, a shrinking agricultural workforce, and buoyant exports, industry sales are expected to surpass RMB 290 billion, growing more than 8%. Penetration of large, new-energy and smart equipment is accelerating, and domestic brands are using cost advantages to crack foreign monopolies. Yet the sector must watch for risks of demand pull-forward, inventory build-up, fading subsidies, lower grain prices and rising trade barriers in emerging markets; competition is moving from price wars to an integrated contest of technology and aftermarket service capabilities.

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- **Subsidy Policy.** China is carrying forward the 2024-2026 three-year support framework. In 2025, the central government allocated RMB 24.5 billion for purchase and application subsidies, 8% more than last year; an additional RMB 12 billion is earmarked for scrappage and replacement. High-spec machine powershift transmissions, GNSS-guided models and new-energy tractors—receive "premium-machine premium-subsidy" treatment, with maximum grants reaching 50% of the sale price, sharply lowering the entry barrier for top-end equipment.
- **Market demand.** Driven by ever-larger farm scale and a shrinking rural workforce, domestic sales are forecast at 580,000 tractors (+6%) and 180,000 harvesters (+9%). Exports remain buoyant: full-year shipments could hit RMB 65 billion, up more than 10%, with ASEAN, Africa and South America together accounting for 65% of the total and providing the main incremental volume.
- **Product:** Sales of 200-hp-plus powershift and CVT tractors are expected to double, pushing their market share above 10% for the first time. Driverless tractors, plant-protection drones and compact machines for hilly terrain—categorized as "large-and-small smart lines"--enjoy a 20% subsidy top-up and are growing more than 40% annually, propelling the sector toward high-end, green and intelligent technology.

CONSTRUCTION: In 2025, China's construction machinery market is projected to exceed one trillion RMB, exhibiting a "stable growth with quality improvement" trend. Intelligentization and digitalization, such as 5G and AI-driven unmanned excavators and remotely controlled cranes, along with the transformation towards new energy, will drive the product structure towards high-end and large-scale equipment. The "Belt and Road" Initiative will expand the export market and increase the international share of high value-added equipment, pushing the industry towards a new stage of high-quality development characterized by green and low-carbon practices and technological leadership.

Meanwhile, the market will grow moderately due to policy support and the need to renew aging equipment. In 2026, the market size is expected to further expand as global construction activities increase, and demand grows in emerging markets. Chinese construction machinery companies will accelerate their global market expansion, and the market concentration index will rise.

> *In 2025, the central government allocated RMB 24.5 billion for purchase and application subsidies, 8% more than last year; an additional RMB 12 billion is earmarked for scrappage and replacement.*

Domestic Market– From Policy Sparks to Structural Replacement. China's 2025 "equipment-renewal" (ultra-long special treasury bonds (RMB 1.3 trillion) and local-government special-purpose bonds (RMB 4.4 trillion) is accelerating infrastructure investment, with mega-projects such as the Yarlung Zangbo River hydropower plant, western desert solar bases (demand for 8-hour-battery electric loaders up 40%) and county-level 5G towers (micro-excavator sales +18%).

Meanwhile 0.8 m Stage-III machines are hitting their 8-10-year swap window; scrappage bonuses plus 2.5% bank loans are pushing the renewal share of domestic sales to 48%, double the 2022 level. Electric/5G-autonomous models have jumped to 25% penetration, and regional patterns are crystal-clear: eastern provinces buy high-end upgrades for urban-renewal sites, central/western regions order 200-t-class mining trucks for new open-pit copper mines, while county economies absorb 1.5-t "zero-tail" units for fiber-optic trenches.

Net result: domestic revenue is tracking RMB 920 bn in 2025 (+12%) and should hold high single digits in 2026 even if infrastructure budgets normalize, because the replacement cycle still has two years to run and rental fleets are only 55% electric.

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Export Market – Value-Up and Geo-Spread. Overseas sales are no longer a commodity overflow channel. Jan-Jul 2025 excavator exports hit 102,000 units (+10%) and are heading for 220,000 units and USD $58 billion (+13%) for the full year, helped by a 20% price advantage and 30-day lead times versus 90 days for European OEMs. Chinese 8-hour-battery electric loaders and 200-t electric mining trucks are winning mine-site trials in Chile and Australia because they cut diesel costs 60% and meet Tier-4 Final without a premium. As a result, electric & hybrid machines will account for 32% of export value in 2025 (up from 18% in 2023) and >35% in 2026.

Geographically, Africa and Latin America are growing more than 15% as Chinese firms bundle EPC finance with local CKD plants; Europe and North America, pressured by carbon rules, have tripled orders for Chinese electric 16-t excavators despite talk of CBAM tariffs. CKD nodes in Mexico, Poland and Indonesia plus 24/7 cloud-parts hubs have slashed delivery times to seven days and keep FX risk inside regional balance sheets. Overall, exports are on a 10–12% CAGR path through 2026, raising the overseas share of total industry revenue from 38% today to an estimated 45% and providing a natural hedge.

INDUSTRIAL: China's forklift market is expected to maintain steady growth, with market size projected to reach RMB 120–150 billion by 2025, although the growth rate may slow compared to previous years. Driven by expanding domestic demand and continuous technological innovation, China will remain the world's largest forklift market.

From a macro perspective, stable economic growth, rapid expansion of the logistics industry, manufacturing transformation and upgrading, and accelerated construction of warehousing and logistics facilities will provide strong demand momentum for the forklift market. Meanwhile, rising labor costs and stricter environmental regulations are prompting enterprises to increasingly adopt electric forklifts, driving the industry toward greener and smarter solutions.

In terms of product trends, electric forklifts will continue to increase their market share, accounting for over 60% of total sales by 2025. Lithium-ion battery forklifts, benefiting from higher energy density, longer lifespan, and faster charging capabilities, will gradually become mainstream. With the development of intelligent warehousing systems, demand for automated guided vehicles (AGVs) and unmanned forklifts will also grow rapidly. Additionally, customized, lightweight, and compact forklifts tailored to specific application scenarios will become increasingly popular in the market.

Regarding the competitive landscape, China's forklift market remains relatively concentrated, dominated by a few leading domestic and international companies. Domestic brands continue to make progress in technology and quality, gradually narrowing the gap with foreign brands, though market competition remains intense, and price wars occasionally occur. In the future, comprehensive service capabilities, including after-sales support, leasing, and maintenance services, will become critical competitive advantages for enterprises, further shaping the industry landscape.

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Between 2025 and 2029, the scale of China's forklift market is expected to maintain steady growth, with especially notable expansion anticipated in the fields of new energy forklifts and intelligent forklifts.

LAWN AND GARDEN: China's gardening machinery market presents a three-pronged landscape of upgraded domestic demand + differentiated exports + technological iteration. In the domestic market, rising urbanization rates (projected to exceed 70% in 2025), upgraded household gardening consumption, and higher municipal greening standards are driving average annual demand of over 8% for products such as lawnmowers and hedge trimmers, with significant trends towards high-end products (such as intelligent robotic lawnmowers) and lightweight designs (lithium-ion battery-powered handheld devices).

In terms of exports, the European and American markets are being forced by environmental regulations (such as the EU's new emission standards for small engines in 2025) to rapidly increase the proportion of electric products to over 50%, while emerging markets such as Southeast Asia and the Middle East still primarily rely on cost-effective gasoline engine models. However, with the improvement of photovoltaic energy storage facilities, the penetration rate of electrification is expected to exceed 30% in the next three years.

The entire industry's technological path is accelerating its transformation from fuel-powered to brushless motors and intelligent IoT. At the supply chain level, domestic companies are gradually breaking the monopoly of European and American brands in the high-end market thanks to their lithium battery production capacity advantages (accounting for over 70% of the global total) and modular design capabilities. However, they need to be wary of international carbon tariffs, patent barriers, and shortcomings in localized services.

Overall, the industry will enter a "period of electric technology dividend release" in 2025, with clear structural opportunities driven by both domestic sales and overseas expansion.

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MEDIUM AND HEAVY VEHICLES: At the national level, subsidies for scrapping and updating old commercial trucks and the promotion of new-energy heavy-duty vehicles are accelerating fleet renewal. In 2025, for example, trucks that meet only China IV or earlier emission standards are now eligible for grants, spurring heavy-duty replacement demand. Supported by these environmental policies, new-energy heavy-duty trucks have already reached 13.6% market penetration in 2024 and are expected to climb to 30-35% in 2025.

Although the economic recovery remains fragile and fixed-asset investment growth has slowed, the replacement of aging vehicles is providing a solid backstop for the market. The sales peak recorded between 2017 and 2021 means that roughly 600,000 heavy-duty trucks will need to be replaced each year from 2025 to 2030.

The heavy-duty truck market rebounded in H1 2025, with cumulative sales reaching 535,600 units, up 6% YoY; June alone recorded 94 thousand units, achieving both YoY and MoM growth. New-energy heavy-duty trucks were the main driver, selling nearly 78,000 units in the first half, a surge of 182% YoY, and June's NEV heavy-duty sales are expected to hit 16,000 units, an all-time high.

At the same time, the fuel mix is shifting rapidly: diesel's share fell to 51.3% in January-August, while natural gas accounted for 25.5% and pure electric for 22.2%. Thanks to policy subsidies and lower operating costs, new-energy heavy-duty trucks are quickly penetrating urban logistics, sanitation and other applications.

On the technology and product front, new-energy solutions are leading the way. Battery-electric heavy-duty trucks dominate thanks to zero tailpipe emissions and lower operating costs, while battery-swap mode—refueled in 3–5 minutes—is becoming a key growth path, with over 5,000 swap stations slated for 2025.

Fuel-cell trucks are also gaining ground in long-haul routes where range and fast refueling are critical. Simultaneously, intelligence and connectivity are accelerating: L4 autonomous-driving trucks are already in commercial use at ports and mines, and advanced telematics platforms are raising fleet efficiency and safety, emerging as a prime avenue for brand differentiation.

> *At the national level, subsidies for scrapping and updating old commercial trucks and the promotion of new-energy heavy-duty vehicles are accelerating fleet renewal.*

PASSENGER CARS: The passenger car market will see a rise in new energy vehicle (NEV) sales, with NEVs accounting for a higher market share. Traditional fuel vehicles will gradually lose market share due to environmental policies prioritizing green and low-carbon development. NEVs are expected to make up a larger proportion of total vehicle sales.

In terms of fuel types, NEVs, especially pure electric vehicles (BEVs) and plug-in hybrid vehicles (PHEVs), will see significant growth. The domestic market will witness robust demand for passenger vehicles, driven by factors like rising disposable incomes and the need for transportation.

The government is likely to continue offering subsidies and incentives to promote the adoption of NEVs, such as purchase tax exemptions and subsidies for R&D, to reduce costs and enhance competitiveness.

The overseas market will present substantial opportunities for Chinese passenger vehicle exports, with NEVs in demand. Exports of Chinese passenger vehicles will increase, with NEVs making up a larger share. In 2026, the passenger vehicle market is expected to maintain its growth momentum. Technological advances and cost reductions will further boost NEV sales. Domestic demand will stay strong, and the government is likely to continue supporting the industry through favorable policies. Exports will also grow, with Chinese passenger vehicles, especially NEVs, becoming more competitive in overseas markets.

POWER GENERATION: The generator set market will meet a significant structural divergence: high-

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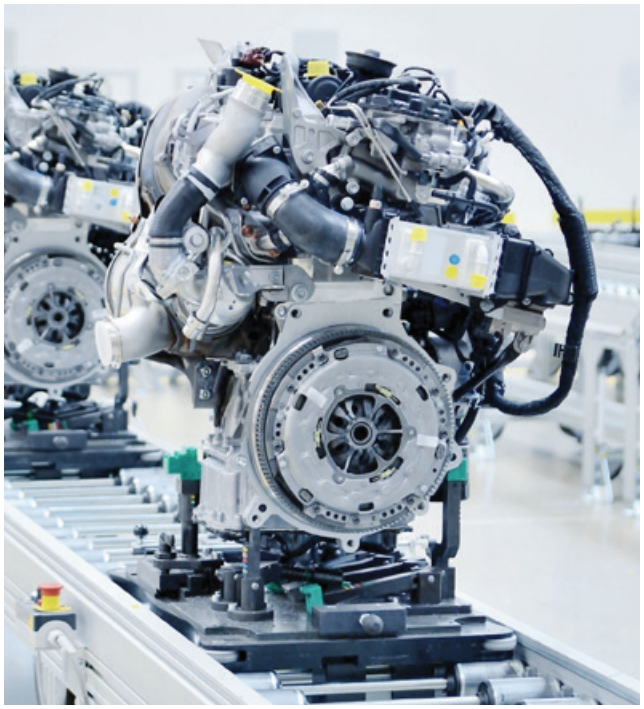
horsepower diesel generator sets, and natural gas generator sets are expected to maintain stable growth, driven by both the energy structure transition (coal-to-gas conversion) and the demand for backup power generation to support renewable energy sources.

Conversely, small gas generator 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 generator 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 exhibits a differentiated characteristic of being driven by both traditional rigid demand + energy transition, with technological iteration and regional policies becoming key variables.

RECREATIONAL PRODUCTS: As a marginalized industry, China's motorcycle market is projected to exhibit a marked trend of structural differentiation. 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 and small-to-medium-sized cities.

However, due to increasingly stringent environmental policies and growing consumer awareness of sustainability, overall growth may decelerate or even contract in certain segments. In contrast, electric motorcycles stand to benefit from rising urban short-distance travel needs, government policy support, and technological advancements such as improved battery performance and broader charging infrastructure. While their share is expected to grow in first- and second-tier cities, as well as some smaller urban centers, they also face intensified competition and serious challenges with product homogenization.



On the export side, gasoline-powered motorcycles remain competitive in emerging markets like Southeast Asia and Africa, thanks to cost advantages and mature manufacturing processes. Nevertheless, manufacturers must closely monitor tightening emission and safety standards globally, proactively upgrading products and ensuring compliance. Electric motorcycle exports will profit from worldwide electrification trends and China's strengths in battery technology and vehicle manufacturing, offering significant future potential. However, companies must bolster brand development, product safety certifications, and after-sales service systems to meet diverse international market demands.

Overall, by 2025, China's motorcycle market will be driven by a dual momentum of traditional rigid demand + technological transformation. Domestically, the market structure will adjust substantially, with electric motorcycles gaining momentum while gasoline-powered models maintain a stable footing.

In exports, product compliance and brand advantages will be crucial, alongside continued efforts to explore emerging markets. To adapt to changing conditions at home and abroad, companies should harness the opportunities of industrial transition by accelerating technological R&D, expanding market deployment, and adopting flexible product strategies. **PSR**

Far East (Japan and South Korea)

Responding to Rapidly Changing Surroundings

JK **JAPAN SUMMARY:** The Q2 2025 forecast remains largely unchanged. The Bank of Japan is expected to keep its policy interest rate at 0.5%, and the CPI is projected to be between 2.5% and 3.0% for fiscal year 2025. The hottest summer on record has led to sustained peak electricity demand, causing a surge in demand for emergency power sources and distributed power generation..

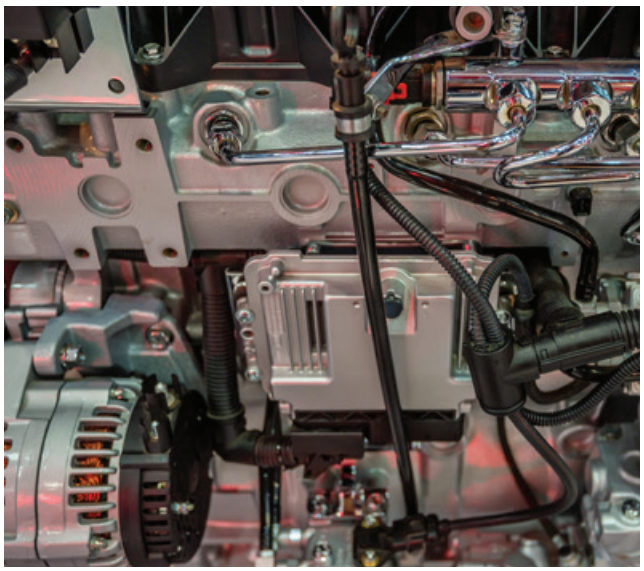
Positive Aspects

- Wage Increases: The wage increases for the spring 2025 labor negotiations are +5.25%, the highest in 34 years. This increase is expected to boost consumer spending.
- Energy Stabilization Efforts: Since April 2023, Japan's LNG import prices have remained stable, and procurement risks have been mitigated through strategic stockpiling.

Negative Aspects

- The prolonged yen depreciation raises concerns that inflation could worsen household sentiment once more.
- The shortage of electricity, childcare, and water directly affects every segment.
- Labor shortages in manufacturing have reached critical levels. It is difficult to transfer skills and hire personnel, which is also causing delays in introducing new equipment.

The impact of U.S. tariffs on Japan has two aspects: direct cost increases for targeted products and indirect



ripple effects on Japanese companies due to tariffs on China. In the short term, this will likely lead to increased prices and reduced margins. In the medium term, it will encourage investment in localizing production in North America and diversifying procurement sources.

SOUTH KOREA SUMMARY: ISouth Korea's manufacturing sector has shown a recovery trend since Q2 2025. However, various challenges have emerged, creating a difficult situation.

Positive aspects

- Semiconductor exports are performing well.
- To support the cash flow of households and businesses, the government will ease its interest rates.

Negative aspects

- The manufacturing recovery has slowed due to uncertainty regarding external demand.
- From 2022 to 2024, industrial electricity rates rose by approximately 70%. This increase has significantly affected manufacturing costs.
- Stagnation in the construction sector

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South Korea faces three layers of pressure from U.S. tariffs: restrictions on steel volume, spillover effects from tariffs on China, and uncertainty over auto tariffs. South Korea is attempting to mitigate these effects through localization and supply diversification. The degree of impact will vary significantly depending on the final details of the latest agreement.

AGRICULTURAL. Japan. IRice prices have risen, and the government's policy to increase rice production makes the market robust compared to previous years. However, the aging population of farmers and the population decline present structural challenges, making it essential to implement mechanisms that lower barriers to introducing agricultural machinery, such as sales financing and shared use.

The implementation of smart agriculture equipment is gradually progressing. In 2026, new technologies centered on automated steering will be more widely adopted, and value-added services such as remote monitoring and preventive maintenance will grow. Although unit sales are projected to decline slightly, they could stabilize at roughly the same level if sales performance remains strong. Revenue is expected to grow, driven by the high-value-added strategy.

AGRICULTURAL. South Korea. In June 2025, the government announced a cross-ministerial initiative that encompasses technology, human resource development, and the promotion of the equipment industry. The initiative aims to strengthen data utilization and the adoption of smart agricultural machinery. It remains to be seen how much this will boost adoption. Currently, the adoption rate of smart agricultural machinery in the field is low. In 2026, fluctuations in interest rates and energy costs could hinder sales.

CONSTRUCTION. Japan. Domestic demand, including public works and replacement demand, as well as service-oriented growth, such as rental operations and remote maintenance, will be the key drivers. However, external demand will be held back by uncertainties in trade and resource prices. This will likely result in a slight decline in 2025. As the rental ratio increases,

Far East: Responding to Rapidly Changing Surroundings

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direct purchases by users will slow due to a cooling investment climate. Manufacturers have proposed adopting compact machines and electric models, but the response has been muted as growth in the construction market slows.

CONSTRUCTION. South Korea. Major manufacturers cite prolonged inventory adjustments and sluggish domestic demand shipments. Weak domestic construction investment, interest rates, electricity costs, and U.S. trade uncertainties pose headwinds. A recovery is expected in 2026, primarily for mid-class models, driven by a rebound in the global demand cycle. However, U.S. tariffs and exchange rates continue to pose risks.

MARINE. Japan. The order backlog for merchant ships remains high at approximately 29.84 million GT, equivalent to about 3.7 years of production, indicating robust demand. Japanese shipping companies are adopting LNG/methanol fuels at a greater rate, and ammonia-fueled engines are entering the market, which is accelerating investments in decarbonization. However, challenges remain, including shipyard labor shortages and an aging workforce, which makes technology transfer difficult. Rising costs also pose challenges.

Demand for outboard motors remains steady in the small-to-medium class, while personal watercraft (PWC) sales are slowing. Electrification remains extremely limited. Overseas, the trend is toward larger sizes and higher power outputs, and manufacturers are accelerating the renewal of their mid-to-high horsepower ranges. However, Japan's chronic shortage of mooring space and lack of marinas capable of accommodating large vessels makes large outboards hard to sell.

Growth in 2026 is expected to be flat or limited to a slight increase of around 2%.

MARINE. South Korea. The backlog of orders for commercial ships remains substantial, and South Korea is expected to maintain its position as the second-largest market shareholder after China for several more years. Gas carriers and large vessels are projected to boost profits in 2026. Furthermore, there are ongoing discussions about contributing to the revival of the U.S. shipbuilding industry. Compared to other sectors, South Korea's shipbuilding industry is relatively robust.

INDUSTRIAL. Japan. The forklift market is expected to remain largely unchanged in 2025. Investment is being driven by logistics automation and e-commerce growth. While 2026 won't see dramatic growth, the market should experience steady growth. The shift to electric models is also accelerating.

RECREATIONAL PRODUCTS. Japan. In the first half of 2025, domestic motorcycle sales totaled 182,040 units, which is a 0.9% decrease from the previous year. Meanwhile, electric models are growing in popularity. Small electric scooters are underpinning the market's growth.

However, challenges remain, including the slow development of charging and battery-swap infrastructure and high vehicle prices, which hinder adoption. Notably, the price gap between Japanese and mainly Chinese brands hinders the spread of Japanese brands in overseas markets. Sales volume in 2026 is projected to remain flat or see slight growth. **PSR**

Southeast Asia

Situation Differs from Country To Country

SUMMARY. Although Southeast Asia's manufacturing sector is generally recovering, the outlook varies by country. The following is a summary of the status and outlook for major nations in the region.

Indonesia. The PMI recovered in August, rising to 51.5 from 49.2 the previous month. Infrastructure projects are underway, with port, airport, and road construction leading the way in supporting domestic demand. Continued infrastructure investment beyond 2025, as well as the resource and EV value chains, will provide support in 2026. However, external tariffs and slowing global demand may negatively impact exports.

Malaysia. New orders and production are gradually improving. The semiconductor, renewable energy, and AI industries will remain key growth drivers in 2026, propelling the economy toward further improvement. However, as with other nations, uncertainties surrounding external demand and tariffs pose risks.

Philippines. Although the impact of rising prices and raw material costs persists, production itself is growing. The economy is expected to remain robust in 2026, fueled by construction and consumption. The main risk is a slowdown in exports.

Thailand. Although domestic demand is driving robust production activity, consumer sentiment continues to decline. Political stability will be a key factor in 2026. While EV investment is a tailwind, automotive industry growth is slowing.

Vietnam. Foreign direct investment is increasing as China Plus One becomes a popular alternative. Around 6% growth is expected by 2026.

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> *Although Southeast Asia's manufacturing sector is generally recovering, the outlook varies by country.*

Overall, Southeast Asia is on the path to recovery, driven primarily by domestic demand, despite electricity and water resource shortages. Despite various challenges, Southeast Asia's large population and significant development potential mean it will likely continue to grow through 2026, albeit with ups and downs.

AGRICULTURAL. I expect growth of approximately 2% for the full year 2025. Demand for agricultural machinery remains resilient, driven by advancing mechanization and labor shortages. Subsidies and credit support are acting as tail winds. However, climate change and insufficient rural infrastructure hinder adoption rates.

In 2026, growth is expected to be driven more by value than by unit volume, and will be fueled by expansion in maintenance, rental, and leasing services. Progress is being made with smart agricultural machinery, but adoption has not yet reached levels seen in Europe, the United States, Japan, or South Korea.

CONSTRUCTION. Although supported by substantial investments in infrastructure, logistics hubs, and data centers, variations exist depending on each country's economy and project progress. Funding channels for green energy projects are expanding in the region. For example, the central bank of Singapore secured a $510 million green infrastructure fund.

Moderate growth is expected in 2026, particularly driven by compact construction machinery. Construction projects are underway on various scales, but resource prices and climate pose risks. Some infrastructure projects associated with China's Belt and Road Initiative,

Southeast Asia: Situation Differs from Country To Country

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which received significant attention several years ago, have been suspended or stalled.

RECREATIONAL PRODUCTS. Overall, the market is recovering, but the pace of electrification varies by country. For example, the suspension of EV subsidies in Thailand caused electric vehicle sales to stall, demonstrating the direct impact of policy changes on supply and demand. In Hanoi, a ban on fossil fuel-powered motorcycles starting in July 2026 will accelerate the electrification trend through urban regulations.

In 2026, volume will show a modest increase, and the share of electric models will rise. However, policy continuity and the pace of infrastructure development, such as battery swap networks and charging stations, are key factors that could cause an upward or downward revision. **PSR**

India

Resilient Economy Boosts Auto Industry

SUMMARY: India's economy in mid-2025 continues to show resilience despite global challenges. Domestic consumption remains strong, aided by easing inflation, good monsoons, and rising infrastructure investments. Rural sentiment has improved with higher sowing levels and better minimum support prices, while urban markets are benefiting from stable incomes and improved financing conditions.

These macro factors are directly influencing the automobile sector, which remains a key barometer of economic health. The industry is navigating high ownership costs, stricter regulations, and price hikes, yet demand in several categories is holding steady.

The broader automobile ecosystem is being shaped by structural changes. Electrification, hybrid adoption, and CNG penetration are no longer side trends but core elements of growth strategies. Government policy support for alternative fuels, alongside major infrastructure projects, is creating a fertile ground for long-term expansion.

At the same time, OEMs are recalibrating product portfolios—balancing mass demand with premium aspirations—to stay competitive in a rapidly evolving market.

RECREATIONAL PRODUCTS: Motorcycle and Scooters. The two-wheeler industry is navigating a dual trajectory of steady rural recovery and strong premiumisation trends. Rural demand is improving, supported by better farm incomes, government spending, and an increased preference for personal mobility. Meanwhile, urban buyers are driving growth in the mid and premium motorcycle categories.

India's economy in mid-2025 continues to show resilience despite global challenges. Domestic consumption remains strong, aided by easing inflation, good monsoons, and rising infrastructure investments.

Strategically, OEMs are strengthening alliances to expand their premium offerings. Hero MotoCorp's partnership with Harley-Davidson continues to bear fruit with models like the Maverick 440 and HD X440, while Bajaj Auto's collaboration with Triumph positions it strongly in the mid-size motorcycle space. Royal Enfield is consolidating its dominance in the lifestyle motorcycle segment with a pipeline of new launches post-July 2025, further intensifying competition.

In the EV space, activity is accelerating. Hero has refreshed its Vida scooter (V2 series), while Honda has entered the market with the Activa e and QC1, marking its serious foray into electrification. Bajaj, TVS, Ola, and Ather continue to expand their product and charging ecosystems. While EV penetration remains concentrated in scooters, the segment is expected to grow steadily as infrastructure improves and costs moderate.

Three Wheelers. The three-wheeler segment is witnessing a recovery driven by both passenger mobility and last-mile delivery demand. Electrification remains the dominant theme, as the category benefits from favorable economics of EV adoption in urban and peri-urban markets. Government incentives and financing schemes have accelerated the shift towards electric three-wheelers, which now account for a significant share of new registrations.

OEMs are scaling up production and exports to leverage growing opportunities in Africa and Southeast Asia, where demand for cost-efficient mobility solutions is rising. Bajaj Auto continues to strengthen its portfolio

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across fuel types — CNG, ICE, and EV — while Piaggio is focusing on electric cargo three-wheelers. Domestic demand is supported by urban mobility platforms and e-commerce delivery models, making this one of the fastest-evolving sub-segments of the industry.

PASSENGER CARS, MINIVANS & SUVs: Passenger vehicles remain the most competitive segment of the Indian automobile market, with SUVs continuing to dominate. The preference for larger, feature-rich vehicles is reshaping OEM portfolios, leading to significant investments in capacity and product development. While rising ownership costs have slowed the entry-level car segment, SUVs and premium cars continue to see strong demand.

OEM strategies post-July 2025 have focused heavily on alternative fuels. Maruti Suzuki has expanded its CNG lineup, while Hyundai and Tata Motors continue to push EV launches to strengthen their presence in the fast-growing electric car market.

Joint ventures and alliances are being explored to secure battery supply chains and ensure competitiveness in the EV race. The passenger vehicle industry is also witnessing increased localization of advanced powertrain technologies to align with India's clean mobility roadmap.

COMMERCIAL VEHICLES: M&HCV. The MHCV segment has benefitted from a revival in construction and mining activities, supported by higher infrastructure allocation in the Union Budget 2025–26. Demand is further boosted by replacement cycles as fleet operators modernize to comply with stricter emission norms and to improve operational efficiency.

Alternative fuels are becoming a focal point, with OEMs piloting LNG and hydrogen-powered trucks. Tata Motors and Ashok Leyland are investing in hydrogen internal combustion engine (H2 ICE) technologies, aligning with the government's Green Hydrogen Mission. These developments are significant, as India positions itself as an early adopter of multi-fuel commercial vehicle ecosystems.

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Export strategies are also being recalibrated, with OEMs focusing on GCC and African markets where demand for MHCVs is strengthening.

Light Commercial Vehicles (LCVs). LCVs continue to benefit from growing e-commerce, urban logistics, and last-mile connectivity demand. Rising consumption in tier-2 and tier-3 towns is driving volumes, while OEMs focus on improving fuel efficiency and total cost of ownership for operators.

Electrification of the LCV segment is also gaining momentum, particularly in the sub-2 ton category, with Tata Motors, Ashok Leyland, and Mahindra launching electric variants to capture early adoption in urban logistics. Meanwhile, CNG-powered LCVs are finding strong traction in cost-conscious markets, as fleet operators seek alternatives to rising diesel prices. The interplay of cost efficiency, regulatory push, and operator preference is shaping product strategies in this segment.

AGRICULTURAL: The agricultural machinery segment has been relatively stable, supported by government initiatives to modernize farming practices and promote mechanization. Increased allocation under rural infrastructure and irrigation programs has improved sentiment in farming communities. Tractors continue to see strong demand from northern and central India, while southern states are benefitting from improved monsoon distribution.

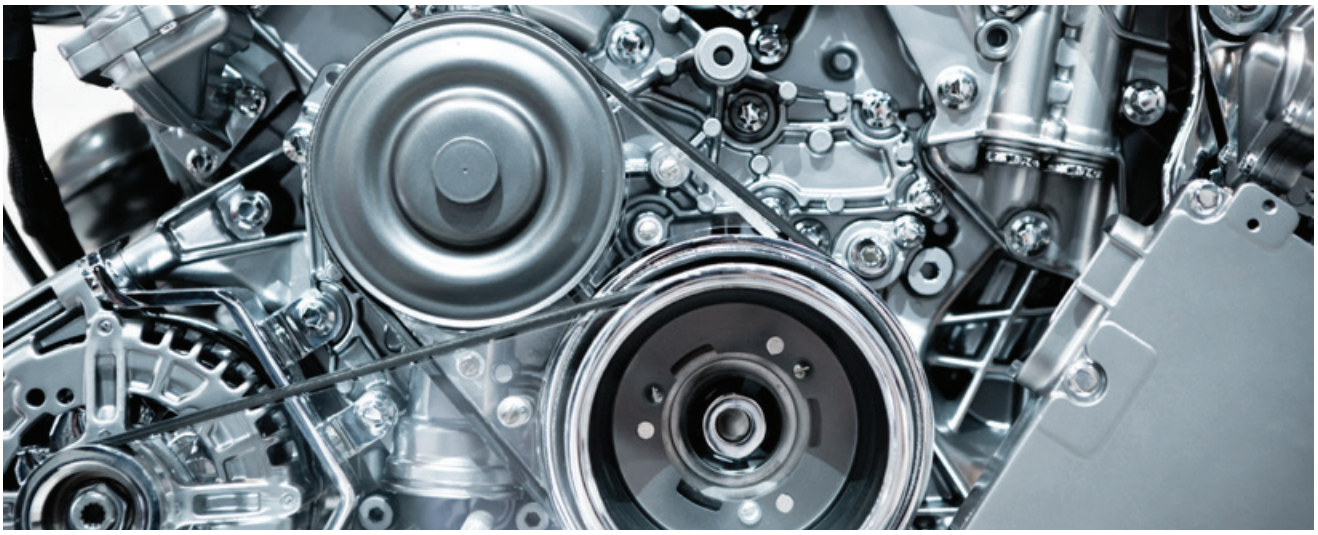
OEMs are aligning product strategies with sustainability goals. Leading players have expanded their portfolio to include CNG-powered tractors, with Bajaj and Mahindra offering models for cost-sensitive farmers. Electrification is still at an early stage, but demonstrations of electric mini-tractors and government incentives for battery-powered farm equipment highlight the direction of the future.

Exports remain steady, with tractor manufacturers leveraging strong demand in Africa and parts of South America.

CONSTRUCTION EQUIPMENT: The construction equipment industry is closely linked to infrastructure spending, which remains robust in 2025. Road construction, mining, and housing projects are driving demand for excavators, backhoe loaders, and tippers. Domestic OEMs and global players operating in India are expanding capacity to meet rising demand.

Electrification of construction machinery is at an early stage, but hybrid and CNG-powered machines are being offered. The government's emphasis on sustainable infra development and the adoption of alternative fuels is pushing OEMs to align long-term product strategies with emission-reduction goals.

Export opportunities are also strengthening, particularly in Africa and the Middle East, as Indian OEMs leverage competitive cost structures. **PSR**



South America/Brazil

Trump´s Tariffs Add Uncertainties To Brazil Economy

SUMMARY. The economy in Brazil, the largest industrial country in South America, is decelerating. Trump´s tariffs policy is an additional issue to add more uncertainties for 2025 and 2026.

Brazil. Interest rate at 15% is causing deceleration in the economy. GDP indicates a reduction from 3.6% in 2024 to 2.0% in 2025 and 1.5% in 2026. The Trump´s tariffs of 50% to Brazil is an additional problem in this scenario. On top of the tariffs there are political issues causing more difficulties in opening negotiation.

Argentina. Argentina continues the drastic reduction of inflation. Annual inflation was 237% in August 2024, moving to 33% in August 2025. GDP should end up at 5% in 2025 and 3.5% in 2026, the best result in South America. Trump´s tariff to Argentina is 10%, which is much better than the tariffs to Brazil, opening more opportunities to export to US.

Colombia. Despite some internal conflicts the GDP in Colombia is growing 2.4% in 2025, above 1,9% in 2024. Inflation for 2025 is expected to remain at the same level of 5%, reached in 2024.

Chile. GDP is expected to grow 2.5% in 2025, while the inflation would remain at the level of 4%.

LEGISLATION. Brazil. LV. The Mover Program, started in June, is aiming for CO2 reduction. The program gives incentives in terms of federal taxes and establishes requirements for expenses in P&D and new products associated with lower CO2 emissions and it is applicable only for vehicles made in Brazil. CO2 emissions measurements will use the concept “well to wheel”.

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The economy in Brazil, the largest industrial country in South America, is decelerating. Trump´s tariffs policy is an additional issue to add more uncertainties for 2025 and 2026.

MHV. Electrical Buses. Legislation in Sao Paulo city back to previous one, which means that Diesel urban buses must be replaced progressively by alternatives such as BEV. Based on this there are around 3,000 Diesel buses that have reached replacement period but remain in the fleet due to the lack of BEV´s availability. The availability of BEVs is planned for 2026.

Sao Paulo government is studying BioGas as an alternative do Diesel. BioGas is becoming an alternative for EV considering the “well to wheel concept”.

LIGHT VEHICLES: PASSENGER CARS, MINIVANS, SUVs, LCV. Brazil. Total LV production grew 10% in 2024 and is forecasted to grow 2,2% in 2025 reaching 2.7 million in 2027.

By subsegment LCV grew 14% in 2024, the forecast is to grow 3 % in 2025 and keep growing 5% in the coming years. The same trend for SUV, growing 11% in 2024 and keeping growing at average 7% in the coming years.

MOVER Program, due taxes reductions, has reduced prices of LV that attend the CO2 emissions reduction, leveraging internal sales. Recovery of exports to Argentina is also helping on keeping this level of production activity.

Chinese OEMs are gaining market share increasing penetration of EV and HEV, but government is increasing import tax for these vehicles from 20% to 28% in Jan/2026 and to 35% in July/2026.

Great Wall started production in July, while BYD will start production of SKD units by next year.

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Argentina. New economic situation in Argentina is driving LV recovery for 2025. LCV is growing 15% and total LV including SUVs and Passenger Car is growing 7%.

Total production of LV in Brazil plus Argentina will reach 3 million of units in 2025.

Colombia. As a result of the current economy plus the phase out of the GM operations in the country, the production dropped -60% for LCV and -30% for Passenger Cars in 2024.

The full impact of GM´s phase out will be in 2025, however Renault's decision to begin producing the Renault Kwid locally will help offset the effects of GM's phase out driving growth of 16% of Passenger Cars in 2025. An additional reduction of -19% is forecasted for LCV.

MEDIUM AND HEAVY VEHICLES. Brazil. After recovering 39% in 2024, the forecast is to be flat in 2025 and return to growth only in 2027. It is expected to reach 190,000 units in 2030.

The main reason is the drop of truck sales, mainly heavy-duty segment, although this decline is partially mitigated by the increase in bus production and exports to Argentina.

Volume of 2025 contemplates the move of production of 3,000 units of VW trucks from Brazil to a site in Argentina.

Heavy Trucks has lost share due to high interest rates in Brazil. The Light and Medium Segment gained traction due to exports to Argentina. Buses gained due to the recovery of previous years.

Argentina In 2024, MHV grew 14%, mainly due exports to Brazil. The economic recovery in 2025 plus the move production site of 3000 units from Brazil to Argentina which ramp-up started in March of 2024 now is completed, ending up a growth of 45% for 2025.

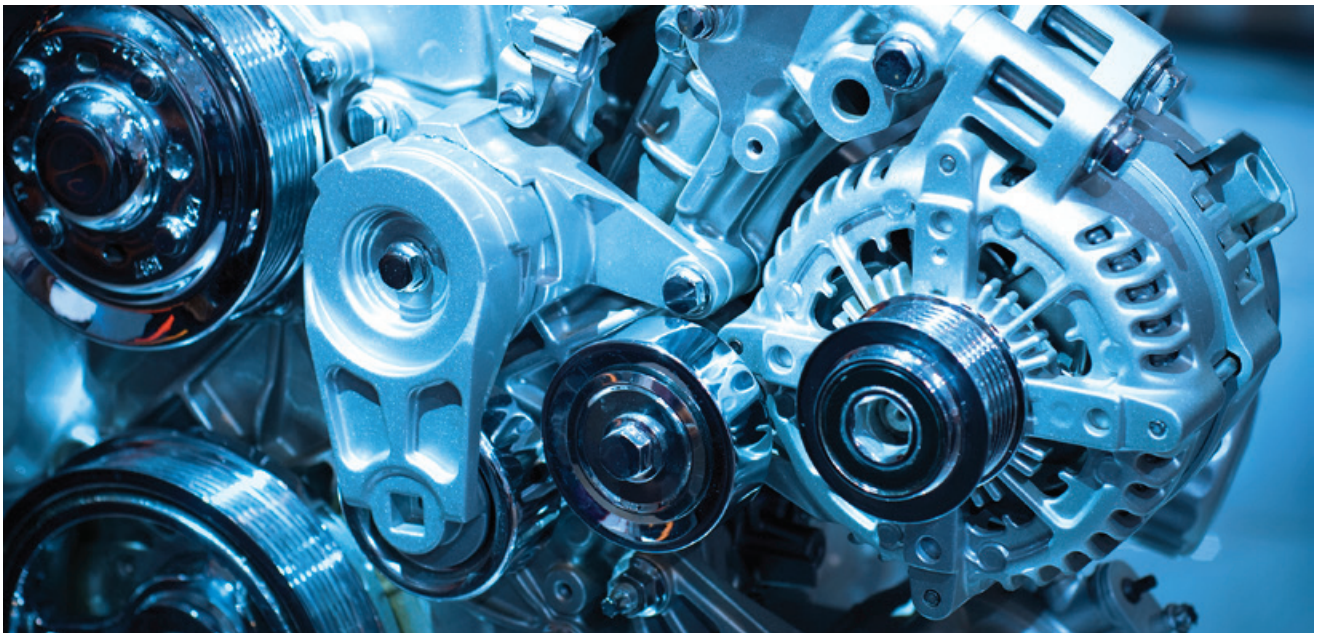
Colombia After a downturn of - 60% in 2024, a new downturn of – 30 % is forecasted for 2025 because of the economy and the full year of GM phase out.

AGRICULTURAL MACHINES. Brazil. Overall, the agricultural segment keeps doing well and Brazil is taking advantages of being one of the largest agricultural grain commodities producers in the world.

In 2025 a record harvest of 350 million tons of grain is expected.

Small recovery of 3.0% is expected to 2025 even with a record harvest due to the low commodities price, which is impacting finance position of the producers.

Even this growth of 3% for 2025 is threated by Trump´s tariffs since Brazil exports AG machines to US.



South America/Brazil: Trump´s Tariffs Add Uncertainties To Brazil Economy

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New machines to enjoy new technology are more associated with connectivity to improve productivity than CO2 reduction.

Argentina. Machines' production dropped -20% in 2024, then will recovery grow of +3% in 2025. The recession drove the farmers to keep current machinery in 2024, which also have impacted imports from Brazil.

CONSTRUCTION MACHINES. Brazil as the hub of production for South America region reached 54,000 units produced in 2022, which is way above the former record of 32,000 units produced in 2013.

In 2024 the market downturn was mainly due to high interest rate impacting construction activities and the reduction in AG segment where CE are used too. OEMs with local production are facing hard dispute with imports from China due the low price of Chinese machines.

Exports are recovering in 2025, which is helping production in Brazil.

On the other hand, interest rates and credit availability are the most important barriers to sales growth in Brazil.

Additionally, the Trump´s tariffs and deceleration of local economy is driving our forecast to be flat in 2025.

Following AG machines technologies trends, connectivity is the most attractive technology, while machines associated with CO2 reduction, such as Hybrid and Electric are still in test phase.

RECREATIONAL PRODUCTS. Brazil. The price increase of LV and fuels plus e-commerce activities boosted the motorcycles segment in Brazil. Production has kept growing in recent years. Our forecast is now 15% growth over 2024, which means 2 million units in 2025.

Motorcycles produced in Brazil already use fuel injection, so PROMOT 5 legislation has not impacted volumes.

Argentina. Outstanding growth is expected in Argentina. Growth of 20% over 2024.

Columbia. Growth in Colombia will be 10% over 2024.

Total production of motorcycles in South America will reach 3 million units in 2025.

> *The economy in Brazil, the largest industrial country in South America, is decelerating. Trump´s tariffs policy is an additional issue to add more uncertainties for 2025 and 2026.*

INDUSTRIAL. Industry GDP will grow in 2024. Since there is a mix of products in this segment not linked to industry, our forecast is in the range of 2% for 2024. There is a remarkable change in the production level of Lift Trucks in Brazil due to the penetration of electrical units powered by Li batteries imported from China.

Brazilian OEMs are launching similar models in Brazil. At same time, the share of electrical models is increasing over the IC powered units.

Lift Trucks sales in Brazil were in the range of 50,000 units but only 25% were produced in Brazil. The difference is due to imports of electrical units with Li batteries from China.

POWER GENERATION. After the pandemic, the risk of power shortage is over, but the segment still grew 14% in 2023. In the coming years due to the increase of capacity generation while the demand remains flat, our forecast is low growth since electricity in the "free market" is cheaper.

RAILWAY. This segment maintained low demand in the last decade. Now, with new infrastructure plans announced by the government in September 2021 based on legislation MP 1065/2021, the segment has grown up +110% for 2021. Our forecast is an average of 40% growth per year for the coming years since the new government keeps the plan of railway expansion. There is an increase in 2024 vs 2023, mainly due to low demand in the last year, but there is no investment from the government side to increase the demand. **PSR**

V. Research Methodology

Power Systems Research (PSR) Research Methodology

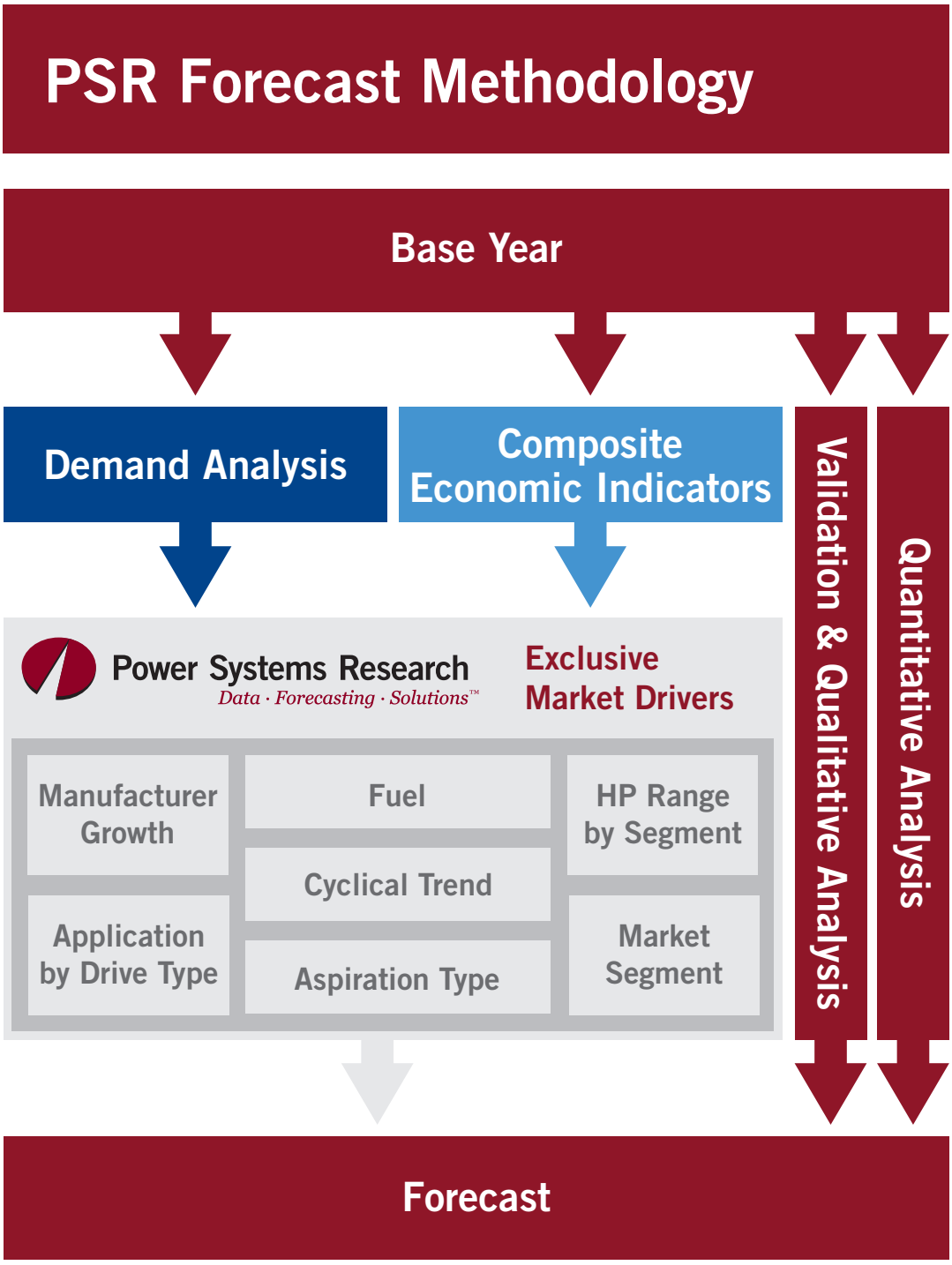
Research begins with the gathering of information from primary and secondary sources. Next, the PSR analyst team reviews and validates all data against industry benchmarks. If our analysts discover anomalies in the data, additional research and validation is performed before publishing.

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.



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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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