

Automotive Industry Weekly Digest

26 Apr - 30 Apr 2021





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Contents

[Semiconductor supply Highlights] Semiconductor supply issue: Light-vehicle production tracker	3
[Semiconductor supply Highlights] Stellantis updates North American production on chip shortage; US Ram plant affected by	y
COVID-19 surge - reports	5
[Shanghai Motor Show 2021] Electric vehicles take centre stage	7
[Shanghai Motor Show 2021] Hongqi's S9 sports car makes debut	10
[Technology Highlights] Navya partners with REE to develop Level 4 autonomous system	12
[Technology Highlights] Continental presents new software and sensor technology	12
[GSP] Middle East/Africa Sales and Production Commentary -2021.03	14
[Supplier Trends and Highlights] Veoneer partners with Swiss Re to improve assessment and enhance development of ADA	4S
systems	18
[Supplier Trends and Highlights] Johnson Matthey, Finnish Materials Group collaborate on el NO cathode plant	19





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[Semiconductor supply Highlights] Semiconductor supply issue: Light-vehicle production tracker

Reports of disruption within the supply chain of semiconductors to the automotive sector began in late 2020 and have continued into the second quarter of 2021. Vehicle manufacturers continue to face disruption to the supply of systems using semiconductors. Pressure built up as the automotive industry recovery from the widespread coronavirus disease 2019 (COVID-19) virus pandemic-related lockdowns experienced during the first half of 2020 clashed with increasing demand from the wider consumer electronics sector, itself recovering strongly and, late in the year, building stocks for the holiday season. The situation has been further exacerbated by other factors, including the fire at Renesas' Naka (Japan) facility on 19 March and ongoing disruption following the severe weather that hit the southwest US in February.



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Shutterstock/Dario Lo Presti

Our current assessment lead us to think that the second quarter of 2021 could be as exposed as the first, while stabilisation of supply may not emerge until the fourth quarter of 2021 and recovery efforts starting only in early 2022. This pattern will further distort production seasonality and have a more significant effect on the overall level of output in 2021.

Below is IHS Markit's assessment of OEMs that will record an impact on volume production from the issue as of the week ending 16 April. This is a cumulative record of stoppages identified. As such, not every major OEM is covered.

It should also be noted that the supply chain of semiconductors is not the only problem that has faced vehicle production so far in 2021; there was also an earthquake in Japan and adverse weather conditions in North America in February. These issues are given separate assessments in the tracker.

Greater China

In the first quarter, the **FAW-VW** joint venture (JV)'s production has been hit by a range of disruptions. Production of the Audi A4 and Q5 at **Changchun I** (mainland China) stopped for two days in relation to COVID-19 tests during the first quarter, while media reports have suggested that Audi A4L will be reduced by one-third during April. The **Changchun II** (mainland China) site stopped production of the VW CC for a period during the first quarter and reduced VW Magotan and Tacqua volumes. Production of Jetta models was halted at **Chengdu** (mainland China), while Sagitar volumes have been cut back. Volumes of the VW Golf and T-Roc at **Foshan** (mainland China) have been reduced, and the Lunar New Year holiday in February was extended from one to two weeks. It has now been followed by Audi Q2 production being reduced by one-third in April, according to media reports. This has taken place





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alongside a reduction of production volume at **Tianjin** (mainland China), and the **Qingdao** (mainland China) site being shut for seven days during the first quarter.

- The **SAIC-VW** JV faced wide-scale shutdowns at its plants across mainland China during the first quarter, and it is now seeing some impact in the second. After it had already been shut for five days, the **Shanghai I** (mainland China) plant was closed for the whole of February, including two weeks for Chinese New Year. There have been six days of stoppages at **Changsha** and **Yizheng** (both mainland China). There have been 10 days of stoppages at **Shanghai III** (mainland China) and a two-week shutdown at **Nanjing** (mainland China). Furthermore, **Shanghai II** had its Lunar New Year holiday extended from one to two weeks. **Ningbo** (mainland China), which had already stopped for six days in the first quarter followed by lengthening its Lunar New Year holiday to two weeks, has set production at half the usual rate in April.
- The SAIC-GM JV site at Wuhan North (mainland China) shut down production for one week in relation to the Buick GL6, Chevrolet Cavalier, and Chevrolet Equinox nameplates. Production is also being reduced at the Shenyang (mainland China) facility during the second quarter.



- Beijing-Hyundai is cutting production of the Mista at Beijing Shunyi II, the Santa Fe at Beijing Shunyi III, and iX35 at Cangzhou (all mainland China) during the second quarter.
- The Dongfeng Honda JV reduced production of the Honda Inspire built at Wuhan I (mainland China), the Honda Civic built at Wuhan II (mainland China), and the Honda CR-V at Wuhan III (mainland China) during the first quarter. There will be further reduced production of the Civic at Wuhan II during the second quarter.
- Dongfeng Nissan's site in Xiangyang (mainland China) is cutting production of the Nissan Altima during the second quarter.
- **Ford** is halting production at its **Hangzhou** (mainland China) facility for between one and two weeks in April, reducing production by 30%. It is also cutting production at its **Chongqing** (mainland China) facility by 40% in April.
- Production at the GAC-Honda JV's Guangzhou Zengcheng (mainland China) facility was hit during the first quarter. However, while production of the Vezel and Breeze is to be partly recovered, the impact on output of the Accord is said to be heavier. During the second quarter, production volumes of the Crider and Fit will be reduced at Guangzhou III (mainland China).
- GAC-Toyota has been running production on a single shift on its Line #3 at its Guangzhou Nansha III (mainland China), which builds the Toyota Yaris and Levin, since 12 January. Output of the Toyota Camry at its Guangzhou (mainland China) facility will also be hit in the second guarter.
- Geely's operations at Chengdu and Daqing (both China) building the Volvo XC40, XC60, S60 and S90 are said to have been affected by the semiconductor supply shortage during late March and early April.





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- Great Wall shut down production of its Tank 300 model at its Chongqing (mainland China) facility between 29 March and 10 April.
- **Nio** has reduced production at its **Hefei III** (China) plant which builds the ES6, EC6 and ES8 by 2,500 units per month beginning in March and expected to continue through the second quarter.

[Semiconductor supply Highlights] Stellantis updates North American production on chip shortage; US Ram plant affected by COVID-19 surge – reports

Stellantis is bringing one Canadian plant back up on 19 April, but leaving another down until 3 May over the chip shortage. In the US and Mexico, the chip shortage is blamed for production interruptions as well. Separately, reports indicate that absenteeism related to a surge of coronavirus disease 2019 (COVID-19) cases in Michigan could affect production. According to media reports, the Brampton (Ontario) plant which builds the Dodge Charger and Challenger and Chrysler 300 will resume production on 19 April; it has been down for two weeks. The Windsor (Ontario) plant, however, will remain idled until 3 May. Automotive News quotes Stellantis as saying, "Stellantis continues to work closely with our suppliers to mitigate the manufacturing impacts caused by the various supply chain issues facing our industry." Stellantis has also reportedly confirmed on 16 April that the Belvidere (Illinois, US), and Toluca (Mexico) plants are being idled for the rest of April The Warren (Michigan, US) truck plant will be idled until the end of May. Despite the Warren production interruption, Stellantis indicated that the Jeep Wagoneer and Grand Wagoneer are on track for launch in mid-2021. A separate report indicates that production at its Sterling Heights (Michigan, US) plant may be hit by a surge in COVID-19 infections in Michigan. Automotive News reports that about 10% of the plant's workforce is out for COVID-19-related reasons, whether having the illness or needing to quarantine. The report says that on 13 April, 620 employees were out, up from about 200 the week before. The report cites a source familiar with the issue as saying that Ram fell short of its daily build number by between 200 and 300 vehicles this week, and that the COVID-19-related absenteeism was a factor.



Outlook and implications

The production disruptions reflect the ongoing impact of the chip shortage, as well as automakers' efforts to shift supply to plants building vehicles that are in higher demand, as Stellantis' truck plants as well as Jeep plants are largely still operating. The COVID-19 surge, however, hits the profitable and in-demand Ram full-size pick-up, and





reduced production is not helping the overall disruption. As of 16 April, IHS Markit continues to expect think that the second quarter could be as exposed as the first, while stabilisation of supply may not emerge until the fourth quarter, and recovery efforts starting only in early 2022. This pattern will further distort production seasonality and have a more significant effect on the overall level of output in 2021. Before the disclosures outlined in this report, IHS Markit expected North American production will be affected by about 195,000 units in the second quarter, after losing about 354,000 units of North American production in the first quarter of 2021. This figure does not reflect potential issues related to COVID-19 absenteeism, and there is no current indication that the outbreak is related to the plant operations or protocols, but rather to the community outside the facility.





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[Shanghai Motor Show 2021] Electric vehicles take centre stage

The Shanghai Motor Show 2021, Auto Shanghai 2021, opened its gates with press days on 19 and 20 April and will run until 28 April. From automakers' announcements on the first day, this year's exhibition will be packed with electric models from both Chinese and international automakers. Automakers also announced their future strategies to expand their presence in the Chinese market. Below are some of the highlights of the show:



Toyota bZ4X
Image courtesy: Toyota

Toyota has announced Toyota bZ, its newly established series of battery electric vehicles (BEVs). The Toyota bZ4X, the first model from the bZ series, was unveiled in the form of a concept sport utility vehicle (SUV) at the Auto Shanghai 2021. Toyota developed the bZ4X jointly with Subaru and the model is based on the e-TNGA platform. Leveraging the platform, Toyota said that it is able to give the bZ4X a unique design, featuring a long wheelbase with a short overhang. Inside the cabin, the most eye-catching element is the new steering-wheel design, which the automaker said eliminates the need to change grip when steering. The model has a steer-by-wire system that provides a smooth driving feel aligned with the driver's intentions. In addition to the use of regenerative energy systems to preserve energy, the bZ4X also features a solar recharging system that recharges the battery while the vehicle is stationary. Toyota plans to produce the Toyota bZ4X in Japan and China. It also looks to offer this model in global markets by mid-2022. To reinforce its commitment to electrification, Toyota said that it will expand the total number of its electrified models to around 70 by 2025. The line-up will include 15 BEVs, of which seven new models will come from the bZ series.

Audi has shared its trade-fair stand with its two Chinese joint venture (JV) partners, FAW Group and SAIC Motor Corporation. The Audi A6 e-tron concept vehicle, the Audi A7L, and an SUV concept, named Audi concept Shanghai, made their debuts. The A6 e-tron concept gives the audience a sneak preview of what to expect from a vehicle based on the automaker's PPE platform, an electric vehicle (EV) architecture to be used for Volkswagen (VW) Group's upcoming premium models. The flagship sedan has an overall body length of 4.96 m and is powered by a 100-kWh battery pack, which provides a range of more than 700 km under the Worldwide Harmonised Lightvehicle Test Procedure (WLTP) standard. The production version of the A6 e-tron concept will be produced in Europe and China and is intended for sales worldwide. The A7L, a long-wheelbase variant based on the A7 Sportback, makes another highlight of Audi's Auto Shanghai 2021 display. The automaker did not provide full specifications of the A7L. The vehicle will be produced locally in China by Audi under a partnership with SAIC and deliveries are due to begin in the first quarter of 2022. Along with the A7L, Audi also unveiled a new electric SUV concept, the Audi concept Shanghai. According to local media reports, the production version of the Audi concept Shanghai will be fitted with an 83.4-kWh battery pack, which provides a range of up to 560 km.





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Mercedes-Benz has unveiled the EQB, the second electric SUV from the Mercedes-EQ family, at the show. Based on the GLB SUV, the EQB will be offered in a three-row seven-seat configuration as standard in China. The third-row will be available as an option in other markets. At home or at public charging stations, the EQB can be charged at up to 11 kW with alternating current (AC) using the onboard charger. Depending on the state of charge (SoC) and the temperature of the high-voltage battery, the EQB charges at a corresponding charging station with maximum power of up to 100 kW. In China, the new EQB is being launched as a fully equipped top-of-the-range model with AMG Line and output of 215 kW. In Europe, from the start, customers will have a choice between several models with front-wheel drive or all-wheel drive and various power levels. The usable capacity of the batteries in Europe is 66.5 kWh.



Mitsubishi Airtrek Image courtesy: Mitsubishi

GAC Mitsubishi, Mitsubishi's passenger vehicle JV with GAC Motor Group, has released a teaser of the all-new electric SUV, the Airtrek, at the show. According to a company statement, the Airtrek will be launched in China by the end of this year. The model is expected to be based on GAC's GEP platform, which is a BEV-only platform. Mitsubishi's Chinese JV partner is sharing EV technologies with Mitsubishi and scaling up volumes of GEP-based vehicles.



Genesis G80 EV
Image courtesy: Genesis

Hyundai Motor Group is showcasing three new EVs at the ongoing show. It is showcasing its new IONIQ 5 EV, its first dedicated BEV built on Hyundai Motor Group's electric-global modular platform (E-GMP), for the first time in China. The company said that the IONIQ 5 long-range model with a 72.6-kWh battery pack can travel up to 429 km on a single charge, and can be charged to 80% of battery capacity within 18 minutes. Hyundai's affiliate Kia is showcasing the new EV6, which shares the same platform with the IONIQ 5. The EV6 long-range model with a 77.4-kWh battery pack has a driving range of 510 km and can be charged to up to 80% of battery capacity within 18 minutes, the company said. Hyundai, under its premium Genesis brand, also unveiled the G80 EV. The vehicle is quite powerful with its electric motors delivering 272 kW of peak power and 700 N.m of peak torque, allowing the vehicle to accelerate from 0 to 60 mph in 4.9 seconds. The vehicle has a driving range of 500 km on a single charge based on the New European Driving Cycle (NEDC) standard. The automaker also showcased the Genesis X Concept, an EV-based high-performance GT coupé concept car, which was first revealed at an event in Los Angeles last month. The concept carries Genesis's large feature grille, and the hood and fender are integrated and the bottom-front air intakes are functional, facilitating airflow, reducing air resistance, and helping to extend mileage.





Lexus is giving the ES sedan a facelift for the 2022 model year (MY), focusing on infotainment technology, safety technology, and design updates. The interior of the 2022 ES has a new instrument panel design, which enables the standard 8.0-inch and optional 12.3-inch colour multimedia displays to now sit 4.3 inches closer to the driver and passenger for easier operation. The screens now incorporate touchscreen functionality. The current MY's remote touch interface continues to be available in the centre console. The 2022 ES also has the Lexus Safety System+ 2.5 (LSS+ 2.5) as standard on all trim levels. The LSS+ 2.5 feature was introduced in the IS sedan in

Hongqi, FAW's premium vehicle brand, has unveiled the L-Concept four-door sedan at the show. The vehicle will be officially launched in 2023. The concept vehicle is very muscular outside with the front waistline extending to the rear door. In the interior, the vehicle features pendants similar to a crystal chandelier, giving a feeling of luxury.

2020 and offers several driver-assistance system improvements compared with the prior LSS+ 2.0.

Buick's all-new Envision Plus midsize SUV and Verano Pro premium family sedan have made their global debut at the show. According to a company statement, the Envision Plus SUV is based on vehicle intelligence platform (VIP), General Motors' (GM)'s innovative electrical architecture that will enable future connectivity and intelligent driving features. The vehicle is 4,845 mm long, 1,883 mm wide, and 1,695 mm tall, with a wheelbase of 2,833 mm and is powered by an eighth-generation Ecotec 2.0T variable turbocharged engine and a 9-speed Hydra-Matic intelligent automatic transmission, matched with the standard 48V mild hybrid system. Buick has also introduced the Verano Pro sedan targeting the younger generation in China. The Verano Pro GS offers a great degree of customisation options, including replaceable front and rear bumpers, side panels, and rear wing components, providing additional DIY fun and more personalised styling.



Buick Envision Plus Image courtesy: GM



Buick Verano Image courtesy: GM

Ford has unveiled the 2021 EVOS SUV at the Auto Shanghai 2021. The EVOS took the centre stage on the Ford trade-fair stand, along with the Ford Escape plug-in hybrid electric vehicle (PHEV) and the Ford Mustang Mach-E EV. As the first vehicle shaped by Ford's 'Progressive Energy in Strength' design philosophy, the EVOS presents a mid-sized utility vehicle with coupé-like rear-end styling. The development of the model has also incorporated





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feedbacks from Chinese customers. The instrument panel is dominated by a 1.1 m-wide horizontal screen, including a 12.3-inch digital cluster and a 27-inch 4K touchscreen. The EVOS is equipped with BlueCruise Level 2 driver-assistance technology, which allows the driver to use truly hands-free operation on pre-qualified sections of divided highways called Hands-Free Blue Zones. Ford also unveiled the plug-in hybrid version of the Escape SUV, the Ford Escape PHEV, at the show. The model is equipped with the automaker's fourth-generation hybrid system, including a 1.5-litre turbocharged engine. The automaker claims that the Escape PHEV is able to deliver a combined range of more than 1,000 km and fuel consumption as low as 1.2 litres per 100 km.

Volkswagen has revealed the ID.6 at the show, marking the first regional application of the MEB platform, providing select details of the configuration. The seven-seat utility was developed specifically for China. This is the automaker's third MEB model, following the ID.3 and ID.4. The ID.6 will have two versions for China; the ID.6 CROZZ will be manufactured in the north of China and the ID.6 X in the southern part of the country. Images released ahead of the reveal suggest that the CROZZ takes a beefier look and the X somewhat more subtle exterior finishes, but VW initially provided little details of the differences between the two. Both versions are seven-seaters and offer two battery sizes, 58 kWh and 77 kWh. Range is between 436 km and 599 km (China NEDC), and the 4MOTION version produces 305PS. As with other MEB vehicles, the battery is under the passenger cabin. The ID.6 is 4.88 m long, or 30 cm longer than the ID.4, to accommodate a third row of seats. As with the ID.4, the ID.6 has no physical buttons and instead uses a 12-inch touchscreen and voice control for features. The ID.6 will offer augmented navigation as an option, as well as a panoramic roof. It will offer VW's IQ Drive assistance system, including Travel Assist.

[Shanghai Motor Show 2021] Hongqi's S9 sports car makes debut

Hongqi, FAW's premium vehicle brand, has unveiled the S9 sports car at the Shanghai Motor Show. According to *China Daily*, the first batch of 99 limited edition of the sports cars will be delivered to consumers in 2022. The car has a V8T hybrid power system with maximum output of 1,400 hp and a top speed of 400 km/hr. The S9 can accelerate from 0–100km in less than two seconds.

Outlook and implications

Hongqi has experienced rapid growth since 2018, owing to FAW Group's effort to expand the Hongqi product line. The position of the S9 as a highly capable sporty model will enable Hongqi to connect with a younger demographic group in China's automotive market. The model is developed by FAW's joint venture (JV) with Silk EV, an automotive design and engineering company headquartered in Italy.





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Hongqi S9 China Daily





[Technology Highlights] Navya partners with REE to develop Level 4 autonomous system

Navya has partnered with REE Automotive to develop a system for Level 4 autonomous vehicles (AVs), according to a company statement. The partnership also involves the development of REE corner technology and Navya autonomous solutions. Navya CEO Etienne Hermite said, "We are very pleased to have signed this agreement with REE Automotive, which is a major player in automotive technology. This partnership is fully in line with Navya's strategy of deploying level 4 autonomous driving systems with safe drive components (steering, braking, suspension, powertrain and control) into the arch of the wheels. This partnership will enhance unlocks fantastic opportunities to create multiple new level 4 autonomous form factors with the view to address different use cases."



Outlook and implications

Navya focuses on deploying Level 4 autonomous systems on a wide range of vehicle platforms. The company launched its Autonom Shuttle more than five years ago and claims to have sold more than 180 units across 23 countries as of December 2020. In June 2017, Navya introduced Autonom Cab, which can carry six passengers at speeds of up to 55 mph. The company has also launched Autonom Tract for autonomous transport of goods. REE Automotive focuses on revolutionising the e-mobility industry. The company claims that its REE corner technology integrates critical vehicle components (steering, braking, suspension, powertrain and control) into the arch of the wheel, allowing for the industry's flattest electric vehicle platform.

[Technology Highlights] Continental presents new software and sensor technology

Continental has showcased new sensor and software technology at this week's Shanghai Motor Show, according to a company statement. The company was showing the capability of its sixth-generation radar sensor, which adheres to the Euro NCAP requirements for automated vehicle operation functions. The new radar sensor has a more compact design, higher scanning rates and 360-degree vehicle surrounding monitoring with ranges of around 200–250 metres depending on the radar sensor, which improves safety at short and long ranges. The new radar sensor solutions thus enable anticipatory applications for Euro NCAP requirements through to higher automated operation functions such as automated lane changes, so there is a degree of future-proofing built into the new sensor. In addition Continental also presented what it describes as its 'end-to-end network solution for connected cars' for the first time. From the sensor, the high-performance computer and the connectivity unit to the cloud, the solution is a full system that can be bought by any





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OEM as the basis for a connected car architecture. It offers a fast connection of the vehicle network to the outside world, enabling real-time processing of all data that enters the vehicle and is processed by high-performance processing units in the vehicle.



Outlook and implications

Product lines like this will be Continental's bread and butter in terms of OEM components, as the industry accelerates into the digital age, with increased connectivity and eventually a move to fully autonomous vehicles. Like all traditional major Tier 1 suppliers, Continental has been accelerating its efforts in recent years in terms of offering appropriate digital products to OEMs, while moving away from investments in ICE components.





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[GSP] Middle East/Africa Sales and Production Commentary - 2021.03

Middle East/Africa sales

February 2021: -10.8%; 0.262 million units vs. 0.294 million units

YTD 2021: -9.3%; 0.556 million units vs. 0.613 million units

- Light vehicle demand in the Middle East and Africa in February 2021 likely sharply decreased 10.8% compared with February 2020. This result builds on the previous negative months of January (down 8.0%) through last March (down 29.5%), when the vehicle sales market began to crash. Overall, in the 12 months of the COVID-19 crisis from March 2020 to February 2021, demand had collapsed 20.7%, with 748,000 fewer vehicles registered.
- Regional economies were already very fragile, and further negative effects to business and consumers from the COVID-19 pandemic have deeply worsened the economic development and the near-term outlook. In addition, record-low crude oil prices have further depressed countries that heavily depend on export revenues, as supply heavily overshadows global demand. Key industry sectors in developed countries, such as airlines, cruises, cargo shipping, fuel stations, and manufacturing plants, have significantly lowered demand for oil, resulting from government-imposed lockdowns, forcing consumers to stay at home. As a result, tourism revenues have crashed across the region.
- January—December 2020 year-to-date (YTD) estimated volumes were down 17.9%. The negative trend that has developed in the past few years will likely continue in the near term. The full—year 2021 forecast for the Middle East and Africa is set at 3.162 million units (revised up 0.026 million units versus last month), representing an 8.4% year-on-year (y/y) increase, which still holds total regional volumes back to levels reached 16 years ago (in 2005). Moreover, falling demand in six consecutive years highlights the economic instability across the region and the cautiousness of consumers to commit to a new vehicle purchase.
- As previously forecast, the declining vehicle demand trend will likely persist throughout the first half of 2021. The market is experiencing a steep fall owing to the economic disruptions due to the COVID-19 pandemic. Vehicle sales in February 2021 were affected by the distinct performances across the region, with specific economic developments affecting various markets and subregions in different ways. Vehicle demand during February in the Middle East (excluding Iran) and the Gulf plummeted (down 12.3%) compared with the same month of 2020. Similarly, vehicle demand in Iran decreased (down 3.8%), and the African continent dropped (down 13.6%).



Sales of new vehicles in 2021 should increase 8.4% across the Middle East (excluding Iran) and Gulf subregion. The first quarter shall fall at a much slower, albeit negative rate, as some consumers pull forward vehicle purchases to avoid higher value-added tax (VAT) rates to be introduced in some countries at the start of the





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second quarter. Recovery will likely be strong and positive in the second quarter of 2021 owing to the comparison with a dreadfully low result during the second quarter of 2020. The remaining third and fourth quarters of 2021 will possibly hit cautiously low growth, as the vaccine is rolled out and the economies reopen with fewer restrictions, allowing for consumer spending levels to begin to rise in step with more positive confidence indicators.

- Unfortunately, the African continent felt the full force of the COVID-19 pandemic in the second half of 2020, and this struggle will continue throughout 2021, as the global epicenter of the virus moves away from Europe and the United States. Unfortunately, this expectation has been confirmed as African leaders struggle to contain the virus from further spreading, and South Africa in particular has recorded a higher number of positive cases.
- Demand for new vehicles in Africa decreased by an estimated 13.6% in February, canceling out the slight possibility of a turnaround, as substantial pent-up demand has significantly risen over the years. Since 2015, vehicle sales have considerably fallen from the highs of fewer than 2.0 million units to the current lows of fewer than 1.0 million units. The positive momentum during late 2018 and the first half of 2019 was short-lived, and the start of a turnaround is expected for late 2021. Countries in North Africa, such as Algeria and Morocco, have fallen into negative territory, joining South Africa and hurting the region's overall demand levels. As a result of much weaker consumer demand, vehicle demand across Africa likely decreased 27.8% in full-year 2020, despite some relative support from the rise in commodity prices. Demand is also heavily affected by lower global crude oil demand, despite a trending recovery in prices as of late 2020. As a result, vehicle demand is falling back to levels achieved 17 years ago, in 2003. This scenario will lead to more hardship across Sub-Saharan countries, while North African countries also suffer from a slowdown in Western Europe. Sales of new vehicles in the African continent will increase 13.9% in 2021.



- South Africa is the largest vehicle market in Africa, but the economic landscape has been extremely difficult during the past few years and further depressed owing to COVID-19. Demand for new vehicles continues to struggle owing to the political tension within the African National Congress (ANC), which in turn has led to economic policy stagnation. General elections were held in May 2019 and won by the ANC led by Cyril Ramaphosa, whose main task has been to provide greater stability, which is critical and necessary to turn around low consumer confidence levels. Big-ticket purchases, such as new vehicles, have been largely postponed and are expected to remain weak well into the second half of 2021. As a result of the government lockdown for 35 days from 27 March, which restricted movement and closed businesses, and successive restrictions that have been imposed over the months, the severe decrease in consumer spending will likely persist. Vehicle sales in April crashed 98.7% and contracted 68.2% in May, as car dealerships were forced to close under the government's lockdown measures and only reopened during mid-May. Vehicle sales in the seven-month period from June through February decreased by an average of 18.2%, or 70,500 fewer units, compared with the same period of the previous year.
- The Sub-Saharan region has also struggled in recent years owing to low global oil prices hurting oil revenues for exporting countries and low commodity prices hurting agricultural and mining revenues for other nations.

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Following the high volumes reached in 2014, vehicle demand has struggled to achieve any consistency trending downward in the past five years, and imports of used vehicles continue to flood the continent despite the government policy. Vehicle sales in 2021 are forecast to remain at the levels achieved 20 years ago. A stronger turnaround is projected for beyond 2022, as more governments implement growth strategies for the automotive

- North African countries have also been struggling to put their economies on the right path to economic growth. Demand for new vehicles heavily fell in the three-year period (2015–17) owing to the economic collapse in Algeria, Egypt, and Tunisia. Overall, North African vehicle sales have fallen to levels registered 15 years ago. In 2018, Algeria implemented a vehicle import quota system and has since continued to tank, with sales developments destined to be drastically lower than the normal market demand. In fact, new-vehicle registrations are estimated to have reached an all-time low in 2020 at 27,000 units, an abysmal gap from the highs of 500,000 in both 2012 and 2013 for Algeria. Egypt's vehicle market had been struggling in the recent past and is forecast to continue on the path of a slow recovery throughout 2021. Lastly, Morocco's vehicle market continues to develop in line with its economic growth, despite weaker sales resulting from effects of the COVID-19 virus outbreak on the economy and significant trading partners. The recovery in demand will likely be mild for new vehicles across North Africa in 2021, as more carmakers and many tier suppliers have delayed expanding their manufacturing footprint in the region.
- Demand for new vehicles in the Middle East and Gulf region (excluding Iran) fell by an estimated 12.3% in February, largely owing to the negative results across all countries owing to economic restrictions related to the COVID-19 virus outbreak. For 2021, the trend should turn slightly positive, and full-year vehicle sales will increase 8.4%. Further at the negative end of the scale, Iranian vehicle sales have collapsed to levels reached over 20 years ago, since the highs registered in 2017 at 1.6 million units, down to 0.8 million units in the present day. The stark double-digit declines are a direct result of the renewed economic sanctions imposed by the US under the Trump administration. The Iranian market in 2021 is forecast to stagnate as poor economic development concerns continue to affect the negative sentiments of Iranians. Across the Gulf region, higher taxation has slowed demand for high-priced goods. Iran and Saudi Arabia are the largest vehicle markets in the Middle East and Gulf region, and their performance will significantly affect overall demand. In recent years, Iran's vehicle demand registered one in every two vehicles sold in the region, thus highlighting the importance of the country.
- The high volatility in demand for new vehicles is expected to continue and lies in the political turmoil within the Gulf region, where countries have turned on Iran and previously Qatar, led by Saudi Arabia. In September 2019, a further crisis emerged owing to the drone strike carried out on two targets owned by Saudi Arabia's state-owned Aramco company at the Khurais oil field and the Abqaiq processing facility. Similar drone strikes were carried out in June 2020 and more recently in February 2021.
- Oil prices have begun to rise from late 2020, supported by a weak recovery, owing to the varied global lockdowns, which have grounded industries, such as airlines, cruises, and road transportation, and led to significantly low oil demand in developed markets. As a result, oil-exporting nations will continue to plan budgets with lower revenues. Vehicle demand in the first half of 2021 will likely remain very weak in the Middle East and Gulf region (excluding Iran), as a result of lower-than-optimal crude oil prices. Vehicle demand in Iran will remain depressed.
- In the short term, consumers will continue to be slightly affected by the VAT introduction in the Gulf countries, and the higher cost of goods will lower disposable income, thus hurting demand for new vehicles. Saudi Arabia went ahead and tripled its VAT starting July 2020 to 15%. The three remaining Gulf countries of Kuwait, Oman, and Qatar have pledged to implement the 5% VAT by April 2021. The United Arab Emirates and Bahrain have already implemented the VAT since January 2018 and January 2019, respectively. Meanwhile, Gulf leaders will





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continue to implement projects that are necessary to become less dependent on oil revenues in the longer term. Lastly, as a direct result of the COVID-19 pandemic and low oil prices in comparison with the highs of recent past years, IHS Markit expects a very mild recovery in vehicle demand over the next several quarters. On a positive note, former US president Trump's historic peace deal among Israel, Bahrain, and the UAE shall bring much-needed stability across the region. For 2021, President Joe Biden's administration will have high expectations from Gulf nation leaders to further contribute positively toward the region's peace and economic developments.

• Iranian car owners will hold onto their vehicles for a longer period of time, thus driving up the age of the fleet of Iranian vehicles. In turn, this trend will lead to higher demand for new vehicles in the longer term.

Global crude oil outlook

- Positive vaccine news points to a more certain recovery in oil markets in 2021, following the winter wave of infections. Successful COVID-19 vaccine results from Pfizer/BioNTech and Moderna are in line with IHS Markit's base case assumptions—which point to higher world total liquids demand and prices in 2021, especially in the second half of the year, when vaccines are assumed to be widely available. Activity restrictions will stall global real GDP growth in the first quarter, with most of Europe in recession. The impact of COVID-19 variants, constraints on vaccine supply chains, and lingering restriction fatigue will continue to be difficult to assess and add risks to the forecast.
- World real GDP should increase 4.4% in 2021, 4.1% in 2022, and 3.2% in 2023. Global output will surpass its fourth-quarter 2019 peak in the third quarter of 2021.



- The Asia-Pacific region recovered early—having reached a new peak in the fourth quarter of 2020—and will
 account for more than half of global growth in the next decade.
- High inventory and spare capacity levels remain high and will prevent a rapid acceleration of oil prices in the near-term base case.

Saudi Arabia is in control of the market—for now. Saudi Arabia surprised the market with a 1-million-barrel-perday (MMb/d) production cut for February and March, which reduces what had been shaping up to be a large first-quarter global oil surplus. The unilateral cut is ostensibly to defend USD50/barrel oil with an aim for USD65 or higher. Oil inventories are also falling—at least in the US, which is the only enclave with prompt data. Declining stocks are contributing to backwardation in the future market. The kingdom currently holds 4.5 MMb/d of spare production capacity—just over half of the world total.





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[Supplier Trends and Highlights] Veoneer partners with Swiss Re to improve assessment and enhance development of ADAS systems

Swiss Re will leverage Veoneer's expertise on ADAS hardware and software technologies



Source: Getty Images/4X-image

Veoneer has announced a partnership with insurance company Swiss Re, according to a 20 April press release. Under the agreement, the two companies leverage their services in road safety technologies to further enhance the evaluation and development of advanced driver assistance technologies (ADAS) and related services.

Veoneer will use Swiss Re's empirical knowledge of real-world performance of ADAS systems based on insurancerelevant insights and risk modeling to improve its ADAS products and services while Swiss Re will leverage Veoneer's expertise on ADAS hardware and software technologies.

"With extended knowledge about the real-world performance of various ADAS technologies in different parts of the world, we can develop systems used by vehicle manufacturers globally that support drivers in an even better way. It forms the next step in collaborative driving, putting both driver and technology in focus," said Steven Jenkins, CTO, Veoneer.

Outlook and implications

Understanding of how a vehicle is driven in different road or weather conditions, will reveal the opportunities and limitations of Veoneer's systems so that the company can improve upon them.

"We're delighted to further our work on advanced driving-assistance systems through the partnership with Veoneer. We thereby respond to our clients' needs of being able to accurately assess the latest ADAS technologies and their potential impact on future claims," said Pranav Pasricha, Swiss Re's Global Head P&C Solutions.

In March, Veoneer supplied collision mitigation technology to the Polestar 2 electric vehicle, helping it receive a five-star rating in Euro NCAP's safety test.





[Supplier Trends and Highlights] Johnson Matthey, Finnish Materials Group collaborate on eLNO cathode plant

Finnish Minerals Group look to codevelop an integrated solution to treat sodium sulphate



Source: Getty Images/ilynx_v

Johnson Matthey has announced a partnership with Finnish Minerals Group to support the development of a second commercial plant in Finland to produce electric vehicle (EV) batteries, according to a press release dated 19 April. The company has also signed a term sheet for the supply of nickel and cobalt from Nornickel, and an agreement for the supply of lithium hydroxide from SQM.

"The partnership with Finnish Minerals Group, and the long term supply of critical raw materials with Nornickel and SQM, are important milestones on our journey towards developing a sustainable battery materials ecosystem and further demonstrate the progress we are making on the commercialization of our business. With sustainability at the heart our strategy and an increasingly important requirement for our customers and consumers, we are delighted to be working with our partners to deliver sustainable cathode materials to the market," said Robert MacLeod, CEO, Johnson Matthey.

Outlook and implications

The company sees the latest developments as an important step in the commercialization of eLNO, its portfolio of leading nickel rich advanced cathode materials. Finnish Minerals Group look to codevelop an integrated solution to treat sodium sulphate and invest in pretreatment technology of nickel and cobalt sulphates to tailor the materials to the requirements of high nickel cathode materials.

Johnson Matthey and Nornickel will also collaborate on the digitalization of the supply chain, circular economy opportunities, and the application of a newly developed metal dissolution technology.

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