PowerTALK



Published Monthly by



July 29, 2019 Volume 4 No. 7

Worldwide News & Analysis

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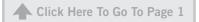
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Data Point: US Combines

6,800

By Carol Turner, Senior Analyst, Global Operations

This is the estimate, by Power Systems Research, of the number of Combines that will be produced in the United States during 2019. Estimated 2019 production will be up nearly 2% from 2018.

In 2018, production was 6,846 units, down 485 units or 6.6% from 2017.

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

Market Share: With 60% of the total units produced, John Deere captured the lead for Combine production in North American. In second position is Case New Holland with 29%; third, Class with 6%. The CNH total is made up of 34% New Holland and 66% Case branded units.

Exports: Collectively up to 60% worldwide

Trends: In 2019, production is forecasted to remain flat from 2018 with a nominal gain of ½%. In recent years, demand for new equipment has dropped significantly. Farmers have been reluctant to buy or trade in pricey equipment because of lower commodity prices.

In 2017, production and purchases of new combines rebounded as portrayed with the gain in overall production figures. The gain can be attributed to an increase in commodity prices such as corn and soybeans.

Expect production to remain flat possibly with a small gain up to 2025. PSR

Truck Production Index

By Chris Fisher, Senior Commercial Vehicle Analyst and Jim Downey, Vice President - Global Data Products

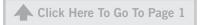
Global Truck Production Climbs in Q2 2019



Power Systems Research The Power Systems Research Truck Production Index (PSR-TPI) increased from 106 to 120, or 13.2%, for the three-month period ended June 30, 2019, from Q1 2019. The year-over-year (Q2 2018 to Q2 2019) loss for the PSR-TPI was, 122 to 120, or 1.6%.

Commercial truck demand in North America and portions of Eastern Europe is expected to be relatively strong for much of the year, at the same time most other





Truck Production Index Continued from page 2



regions are experiencing a slowdown. PSR expects a continued slowdown in medium and heavy truck demand for most regions in 2020.



Chris Fisher



Jim Downey

The PSR-TPI measures truck production globally and across six regions: North America, China, Europe, South America, Japan & Korea and Emerging Markets. This data comes from **CV Link™**, the proprietary database maintained by Power Systems Research.

Global Index: Much like the global economy, medium and heavy truck demand is expected to slow this year and into 2020. Currently, a global recession is not forecasted but rather a cooling off is expected. According to IHS Markit, global GDP was 3.2% in 2018 and is forecasted to edge down to 2.9% in 2019 and 2.8% in 2020. These indicators align with what PSR is seeing in the global medium and heavy truck market.

North America: While demand for medium and heavy commercial trucks has been strong this year, order rates have started to decline more than expected and some 2019 build slots have opened in the class 8 segment. Class 8 demand has

started to slow as freight rates continue to deteriorate. It is believed that an overall slowing of the market along with concerns about a trade war is affecting demand.

Greater China: Medium and heavy truck demand is expected to decline this year primarily due to a slowing economy, relatively high truck capacity and higher truck prices partly due to the cost of emission technology and lower freight rates. It is unknown how much of an impact the trade tariffs play into this. Given the combination of a slowing economy and relatively high truck capacity, demand is expected to be soft during the next few years.

Read the complete report **here**.

The next update of the Power Systems Research TPI will be in October 2019 and will reflect changes in the TPI during Q3 2019. **PSR**

Global/North America Report

By Yosyf Sheremeta, , Director of Product Management & Customer Experience

The End of Growth Cycle Is Close

This is an edited version of the report that initially appeared in the Q2 2019 Update Bulletin prepared for clients of Power Systems Research.

SUMMARY. Looking at the overall market and major economic indicators, one would see a rosy picture. But that look is very deceiving, as more and more facts are popping up that show that a slowdown--and possible a recession--is right





Global/North America Report

Continued from page 3

With the growth of economic uncertainties, we expect to continue to see rapid shifts in political situations and money capital between industries and markets going forward.

around the corner. In fact, should we not see any significant improvements to the economy, and we believe we could see a recession this year or early in 2020. Global geo-politics, Middle East, China, Brexit, global trade tensions and tariffs have all contributed to this situation and have added uncertainty to the global growth.



Yosyf Sheremeta

Markets in European countries and North America still enjoy record low unemployment, historically very low interest rates and low inflation. However, over the past few months conditions have turned south and the growth in these areas is losing its steam. While economic indicators still remain very healthy, we do not expect any continued growth in these areas.

With the growth of economic uncertainties, we expect to continue to see rapid shifts in political situations and money capital between industries and markets going forward.

For the first time in a decade, no region of the world appears to be on solid enough economic footing to be the engine that pulls the global economy upward. Trade wars and broad economic uncertainty are hurting the economic outlook.

When our analysts study current and future market trends, we do not speculate on rumors or proposed future policies—although we consider their possible effects--so we have not made any significant changes in our projections related to escalated global trade tensions and economic disagreements. However, we do expect weaker global economic conditions in the near term; thus our current forecast and growth rates already reflect such a trend.

New proposed global trade policies certainly will have an impact on current markets and future growth; however, these changes will not be immediate and will depend greatly on the outcome of such policies in the long run.

Although 2019 is outperforming 2018 when numbers are compared year over year in some regions and segments, growth rates and indicators are declining around the world and across industries.

As we look at H2 2019 and 2020, we have slightly adjusted our previous forecast to be more cautious and conservative. We do expect a slight decline in segment performance for 2019 and 2020 vs last guarter.

Most markets are still showing modest growth rates, but we see a slowdown in growth dynamics. The North American economy is still strong; however, there are many warning signs to sustain future growth, and a slowdown is on the horizon within 6-12 months.

During the next few years, we will see increased growth and adoption of new technologies such as autonomous driving and electrification. Some markets will adopt these new technologies quickly, which will disrupt some industries. Key segments that will experience the most rapid change will be Lawn and Garden, On-Highway and some Recreational Products.

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Global/North America Report

Continued from page 4



AGRICULTURAL. Global machinery production for the Agricultural sector declined 5.1 % in 2018, up slightly (by 0.1%) from the previous quarter. This trend will continue in H2 2019, slipping at 2.9%. This decline is mainly due to the replacement in China of 2-wheel drive tractors with larger HP machines.

Overall, machinery production within the Chinese Agricultural sector showed a decline of 15.5% in 2018, and we project an additional drop of another 8.9% in 2019. Confidence in the European agricultural equipment market is waning with concerns over Brexit being a factor, especially for those in the U.K.

Globally, we do not expect any rapid recovery or high growth, mainly due to current economic conditions, ongoing trade rhetoric in the segment and record low commodity prices. We forecast the recovery will be very slow at 1%-3%, and the market will not reach its prior high levels in the foreseeable future.

CONSTRUCTION. The global Construction sector performed very well over the past couple of years, posting an overall growth rate of 9.1% in 2018. This rate was slightly better than previously projected by about 1%. Some equipment seems to be gaining solid ground in Europe and production was slightly higher by 0.5% against previous quarter projections.

The Construction segment showed a healthy demand recently in North American markets, especially for smaller equipment and for now, 2019 still looks very promising.

China showed a significant increase in the segment during H2 2018, and the whole year posted a solid 39% gain over 2017. Furthermore, the trend continued into 2019-2022, with the projected growth rate at 13% in 2019 and additional 4%-8% over the next few years.

Currently, we forecast global machinery production for construction markets to achieve 1.4% growth in 2019, which is healthy, but slightly lower than the previous quarter by 0.6%. Next year (2020) is projected to be flat to negative, possibly down by 0.1%.

In terms of the overall economic cycle, we expect most developed markets to remain solid in 2019. Within the Construction segment, we see Brazil, India and China showing very strong performance in emerging markets, and North American, European and Japanese markets supporting this trend. However, signs of a slowdown are on the horizon.

We expect fast adoption of new technologies and electrification of equipment, especially on the smaller end of the HP range. Many OEMs already have introduced new electric and other alternative fuels drive type models or will be doing so soon.

Other **Off-Highway** segments, such as **Industrial**, **Lawn and Garden** and **Power Generation**, will closely follow economic trends, globally.

For the **On-Highway** sectors we will see a decline in production volumes across various products (with the exception of the LCV segment and Electric Vehicles).





Global/North America Report

Continued from page 5

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On the other hand, we continue to see development of EV technology and the introduction of multiple EV models across the board.

New electric models are planned to be introduced by most major OEMs. At this point, the overall volume for electric vehicles (both commercial and for personal use) is insignificant in terms of market share, but we already see rapid adoption of these technologies, and its growth will accelerate over the next 5-10 years.

Over the past six months, we have significantly increased our near-term projections and growth rates for electric buses as well as commercial vehicles. However, the baseline production volumes remain low in terms of overall market share for these applications. We project that these new technologies, if adopted by the market will have a significant impact and rate of change in 4-5 years and will continue to rapidly expand market share.

Much like the global economy, demand for **Medium and Heavy Vehicles** is expected to slow this year and into 2020. Commercial truck demand in North America and portions of Eastern Europe are expected to be relatively strong for much of the year while most other regions are experiencing a slowdown.

PSR expects a continued slowdown in medium and heavy truck demand for most regions in 2020. Currently, a global recession is not forecasted but a cooling off is expected. According to IHS Markit, global GDP was 3.2% in 2018 and is forecasted to edge down to 2.9% in 2019 and 2.8% in 2020. These indicators align with what PSR is seeing in the global medium and heavy truck market. **PSR**

Brazil/South America Report

By Fabio Ferraresi, PSR Director, Business Development, South America



Fabio

Ferraresi

Brazil Auto Parts Manufacturers Revenue Grows 13.7% YTD

Revenue of Brazilian auto parts manufacturers grew 13.7% for the first five months of 2019 compared with the same period in 2018. Sales to local OEMs grew 15.8% and Aftermarket sales grew 9.7%. Exports grew 5.3% in Brazilian Reais but fell 8.4% in US Dollars.

Source: Automotive Business **Read The Article**

PSR Analysis: The main driver for this growth was the increased internal market for car and truck sales. Exports to Argentina caused the drop in US dollars; the currency depreciation offset the drop and brought growth. The Truck Drivers strike in May 2018 hurt revenue for that period. Before May, growth was around 8% and the YTD comparison of 2019 vs. 2018 jumped to 13.7% because of the low sales in May 2018.





Brazil/South America Report

Continued from page 6

The perspective of JCB is in line with PSR's forecast. The capacity increase is interesting since the plant has been idle following the market drop in 2014 and has increased its utilization in recent years.

JCB To Invest US\$ 26 million in Brazil Plant

JCB plans major investments in Brazil over the next three years. The investment will be used to increase plant capacity. The plant, started in 2012, had an initial investment of about US\$ 200 million. The move recognizes the growth of the CE Market in the last 18 month and shows JCB's believe in continued growth for the segment.

Source: Automotive Business Read The Article

PSR Analysis: The perspective of JCB is in line with PSR's forecast. The capacity increase is interesting since the plant has been idle following the market drop in 2014 and has increased its utilization in recent years. The new product investment is driven by corporate technology strategies and focuses on expanding in niche market opportunities developed in 2018 and 2019 where competitors are scoring well.

Brazil To Introduce Low Cost Energy Shock

Minister of Economy Paulo Guedes told a meeting of investors in July that the government soon plans to introduce a drastic reduction in energy costs. The reduction will be based on opening gas distribution for private companies rather than keeping the monopoly with Petrobras. By injecting the fuel into the pipeline and using it for thermoelectric generation, Minister Guedes expects to reduce the thermoelectric generation cost by 40%.

Source: Valor Economico Read The Article

PSR Analysis: This movement will increase the penetration of Gas Engines in several segments, but mainly in Power Generation and Industrial. MHV and passenger cars will be impacted also. Today, the bulk of Gas Engines in Brazil are imported, and a significant portion is adapted from other configurations. The higher volume in the market will bring nationalization movements. **PSR**

China Report

By Qin Fen, 秦奋 PSR Business Development Manager-China. 业务拓展经理



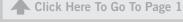
Toyota and CATL Partner for New Energy Vehicle Batteries

Toyota has officially announced that it will partner with China's Contemporary Amperex Technology Co Ltd (CATL) to supply batteries for new energy vehicles.

Qin Fen Sources: autohome.com.cn Read The Article

PSR Analysis: Toyota has taken major steps in securing battery supply and expanding electrification in both passenger cars and commercial vehicles. Besides





China Report Continued from page 7

teaming up with CATL, Toyota also has signed a deal with BYD, China's EV & PHEV car manufacturer. It's a different deal, but Toyota also has signed a deal with a local fuel cell packager based in Shanghai to supply fuel cell components to coach bus OEMs: Higer and FAW. This all happened in the same month, and it tells you how Toyota feels about electrification and EVs. One important factor to bear in mind is that local EV car makers in China are still heavily subsidized.

官宣: 丰田与宁德时代建立合作伙伴关系

2019年7月18日 - 日前,丰田汽车正式宣布,与中国电池制造商宁德时代建立新能源汽车动力电池全面合作的伙伴关系。

新闻来源:汽车之家 - 阅读原文链接

PSR分析: 为了保证电池供应,并且在乘用车和商用车两个市场拓展电气化,丰田不止做了新闻上这点事情。除了和宁德时代合作以外,丰田也和比亚迪签署了协议,比亚迪是中国电动汽车和插电式混合动力汽车制造商。这个协议和宁德时代的协议不同,但是不止于此,丰田还和上海一家燃料电池系统厂家签署了协议,要为一汽股份和苏州金龙这两家企业生产的大巴,搭载采用丰田燃料电池电堆等零部件。这些都发生在同一个月,应该告诉你丰田是怎么看待电气化或者说电动汽车的了。不过有一件事要记住的是,目前为止,中国本土的电动汽车生产厂家仍旧重度依靠政府补贴。

China June Auto Sales Fall 9.6%

CAAM (China Association of Automobile Manufacturers) statistics shows that China's June car sales fell 9.6%, the 12th consecutive month of decline.

Sources: Reuters Read The Article

PSR Analysis: They say the shorter the news, the bigger the impact it makes on the world. This is how we felt when this news was announced. The auto market would look even worse if you considered the pre-buy factor in June. This is no longer just an indicator of the auto market; its impact goes beyond autos to overall consumption and demand. Considering declines in other markets, how far away is an economic crisis for us? **PSR**

中国6月汽车销量下降9.6%连续第12个月下滑--中汽协

2019年7月10日 - 路透北京—中国汽车工业协会周三表示,6月中国汽车销量同比下降9.6%,为连续第12个月下滑。中国是全球最大汽车市场。

新闻来源:路透社 - 阅读原文链接

PSR分析: 人们说新闻越短,事情影响越大。这也是我们听到这则新闻时的第一反应,特别是考虑到6月份消费者为了国六而做的提前购买因素,真实的市场可能看起来更糟。这一数据已经不只是汽车市场的晴雨表了,其影响已经远至消费和需求。综合考虑其他市场的下降,一场危机离我们究竟还有多远? **PSR**

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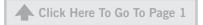
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BAIC has acquired an equity interest of approximately five percent in Daimler AG through Investment Global Co. Ltd., a 100-percent subsidiary.

Europe Report

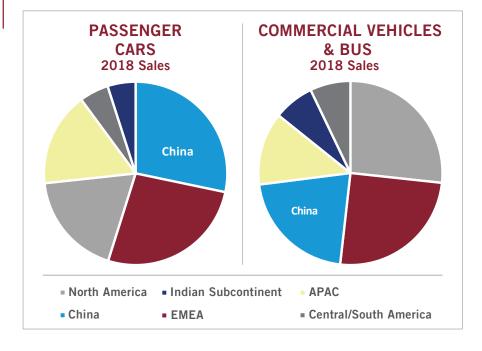
By Emiliano Marzoli, Senior Business Development Manager - Europe

Daimler and BAIC Relationship Becomes Stronger



Emiliano Marzoli Ola Källenius, Chairman of the Board of Management of Daimler AG and Head of Mercedes-Benz Cars: "We are very pleased that our long-standing partner BAIC (Beijing Automotive Group Co. Ltd.) is now a long-term investor in Daimler."

Daimler and BAIC are linked in a long-term partnership. Daimler has been shareholder of BAIC Motor since 2013. **Read The Article**



PSR Analysis: BAIC has acquired an equity interest of approximately five percent in Daimler AG through Investment Global Co. Ltd., a 100-percent subsidiary. Daimler and BAIC are linked in a long-standing strategic partnership that has existed since 2003. Since then, the two companies have cooperated in the production, research and development, and sale of passenger cars, vans and trucks.

In 2013, Daimler acquired an equity interest in BAIC Motor, a listed subsidiary of BAIC, and currently holds 9.55% of its shares. Since 2018, Daimler has also held an interest of 3.01% in BAIC BluePark New Energy Technology Co. Ltd., a manufacturer of electric vehicles for China.

This move enables Daimler to reinforce its position in one of the most important markets in the world. According to our database **OE Link™ Sales**, China is the





Europe ReportContinued from page 9

number one market for passenger cars and the third market in the world for commercial vehicles and buses.

Thanks to this relationship, both companies can share development costs and technologies that are becoming more and more expensive and complicated to research and develop for manufacturers.

We expect to see more collaboration in future years between BAIC and Daimler and a further intensification of their relationship. **PSR**

Far East: Japan Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia 小室 明大 極東及び東南アジア - リサーチアナリスト

Kawasaki Plans To Commercialize Hydrogen Liquefaction Equipment by 2020

Kawasaki Heavy Industries is the first domestic manufacturer to have embarked on the commercialization of hydrogen liquefaction equipment. The target is 2020.



Akihiro Komuro

If hydrogen can be transported efficiently and a supply network, including storage, can be established, opportunities for its use can be expanded. These opportunities include the expansion of fuel cell vehicles (FCVs), and development of hydrogen supply stations and power generation equipment using hydrogen.

For transportation, a dedicated carrier is required, but the advantage is that the hydrogen is pure and can be used for fuel cells and power generation as it is.

Kawasaki Heavy Industries is working on a liquefier that cools and liquefies hydrogen. Kawasaki has developed a prototype that can improve the efficiency of liquefaction by almost 20%, compared to the conventional process. The prototype is capable of increasing the amount that can be liquefied from 5 tons to 25 tons per day.

Kawasaki Heavy Industries proposes an energy supply network of hydrogen storage tanks and piping. Under the plan, hydrogen would be sold to energy resource development companies. A 5-ton-class liquefier has a construction cost of about 3 to 4 billion yen. They aim for sales of more than 100 billion yen in 2030 in the hydrogen business.

Source: The Nikkei Read The Article

PSR Analysis: Brown coal can be an inexpensive source of hydrogen; however it is not an efficient energy source. Brown coal, which is abundant in Australia, has low transportation efficiency and low power efficiency, and it spontaneously ignites when

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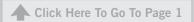
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Far East/Japan Report Continued from page 10

dried, so it cannot be moved after it is mined, and its destination is limited. However, it is an inexpensive energy resource that has not been traded internationally.

It is a large-scale project to make hydrogen using this brown coal, liquefy the hydrogen, transport it to Japan by liquefied hydrogen cargo ship, land it at the liquefied hydrogen receiving base and fill it into a storage tank.

Kawasaki Heavy Industries is promoting this project under the support of NEDO (Japan's New Energy and Industrial Technology Development Organization), in cooperation with companies and local governments such as Iwatani Sangyo, J-Power, Shell Japan, Kobe City.

The liquefied hydrogen cargo ships and the liquefied hydrogen receiving base already are under construction; and the first ship is scheduled for launch by the end of 2019.

More investment and time are needed for hydrogen to become a common source of new energy. I forecast that it will take at least 10 years, and, realistically, it could take 15-20 years.

FCV can be expected to be a large source of demand for hydrogen, but at this point both domestic and overseas FCV markets are not yet developed. Hydrogen can also be used as a fuel for power stations and cogeneration systems, but it is not yet in wide-spread use. There is also price competition with natural gas, which is already available on a commercial basis.

Today, the development of a series of safe processes to produce, transport, manage and use hydrogen is rapidly advancing.

However, there are negative views about using hydrogen as a power source because of concerns over safety and cost.

Given these concerns, commercialization of hydrogen facing major challenges. However, Japan is advancing step by step toward the safe use and commercialization of hydrogen, which some see as the ultimate clean energy. **PSR**

極東 > 日本:

川重、水素液化設備を商用化 来年めど

川崎重工業は国内メーカーで初となる水素を液化する設備の商用化に2020年をめどに乗り出す。水素の効率的な輸送ができ貯蔵も含めた供給網を整えられれば、水素を使う燃料電池車(FCV)や水素ステーションの拡大や、水素をつかった発電など利用機会が広げられる。次世代エネルギーとして注目される水素の普及を後押しする。

同社は水素を冷却して液化させる液化機を手掛けている。専用の運搬船が必要だが、純度が高く輸送先でそのまま燃料電池や発電に活用できることがメリットだ。

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♠ Click Here To Go To Page 1

Far East/Japan Report Continued from page 11



水素はセ氏マイナス253度に冷やして液化すれば体積を800分の1にでき、一度に大量の輸送が可能になる。例えば海外の再生可能エネルギーによる電気を使って発生させた水素を液化して日本に運び、クリーンエネルギーを輸入することも想定される。化学工場などに併設し、副産物としてできる水素を液化し、発電につかうシステムも想定できる。

同社は従来と比べて液化の効率を2割弱向上させ、液化できる量も日量5トンから5倍の同25トンにまで増やせる試作機を開発した。耐久性テストなどを経て液化機の外部販売を始める。

川重は天然ガスの液化機や貯蔵タンクのノウハウを用い、水素の貯蔵タンク や配管までのエネルギー供給網を提案する。

販売先はエネルギー関連の資源開発事業者などで、日量5トン級の液化機で建設費の目安は30億~40億円ほどという。川重は水素関連事業で2030年度に1千億円超の売上高を目指す。

出典: 日経 記事を読む

PSR 分析: オーストラリアに大量にある褐炭は、輸送効率や発電効率が低く、さらに乾燥すると自然発火するため、採掘しても移動ができず、利用先が限定されている。国際的にも取引されておらず、安価なエネルギー資源だ。この褐炭を利用して水素を作り、その水素を液化し、専用の運搬船で日本まで輸送、液化水素受入基地で陸揚げして貯蔵タンクに充填する、という大規模プロジェクトである。川崎重工業はNEDOの助成のもと、岩谷産業、電源開発、シェルジャパン、神戸市などの企業や自治体と協力してこのプロジェクトを進めている。すでに液化水素の運搬船と受入基地は建造中であり、運搬船の進水式は今年2019年末ごろの予定とのことだ。

水素が新しいエネルギー源として一般的に普及するためには、更なる投資と時間が必要だ。少なくとも10年、現実的には15-20年の時間がかかると筆者は予測している。FCVは需要を喚起する大きな受け皿として期待できるが、国内外ともに普及ベースには乗っていない。発電所やコージェネの燃料としても使用できるが実際の普及はこれからだ。すでに商業ベースに乗っている天然ガスとの価格競争もある。

世の中にはまだまだ「水素エネルギーは夢物語であり非現実的だ」というようなネガティブな見方がある。このような否定的な意見の多くは、しばしば「水素は安全性とコスト面で必要要件を満たしていない」という視点で語られる。つまりそうした意見を追い去るためには、安全性とコスト性を満たすことが必要である。そういう意味でも、水素の商業化を目指すというのは大きなチャレンジであり、大きな進捗である。究極のクリーンエネルギーと言われる水素の安全な利用と商業化に向けて、日本は現実的に、一歩一歩進んでいる。PSR





Far East/Japan Report Continued from page 12



India Report

By Shubham Skelke, Research Associate-India



India Buyers Turn to Used Cars, Reducing Demand for New Cars

Used car dealers such as Mahindra First Choice Wheels reported 40%-50% growth in FY19. At the same time, the used car overall market grew about 12%. **Read The Article**

Shubham Skelke **PSR Analysis:** With passenger car sales dropping to an 8-year low, the auto industry seems to be in turmoil. There are several

factors causing this sales drop, but the increased sales of used cars seems to be one more reason for the decline in new car sales.

India is a country with one of the lowest used-car to new-car sales ratios (1.2) in the world, much below the global average of 2.5. The current market situation with the liquidity crunch, NBFC crisis and higher interest rates may make buyers opt for used cars.

Even though around 75% of used car trade-ins lead to a new car purchase, new model launches lead to faster depreciation of the older version vehicles. This, in turn often pushes the buyer to go for an older version vehicle with much a lower price.

We see another month of sluggish new vehicle sales until the festive season kicks in with the added benefit of new launches by Hyundai, MG Motors and Kia.

Ethanol-Blending in Petrol Rises To Record 6.2%

A combination of measures by the Modi government appears to have boosted the purchase of the biofuel in recent years.

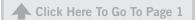
Ethanol-blending in petrol has risen to a record 6.2% this year, rising nearly tenfold in six years, a sign that the policy interventions of recent years have paid off. **Read The Article**

PSR Analysis: Recent government investments for 2G (Second Generation) biofuel refineries are yielding results, and India is successfully moving towards its goal of 10% ethanol blend petrol by 2022. **PSR**

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Russia Report

By Maxim Sakov, Market Consultant, Russia



Rostselmash Will Stop working for Two Months Aug. 1

Rostselmash said it will halt production for two months beginning Aug. 1 because of a lack of orders and because of the cancellation of State subsidies.

Maxim Sakov

The company said almost all Rostselmash machines were purchased with the subsidies. At the end of June, the budget for

these subsidies was depleted, and the plant ran out of orders.

The OEM's 10,000 employees will be on paid leave.

This year Rostselmash planned to increase combine production by 200 units to 5,000 machines. However, in June, the OEM cut its annual plan by 700 combines.

In 2020, the State is going to introduce privileged leasing instead of providing direct subsidies. **Read The Article**

PSR Analysis: Rostselmash is the largest Russian producer of agriculture combines. The defects in planning and budgeting process will reduce production of domestic AG machines. This, in turn, opens a door for imports.

Russia Reduces Emphasis on Electric Cars

The Russian Government has significantly redirected its development strategy for the national automotive industry, shifting from electric power to NG fueled vehicles. NG fueled vehicles are said to be 30% more energy efficient than electrics.

Zero Customs duties for electric cars will not be extended as part of the new strategy. In 2014-2017 customs taxes for electric cars were reduced from 17% to zero. But in 2018 the zero tax rate was not extended. **Read The Article**

PSR Analysis: The main problem in operating electric vehicles in Russia is the cold climate, when a significant part of energy should be spent for heating (or use separate diesel heater). Another issue is the large territory which requires a significant investment for charging infrastructure. The technology of electric cars is also a problem – the car batteries are heavy, expensive, dangerous and hard to use.

Six Auto OEMs Sign Special Investment Contracts

The special investment contracts (SPIC) were signed with Volkswagen, GM AutoVAZ, Autotor, PSMA, Toyota and Volvo. The contracts will bring US\$ 1.7 billion in private investments to the Russian automotive industry.

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Under its special investment contracts, Volkswagen will locally produce engine components, such as crankshafts and cylinder blocks (including heads).

The program requires local production of key components such as engines, transmissions, and vehicle operating systems. R&D projects in Russian also are expected.

Under its SPIC, Volkswagen will locally produce engine components, such as crankshafts and cylinder blocks (including heads). The OEM also plans to localize production of transmission and car's electronic systems.

Volvo also is going to localize automatic transmission for heavy machines, and LNG truck production. **Read The Article**

PSR Analysis. SPIC has shown itself to be an efficient tool for attracting foreign investments and technologies in exchange for privileged access to the local market and workforce. **PSR**

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