

Automotive Industry Weekly Digest

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[Autonomous Highlights] Plus demonstrates autonomous truck on public roads in China

Plus's Level 4 autonomous heavy truck has completed a 20-mile stretch of China's Wufengshan highway in regular traffic conditions, reports Automotive News. The truck conducted lane changes and other manoeuvres autonomously without a safety driver, teleoperator, or any other form of human intervention. David Liu, CEO of Plus, said, "The technology of the future is here. However, to deploy at scale and commercially, it will require maturity on three fronts. One, software, two, hardware and third, regulation."



Outlook and implications

This comes after Pony.ai received permit from Beijing municipal government officials to test autonomous passenger cars on the highway. Plus said that it plans to launch pilot operations of a fully autonomous truck for use in a dedicated environment in 2022. The company has developed an autonomous system, PonyAlpha, which combines cameras with sensors such as radars and LiDAR along with artificial intelligence software to detect objects at distances of up to 200 m.

[Autonomous Highlights] Baidu launches new-generation autonomous minibus Apolong II

Baidu has launched a new-generation autonomous minibus, named Apolong II, which will be deployed for commercial services in Guangzhou's Huangpu district. Compared to the first generation, the Apolong II has received 155 capability enhancements. Its computing power has increased threefold to 372 trillion operations per second (TOPS) and its perception system has been enhanced to include two 40-channel LiDAR sensors. It uses Baidu's vehicle-to-everything (V2X) and 5G remote driving service, complete with dual redundancy to ensure safety and reliability. Inside the cabin, an intelligent 55-inch transparent window display, jointly developed by Baidu and BOE Technology, has been installed. The Apolong II, which is a multi-purpose vehicle (MPV), is highly configurable and can be customised for public transport, mobile policing, healthcare providers and other commercial industry uses.

Outlook and implications



The first-generation Apolong, which has been in production since 2018, was claimed by Baidu as China's first commercial-grade autonomous electric minibus. The bus has been deployed in 22 urban parks in Chinese cities and has served 120,000 users while traveling a total of 120,000 km. This development will support Baidu's plan to scale up its commercial ride-hailing service called "Apollo Go" using fully autonomous vehicles (AVs). Baidu's Apollo Go robotaxi service is available in Beijing, Cangzhou, Changsha, and Guangzhou, with plans to expand it to 30 cities over the next three years.



阿波龙|| 百度



[Energy Highlights] Fit for 55: Biofuel sector burdened with highflying, full-sail ambition

The EC's proposals for biofuels in its "Fit For 55" package of policies attempt to correct past mistakes, but they call for tough reforms in sectors with a low appetite for change.

The EU must rapidly grow the share of renewable fuels and electricity used by cars, trains, ships, and planes to reach its newly legislated carbon neutrality aim.

Today's renewable transportation fuel frontrunner is biofuels—of which around 80% is biodiesel made from food crops like rapeseed—but its carbon-cutting benefits are hamstrung by the use of crops imported from overseas, which results in deforestation that devastates carbon sinks. This may be why the EU has decided to ease off supporting those crops and reshape markets for biofuels in the proposed revision of the Renewable Energy Directive (RED II) published on 14 July.

While IHS Markit analysts see crop-based biofuels as the current leaders in the decarbonization of transportation under RED II, under the proposed revision as it is currently worded, states may need to reduce their crop-based biofuels consumption in favor of fuels that use alternate feedstocks.



The EC would also like to see, for example, ships and cars use electricity, and new advanced biofuels that come from feedstocks like waste or "energy crops," specific types of trees that grow on land that is not devoted to arable use, or algae, recycled carbon fuels, and electricity-based fuels such as green hydrogen. The EC's proposal seeks to make its fuel wishlist a reality even though these fuels are high in cost and low in availability.

Raising RED again

Rounding off a decade of renewable energy and biofuels growth, the adoption of a revised RED would mark the third time since 2009 that targets have been revised upwards. Now, the transportation targets are being upped because the existing ones are not high enough to put the EU on a carbon-neutral path.

Under prior versions of RED, member states were assigned specific renewable electricity and renewable fuel targets for transportation. The 2030 bloc-wide target for renewables as a share of energy in transportation is 14%. The EC suggested in the July proposal that this is far too low: The bloc will need to reach not 14% but 27-29% by 2030.

Thanks to the combined efforts of states and despite a few laggards, the EU was expected to achieve its blocwide 2020 RED target for electricity, and the progress towards the RED target for the transport sector is similarly



uneven. The EC in October 2020 expected to exceed its overall 10% renewable energy in transportation target for that year despite 11 states not fulfilling their mandatory obligations.

The stubborn transportation sector is still transitioning at "the slowest pace," according to the EC. The vast majority of transportation in the EU relies on fossil fuels, and sector-wide emissions are increasing, the EC said in the proposal.

Advanced biofuel, e-fuel targets praised

Today, member states meet their RED transport targets by passing laws promoting the use of biofuels, but in the future, electrification of transport may play a bigger role.

Several of the Fit For 55 proposals, including a credit mechanism in the latest RED revamp, would significantly aid the electric vehicle charging market.

But the overall target that counts both electricity and biofuels is set to change. The RED revisions change the metric for the RED transport target, replacing the current 14% renewable energy consumption target in 2018's RED II with a 13% GHG intensity reduction target for the fuels and electricity used for transport. The EC says this will "stimulate an increasing use of the most cost-effective and performing fuels, in terms of greenhouse gas savings, in transport."

While this target may not look ambitious at first, the EC regards this as "increasing the ambition level of renewables in transport." This is partly because the proposed target counts GHGs and partly because it captures the whole transportation sector, including ships and planes, whereas only road and rail transportation are currently regulated. The metric aligns with what some in the biofuels industry called for in 2020.



Campaigners have said the 13% GHG reduction target will encourage both environmentally sound and damaging activity. "The new targets in the revision of the RED II are certainly very ambitious. They're much higher than what was already in the RED II, which is good in some ways and bad in some ways," Stephanie Searle, fuels program director at the International Council on Clean Transportation (ICCT) campaign group, told Net-Zero Business Daily.

One target that is green is the sub-target within the GHG reduction target that would see advanced biofuels increase from at least 0.2% in 2022 to 0.5% in 2025 and 2.2% in 2030, Searle said. This is because advanced biofuels are mostly cellulosic biofuels like wheat straw that do not create damaging carbon sink impacts through Indirect Land Use Change (ILUC). "So, increasing the ambition on that front is a good thing, although it may be difficult for the market to meet," said Searle.



The series of advanced biofuel targets proposed would replace a previous 0.5% advanced biofuels target for 2020, which many member states did not meet.

Searle acknowledged that the new advanced biofuel targets would mean changes for the biofuel industry. "The Commission is not really trying to stimulate a 100% new industry, but a mostly new industry and it's going to take really dramatic growth to reach those targets by 2030," said Searle. "It depends on member states. This is a directive, not a regulation, and member states have to implement it. If member states implement it well, those targets can be met. If member states don't implement it well, the targets will be missed."

Searle supports a proposed 2.6% sub-target for Renewable Fuels of Non-Biological Origin that includes renewable-power origin liquids and gases, like hydrogen, that to date are not widely used as fuel. The target excludes blue hydrogen, which is not usable for compliance with any part of the RED proposals, said Searle.

Food-based biofuel crop cap a negative

No one disagrees with the idea that burning biofuels releases less emissions than fossil fuels. In the case of biodiesel when compared to diesel, it's 41% less.

The debate is around biofuels made from feedstocks that displace agriculture such as food or animal-feed crops, which leads to the clearing of forests that would otherwise be carbon sinks to grow those crops. The EC estimated that 51% of land used to grow biofuels for EU consumption in 2018 was located in non-EU countries. EU centers of biofuel production are in Romania, Poland, and France.

To deal with this ILUC issue in the proposal, a cap of 7% on food-based biofuels like palm, rapeseed, and soy will be carried over into the new target. The target existed under the previous RED II and discourages the use of feedstocks like palm due to their impact on forests in Indonesia and Malaysia.

Searle argues the proposed cap on food-based biofuels is bad for the climate because while the cap would stay the same, it would cover almost all transportation fuels, thus allowing for greater volumes of food-based biofuels to be used. "It's not a great thing, because we know food-based biofuels are linked with significant land-use change emissions and many types of food-based biofuels are actually worse for the climate compared to petroleum, and some of the types of biodiesel in particular," said Searle.

The proposal also includes an exception for crops grown abroad during the winter in Europe, so-called intermediate crops like corn. "There is the risk that a very large amount of just 'business-as-usual' food-based biofuels could sneak in around the 7% cap as intermediate crops, and the issue is that with the large 13% target, there is more draw for these unsustainable pathways. We've done the modeling recently, and we found that we'd actually get significant GHG savings with a slightly lower target of 11% because you'd have less of a draw for these unsustainable pathways," said Searle.

The EC is aware of the problem and has made modest efforts to solve it. It passed a 2019 Delegated Act to set out rules for certification of low-ILUC-risk biofuels and planned to legislate for the gradual phase-out of high ILUC-risk biofuels like palm oil by 2030. In last year's renewable energy progress report, the EC lamented that ILUC emissions "cannot be measured precisely."

The EC believes that voluntary programs certifying the sustainability of biofuels, including 13 schemes already approved under the RED, can be used to certify low-ILUC biofuels, although they do not allow tracing from production facilities.

But in 2016, an investigation by the European Court of Auditors found such schemes were "not fully reliable" due to weak oversight. In June, the EC opened a consultation on new standards that would apply to all voluntary schemes, acknowledging a willingness to improve its biofuel sustainability framework.



Change on the horizon for biofuel, shipping, aviation industries

Encouraging the greening-shy shipping industry to start using biofuels, the EC's 14 July package included policies supporting RED's renewable aims for the maritime sector.

Measures that boost biofuels' use in shipping include the RefuelEU Maritime minimum lifecycle GHG reduction, bunker fuel taxation in the Energy Tax Directive, and the inclusion of shipping in the EU Emissions Trading System, IHS Markit analysts explained in a recent presentation.

What is more, the advanced biofuel target in the RED will contain a 1.2 multiplier, which will mean a "double counting" (more or less) of ships' and planes' use of such fuels towards that target. As a result, not only shipping but also the aviation sector is expected to form a new large source of demand for biofuels.

Umbrella network Transform! Europe released a statement decrying the land-use effects of a "boom" of biofuel use by ships. But the RED aviation proposals won favor with other campaigners.

The proposal denies crop-based biofuels with feedstocks such as soy and rapeseed inclusion in the definition of sustainable aviation fuels (SAFs) used to meet proposed aviation targets and restricts their use for maritime fuel targets. "From an environmental point of view, the targets in that [ReFuelEU Aviation] regulation are really good, because it doesn't include food-based biofuels," said Searle.

Waste biogas would only make a limited contribution to the target because there are few CNG vehicles in use, she added.

Advanced biofuel cellulosic ethanol might be spurred, but probably for use in sectors like aviation rather than for vehicles because the EC wants to phase out internal combustion engines in favor of battery electric vehicles. "I expect we'll still see some growth in that industry, but it may be limited now by the forecast for transitioning all gasoline cars to electric vehicles Hopefully, we will see significant growth in other types of cellulosic biofuel technology that can produce drop-in fuels for diesel and jet fuel," Searle said.

Yet, concerns remain that the riddle of sustainable biofuel supply must be solved by ill-prepared sectors.

The lack of harmonization between sustainability criteria for aviation and shipping sectors bothers the biofuel trade body, the European Biodiesel Board. "The Commission proposes different sustainability regimes and limits on feedstocks for biodiesel in the aviation and maritime proposals This would cause substantial market disruptions, possibly decreasing overall sustainable fuel use and imperiling European transport decarbonization efforts," it said in a statement.

The European Waste-to-Advanced Biofuels Association is concerned about aviation outbidding other sectors for limited biofuel supplies. It said this would "completely" distort the market and "divert more than half of feedstocks" towards aviation, undermining climate mitigation efforts in the road and maritime sectors.

The EC's impact assessment for the policy concludes that bio-LNG and biodiesel combined will meet the bulk of EU maritime energy mix, but those prospective buyers are skeptical. Shipping sector trade bodies have protested that the fuels are not yet widely available.



[Energy Highlights] China's gasoline, jet fuel use to hit record in 2021 despite COVID cloud

China's fuel demand is on track to hit record highs this year on a rebound in car sales and booming domestic air travel, even as a resurgence of COVID cases slows movement in some cities in the near term, analysts say.

Despite slowing growth for diesel, the main industrial fuel, overall consumption of gasoline, diesel and aviation fuel in the world's top crude oil importer is expected to grow by 7% to 11% in 2021 to a record between 8.4 million and 8.9 million barrels per day, analysts at consultancy SIA Energy, IHS Markit and Energy Aspects estimated.

By comparison, the International Energy Agency (IEA) in March forecast China's demand for gasoline, jet fuel and diesel would rise by 6.5% to 8.2 million bpd in 2021.

China's strong growth in fuel use has helped stoke a 50% jump in global crude oil prices from 2020.

COVID CAUTION

The latest outbreaks of the COVID-19 Delta variant across 17 provinces are expected to constrain travel in the near term, but analysts say the overall growth trend remains intact.

"If fast containment can be achieved by mass testing, and future large-scale outbreaks can be avoided with the vaccination rollout, gasoline and jet will be still on track to hit a record," ISH Markit analyst Shi Fenglei said.

Gasoline demand, which accounts for a quarter of China's refined fuel use, is forecast to rise by 11% to 13% this year to a record 3.8 million to 4.1 million barrels per day, well above the IEA's March forecast of 3.5 million bpd.



"Gasoline leads the growth as people drive more for long-distance travel, (there are) more ride-hailing services and motorbike e-commerce deliveries," said Seng Yick Tee, senior director at SIA Energy.

New passenger vehicle sales are expected to rise 7% this year, marking China's first annual growth since 2017, said Tao Gao, light vehicle specialist with IHS Markit.

Gasoline-guzzling sport utility vehicles continue to dominate new sales, making up nearly half the first half 2021 total, steady from last year, IHS data showed.

People are spending more on cars while cutting overseas travel as China's borders remain largely sealed to contain the coronavirus.

"Our car models are not the most trendy, but we're predicting annual sales to be a quarter above last year, as customers appear to have more to spend, now that they're unable to travel abroad," said an east China-based car dealer of General Motors Co's Cadillacs.



JETTING AWAY

Flight cancellations due to the latest COVID outbreaks will cut jet fuel demand for the next two weeks, but fullyear aviation fuel demand is seen nearing or topping 2019 levels, at between 880,000 and 947,000 bpd in 2021, Energy Aspect's Liu Yuntao and FGE's Mia Geng estimated.

According to aviation data firm OAG, passenger seat capacity in China from February through July was 413 million, up 52% from the same period in 2020 and about 1 million more than in the same period in 2019.

EXCAVATORS

Demand for diesel, which powers heavy machinery like excavators and trucks, is expected to rise just 1.7% from 2020 to 3.88 million bpd, FGE's Geng estimated.

Sales of excavators, a gauge for the mining and construction sectors, began to tumble in April and fell through June versus a year ago, while utilization also dropped, according to Chinese financial data group Wind.

Even record first-half heavy-duty truck sales, another proxy for diesel use, did not boost fuel demand, said Cassie Liu of IHS Markit. Sales were driven more by aggressive marketing by vehicle dealers than trucking activity.

(Additional reporting by Koustav Samanta in Singapore, Beijing newsroom; Editing by Shivani Singh, Gavin Maguire and Sonali Paul)



[Battery and EV Highlights] Chinese battery-maker Envision to set up plant in Japan to supply Nissan for EVs

Nissan has teamed up with Chinese battery manufacturer Envision AESC to set up a battery plant in Japan, reports Electrive. According to the report, the new plant is to be built in Ibaraki prefecture north of Tokyo and involve an investment of JPY50 billion (USD456 million). Reportedly, the plant is to have an annual production capacity of six gigawatt-hours in 2023.



Outlook and implications

The new battery-manufacturing plant in Japan will be the second facility set up by Envision to supply batteries to Nissan for electric vehicle (EV) models. Last week, Envision AESC submitted plans for an EV battery plant to supply Nissan's Sunderland (United Kingdom) facility. The new facility in the UK is to be built at the International Advanced Manufacturing Park (IAMP) in the city and, if approved, construction is due to begin in 2022, with the aim of starting battery production in 2024. The battery supplier plans to spend GBP450 million to build this large-scale battery manufacturing facility, which will have a capacity to manufacture 9 GWh of batteries per year initially. This new plant will help support Nissan's plan to expand its presence in electrified cars, including e-POWER, to achieve annual sales of 1 million EVs by fiscal year (FY) 2023 and increasing the electrification ratio to 60% in Japan.

[Battery and EV Highlights] Ganfeng Lithium to invest substantial funds in new battery projects in Jiangxi and Chongqing

According to a company filing with the Hong Kong Stock Exchange, Jiangxi Ganfeng LiEnergy Technology Co., a controlled subsidiary of Ganfeng Lithium, is planning to invest CNY3 billion (USD463 million) and CNY5.4 billion in separate battery projects. The former will be for the construction of a new-type lithium battery project with 5-GWh annual capacity in the High Tech Industrial Development Zone of Xinyu, Jiangxi. The latter will be invested to establish a new independent legal-entity project company to build a new-type lithium battery Science and Technology industrial park with annual capacity of 10 GWh and an Advanced Battery Research Institute project in Liangjiang New District, Chongqing. The Jiangxi project is expected to be completed and begin operations by October 2023, while the Chongqing project is expected to begin construction within three months from the date of signing the "Land delivery minutes". The scope of the project includes research and development (R&D),



production, and sales of lithium-ion power batteries and fuel cells, as well as production and sales of supercapacitors, battery management systems, and wind and solar energy storage systems.



Outlook and implications

Ganfeng Lithium claims to cover different aspects of the lithium-battery supply chain including lithium resource development, refining, and processing to battery manufacturing and battery recycling. The company is a batterygrade lithium supplier to automotive clients such as Tesla, Volkswagen (VW), and BMW. Expanding into the area of battery production will enable Ganfeng to compete with other Chinese battery suppliers such as CATL and Envision, which already have a strong foothold globally and have supply agreements with different automakers.

[Battery and EV Highlights] NIO partners with Shanghai Lingang Group for development of NEV industry

Chinese electric vehicle (EV) startup NIO has partnered with Shanghai Lingang Economic Development (Group) Co. (Lingang Group), to develop the local new energy vehicle (NEV) industry, reports Gasgoo. The two parties will co-operate on NEV-related key projects including setting up a national-level R&D centre dedicated to NEV innovative technologies, and explore smart mobility services and the construction of smart industrial parks. According to the report, NIO will set up an R&D hub at the Caohejing Science and Technology Oasis Phase IV building, a construction project managed by Lingang Group. Chairman of Lingang Group, Yuan Guohua, said, "We wish to further step up exchanges on smart new energy vehicle industrial chain, covering such fields as chip supply, cross-border trade, service testing, and talent pool, to secure a more sustain, profound and solid cooperation between us, and co-boost the development of China's intelligent NEV industry".



Outlook and implications



NIO is experiencing rising demand for its EVs in China and is expanding its presence and R&D facilities in the country. In March, it partnered with Anhui Jianghuai Automobile Group to establish a new joint venture (JV) in Anhui province to focus on the development and production of EVs and related components, and provide consultation services on EV technologies, services, and technology transfer. The automaker has also started construction of its smart EV industrial park in Hefei, Anhui province. Called the Neo Park, the facility covers an area of 11.2 million square metres and includes manufacturing and R&D facilities with designed annual capacity of 1 million vehicles and 100 GWh batteries. The R&D will focus on development of technologies related to complete vehicles, core parts, and autonomous vehicle operation.



[GSP] Greater China sales and Production Commentary -2021.07

Greater China sales

June 2021: -14.7%; 1.86 million units vs. 2.18 million units YTD 2021: +22.1%; 11.82 million units vs. 9.68 million units

In June 2021, a total of 1.86 million light vehicles were sold in Greater China, a decrease of 14.7% compared with the same period in 2020. Specifically, light vehicle sales in mainland China dropped 15.1% from 2.14 million units in June 2020 to 1.81 million units. Passenger vehicles recorded sales of 1.51 million units, for a decrease of 13.5% year on year (y/y), while light commercial vehicle (LCV) sales decreased 22% y/y, to 0.31 million units.

On a year-to-date (YTD) basis, light vehicle sales in mainland China jumped 22.3% from 9.47 million units to 11.58 million units. Precisely, passenger vehicle sales increased 24% y/y, to 9.63 million units, while LCV sales increased 14.4% y/y, to 1.95 million units. Segment-wise, YTD sedan sales rose 25.7% y/y from 3.75 million units to 4.71 million units, and the sport utility vehicle (SUV) segment increased 21.8% y/y from 3.75 million units to 4.56 million units. For multipurpose vehicles (MPVs), YTD sales increased 32.3% y/y, to 0.37 million units.



In June 2021, passenger vehicle sales of local brands increased 16.6% y/y, to 0.57 million units. Their market share went up from 28.2% to 38%. In the first half of 2021, local brands' passenger vehicle sales in mainland China achieved 47% growth—significantly higher than the market average. Their export sales reached a record high of 0.43 million units, up 133.9% compared with first half 2020. The expanding channel in regions such as the Middle East and the Association of Southeast Asian Nations (ASEAN) enabled mainland Chinese brands to reach more potential consumers in the overseas market.

The recent COVID-19 outbreaks in the Guangdong province that began in late May should remain contained and are unlikely to derail mainland China's economic expansion. The vaccination rate in mainland China has continued to rise, helping to normalize domestic demand and the service sector. At this point, mainland China's light vehicle sales in 2021 will likely increase 5.9% y/y, to 25.05 million units. Of this, passenger vehicles are estimated to increase 7.1% y/y, to 21.19 million units, while LCVs are forecast to decline 0.4%, to 3.86 million units. Production in the first quarter of 2021 suffered a loss of 364,000 units, followed by 420,000 units in the second quarter. The disruption is expected to lead to a production volume loss of about 40,000 units in the third quarter of 2021. The semiconductor shortage could result in a net loss of 250,000 units of vehicle demand for this year, with a clear slowdown in sales in the second quarter. The situation remains highly fluid, and IHS Markit analysts continue to track the impact of these developments, which will be reflected in upcoming forecasts.



Greater China production

June 2021: -12.3%; 1.89 million units vs. 2.16 million units YTD 2021: +25.4%; 11.72 million units vs. 9.34 million units

Greater China's light vehicle production in June recorded 1.89 million units, decreasing 12.3% year on year (y/y). In mainland China, light vehicle production declined 12.5% y/y to 1.87 million units. Hit by the global semiconductor shortage, Chinese auto production has shown a y/y contraction for two consecutive months. As expected, second-quarter production should be severely affected by the chip shortage. The mainstream international brands have been hit the hardest, particularly after the March fire at the Renesas chips facility in Japan. The June output of Volkswagen (VW), General Motors (GM), and Honda have plunged over 30% y/y.



[Supplier Trends and Highlights] Innoviz Technologies, Whale Dynamic partner on next-gen L4 LiDAR-driven autonomous driving platform

The Collaboration will Integrate Innoviz's High-Performance LiDAR in Level 4 Platforms in China



Source: Getty Images Plus/ AndreyPopov

Innoviz Technologies, a leading provider of high-performance, solid-state LiDAR sensors and perception software, and Whale Dynamic, a "full-stack" Level 4 autonomous driving company based in mainland China, announced their collaboration on Whale Dynamic's next-generation intelligent autonomous driving (AD) platform, according to a press release on PRNewswire dated 9 August.

"We are excited to expand our technology collaboration with Whale Dynamic to bring Innoviz's advanced highresolution solid-state LiDAR technology to their AD Platform," said Omer Keilaf, CEO and co-founder of Innoviz. "We look forward to collaborating with Whale Dynamics to bring Innoviz's High-Performance LiDAR to L4 Platforms in China, the largest vehicle market in the world."

Outlook and implications

Whale Dynamic is working on a unified Autonomous Driving platform that incorporates multiple sensors, such as LiDAR and high-definition cameras, to provide a complete and detailed view of the area around the vehicle. The platform uses "drive by wire" technology to guide the vehicle and is a "full stack" or "plug and play" solution for automotive OEMs, robo-taxi companies, and autonomous delivery providers.

The new Whale Dynamic AD platform will use InnovizOne LiDARs as its primary sensor, replacing the previous version's InnovizPro LiDAR. InnovizOne was chosen for its superior performance, automotive-grade specifications, low power consumption, and small size.

[Supplier Trends and Highlights]UK-based Startup Wejo collaborates with Iteris for enhanced connected vehicle data content

Iteris will access Wejo's data from more than 11 million connected vehicles





Source: Getty image/ metamorworks

Wejo has partnered with Iteris to deliver enhanced connected vehicle data content to Iteris' public-sector and commercial customers throughout North America, it said in a press release on 10 August. Iteris will join Wejo's partner program with real-time movement data from more than 11 million connected vehicles. Wejo will also join Iteris' ecosystem of mobility intelligence providers.

"We are excited to announce this partnership, which will make Wejo's near real-time connected car data available to Iteris' public-sector and commercial enterprise customers nationwide for the first time. Our value-added insights will enhance and improve Iteris' product offerings, and ultimately contribute to improved safety and reduced congestion on roadways throughout North America, while helping to shorten journey times and providing car owners with a materially better driving experience," said Richard Barlow, CEO, Wejo.

Outlook and implications

Under the partnership, Wejo's connected vehicle data will combine with layers of real-time traffic and weather information, incremental predictive inputs and artificial-intelligence capabilities from Iteris' ClearMobility Cloud. This will help with insights in areas such as commuter information, traffic mitigation, road network management, and studying road utilization.

"We are delighted to announce our partnership with Wejo and welcome the expansion of their industry-leading vehicle intelligence into Iteris' smart mobility infrastructure ecosystem. Wejo is a leader and pioneer in connected vehicle data, and combined with valuable traffic and weather information, and artificial-intelligence driven capabilities from our ClearMobility Platform, Iteris will enable safer and more efficient mobility for public transportation agencies and commercial enterprises throughout North America," said Joe Reed, CTO, SVP, and general manager, Applications and Cloud Solutions, Iteris.

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