

# Autos & Mobility Industry Briefing -- 23rd December 2019 to 5th January 2020

News is arranged by company and topic. Stories that apply to more than one company or topic are duplicated.

# News about the major automakers

### BMW (history)

- BMW thinks it has chosen the right path by developing platforms that can accommodate conventional and electric powertrains but admits that dedicated architectures would be better if all-electric vehicles dominate. Improvements in battery energy density have wildly exceeded BMW's expectations and the next generation of plug-in hybrids from the company will have zero emission ranges of 80 120 km. The firm believes that, in Europe, a decent charging network "is coming" and that this will support a plug-in hybrid sales mix of 25% by 2030. Although a current fuel cell costs ten times that of a battery electric system, BMW expects costs to converge by 2025. (Automotive News)
- Will cease production of the 1.5 I3 diesel engine and the highest power derivatives but thinks that internal combustion engines will continue for decades -- at least 20 years for diesel and 30 for gasoline. (Automotive News)
- The US SEC is investigating BMW's sales reporting practices. (<u>NYT</u>)
- Won an appeal against fines levied in South Korea for vehicles sold with improper emissions certification. BMW isn't exonerated, but the penalties have been reduced. (Korea Herald)

### Daimler (history)

- CEO Källenius says the personnel cost reduction target is €1.4 billion by 2022. (Economic Times of India)
- Rumoured to be in talks with Geely's Volvo unit about combustion engine sharing. (Reuters)
- Investing about \$19 million to expand a test track in Brazil. (Autocar)
- Recalling 744,000 cars in the USA because the sunroof glass might come away. (<u>Reuters</u>)

### FCA (history)

- Sold 2.2 million vehicles in the USA during 2019, down (1)% on a year-over-year basis as improvements at Ram almost offset declines in every other brand. FCA's press release didn't even mention the Chrysler, Fiat and Alfa Romeo brands. (FCA)
- The Peugeot and Agnelli (Exor) families are reportedly discussing a formal pact that would control around 23% of the merged PSA-FCA's shares (and could have double strength if maintained in the long term). (<u>II Sole 24</u>)

# Ford (history)

- Ford executives hinted that the line-up of electric vehicles intended for production from VW's MEB platform will include a smaller sibling of the Mach-E SUV. (<u>Auto Express</u>)
- The next Focus RS is rumoured to have a 48V gasoline engine and a plug-in hybrid that will drive the rear wheels. Such a setup would be expected to have considerable CO<sub>2</sub> benefits over the current model. (<u>CAR</u>)
- Declared reservations for the first edition of the Mach E to be full. Despite the attention-grabbing headline, plenty of vehicles are available. (Ford)
- Ford bought a pair of humanoid robots to perform experiments with commercial vehicles. (Ford)

## Geely (includes Volvo) (history)

- Geely sold 1.36 million vehicles in 2019 (including Lynk&Co), marginally beating the sales target but down (9)% on a year-over-year basis. In 2020 Geely aims to sell about 1.41 million units, back to 2018's level. Lynk&Co sold 128,000 units, improved versus the 120,000 vehicles in 2018, but indicative of stalling sales growth since 2019 has been a full year with a three car portfolio, whereas until June 2018 there was only a single model on sale. (Geely)
- Kandi signed an additional cooperation agreement with Chinese group Jiangsu, selling part of the vehicle division (which in turn owns a 22% in the joint venture with Geely) and establishing a joint ride hailing firm. (Kandi)
- Volvo is rumoured to be in talks with Daimler about combustion engine sharing. (<u>Reuters</u>)

## General Motors (history)

• Sold 2,887,046 vehicles in the USA during 2019, a (2.3)% drop on a year-over-year basis, explained by falling Chevrolet sales partially offset by slight improvements at GMC and Cadillac. GM blamed the UAW strike and pointed to low dealer inventories, hinting it will stuff them full of new product in 2020 rather than take the opportunity to run a leaner build to order system. (GM)

## Hyundai / Kia (history)

- Hyundai sold 4,422,644 units in 2019, a (3.6)% drop versus 2018. The company blamed emerging markets but hopes that in 2020 it will be back at the 2018 level. (<u>Hyundai</u>)
- Hyundai's CEO reiterated electrification goals of 44 models across Hyundai and Kia by 2025, and slightly revised the declared timeline for autonomous cars. <u>Having previously</u> talked about a solution from the JV with Aptiv being on the road by 2022, the plan is now: develop the system by 2022, rollout in company fleets in 2023, then sale to 3<sup>rd</sup> parties in the second half of 2024. (<u>Hyundai</u>)
- Kia's rule of thumb is that an electric car costs €8,000 €9,000 more than an entry-level gasoline model. The brand's European arm says it cannot make cars that compete with VW's ID3 on price but that it will sell some electric cars because paying fines "is a no-go at a Korean company". It is highly confident of selling 40,000 all-electric models in 2020, predicting that most will go to retail customers, rather than fleets. (Automotive News)
- Hyundai's tests have shown that the charging rate from a solar roof is fairly reliable, with only (3)% (10)% performance degradation if the panel is dirty or has debris on it and that the CO<sub>2</sub> benefit is approximately 9g / mile (based on tests recognised be the US regulator). (<u>Hyundai</u>)
  - Significance: If Hyundai's maths are right (and European regulators agree), at \$1,100, solar roofs would have a CO<sub>2</sub> reduction cost below \$75 / g per km (unless it is lossmaking) -- competitive with many electrification measures being implemented.

## Mazda

- Defended the 35 kWh battery size, smaller than most peers, of the forthcoming MX-30 BEV on the basis of data suggesting it is enough for the real-world requirements of most drivers and saying that the negative emissions of manufacturing larger batteries outweigh their benefits. (Autocar)
  - $\circ$  Significance: It remains to be seen whether the lifetime CO<sub>2</sub> argument can be resurrected and win support from consumers or politicians. Since it rests on a key assumption that power grid energy generation continues to rely on fossil fuels (something which varies by country anyway), this might be difficult.

## Nissan and Mitsubishi (history)

- Nissan's number three executive resigned to take up a post at supplier Nidec. (Reuters)
- Mitsubishi has reportedly decided not to design any new diesel engines, although it will continue development of existing architectures. (Nikkei)
  - Significance: Existing engines can still be improved considerably, even without starting afresh. The application of 48V significantly reduces fuel consumption and emissions. So, whilst this move is a shift in emphasis, it doesn't necessarily mean the range dropping diesel altogether anytime soon.
- Ex-CEO Ghosn fled pre-trial detention in Japan, saying things were taking too long and offering to give his side of the story. Journalists were more interested in how he escaped. (<u>Nikkei</u>)

#### PSA (history)

- Both PSA and Changan said they were selling their joint venture to Baoneng. (Economic Times of India)
- The Peugeot and Agnelli (Exor) families are reportedly discussing a formal pact that would control around 23% of the merged PSA-FCA's shares (and could have double strength if maintained in the long term). (<u>II Sole 24</u>)

## Renault (history)

• Won't launch any more diesel vehicles in India and will have an EV in the market by 2021. (Autocar)

## Tata (includes JLR) (history)

• Deposed chairman Cyrus Mistry says that although he won a court ruling, he isn't trying to get his old job back, but does want a seat on the board. (Economic Times of India)

### Tesla (history)

- Tesla's Q4 deliveries totalled 112,000 cars, up 23% on a year-over-year basis, thanks to Model 3. In the full year, 367,200 cars were delivered, up almost 50% versus 2018. (<u>Tesla</u>)
- Delivered the first Model 3 cars from the new Shanghai factory. (BBC) Tesla said the factory has already produced 1,000 units and has reached a run rate of 3,000 cars per week. (Tesla)
- Russian Tesla enthusiasts can already get hold of a Cybertruck replica for about \$11,000, the low price is helped by the humble Lada underpinnings. (Ars Technica)
  - Significance: As we discussed at the time of the Cybertruck's launch, the simple design is an asset in terms of the ease with which it can be built. This goes two ways however... if this becomes a styling trend it also makes the design far easier to copy and companies could be leaving themselves open to IP theft.
- Elon Musk's mother shared the secret of her family's success. (CNBC)

## Toyota (history)

- Received a fine of \$13 million in China for telling Lexus dealers not to discount too much. The fine was based on annual sales in the affected Chinese province (2% of 2016FY). (<u>Nikkei</u>)
- Building a "city of the future" powered by fuel cells in Japan. Toyota hopes it will gain insights into connected homes and cars through the project. (Toyota)

## VW Group (history)

- German media were up in arms over VW's decision to (modestly) compensate Austrian police for vehicles affected by the diesel scandal, whilst continuing to deny German customers similar satisfaction. VW said there was no inconsistency because it was the importer that paid up. (Handelsblatt) It then transpired that VW had begun talks with representatives of a German diesel scandal class-action lawsuit covering around 440,000 owners. (The Guardian)
- Showed a concept video for a mobile charging station based in a car park. The system is made up of two elements, a battery pack on wheels that is put next to the car to charge the car's battery and a robot tug that tows it from the charging station to the car and back again. The use of an animated video and dimensions of the battery pack suggest this is not something VW have yet mastered. (VW)
- The VW brand is so pleased with the rollout of electric vehicles that the company upped its production forecast. It now expects to pass the one million mark by 2023 and make 1.5 million units in 2025 (memo: the VW group target is about double this). (VW)
- Bentley's CEO repeated <u>earlier comments</u> that 2025 is the earliest that the brand could have a credible all-electric car and is keeping his fingers crossed that solid state batteries are ready by then so as to save weight. He implied that the car might be the next generation of an existing nameplate, rather than an all-new model (<u>previous rumours were of an</u> <u>all-electric two seater</u>). Bentley is likely to use the VW Group's PPE electric platform as the brand is leading development of some component areas -- which ones is a secret. (<u>Automotive News</u>)
- Porsche's works council representatives want a ten-year hiring commitment pointing to continued hiring, even as the brand's electric vehicle portfolio is being rolled out, as evidence of the brand's exceptionalism. (Manager Magazin)
- Audi hinted that high performance RS-badged variants of all-electric models will begin rolling out in 2021. (Autocar)

## Other

- Nio released financial results for Q3 2019. The firm sold 4,799 cars, an improvement over prior quarters, but losses continued to mount; \$(337) million operational loss on \$257 million of revenue. Nio unveiled the EC6, a sporty all-electric SUV and announced a minor refresh for the ES8. The cash and equivalents balance of \$274 million dropped \$(229) million in the quarter. (Nio)
- Although Nio is cash poor, its investment vehicle Nio Capital raised over \$200 million. (Deal Street Asia)
- A Turkish consortium unveiled the **TOGG** brand, an attempt to create a domestic champion along the lines of Proton in Malaysia. The first vehicle will be an SUV and the government has pledged to help by buying 30,000 cars by 2035. (<u>The National</u>)
- Chinese all-electric brand **Lixiang Automotive** (also known as **CHJ Automotive**) hopes to raise \$500 million in a forthcoming IPO. (<u>Reuters</u>)
- **Rivian's** forthcoming pick-up truck can perform a complete turn in little more than the vehicle's own length. The feature, dubbed tank turning, appears to work by independently controlling the electric motors on each wheel. The demonstration video is on dirt -- it is unclear if the method works well on tarmac. (<u>Rivian</u>)
- **Byton** received investment from **Marubeni**. The Japanese trading house apparently hopes the deal will secure a supply of Byton's used batteries that can be put into service as stationary storage. (<u>Nikkei</u>)
- Chinese firm **Youxia Motors** is reportedly in financial trouble (despite previously claiming it had raised hundreds of million of dollars) and the regional government is contemplating a takeover. (<u>China Money Network</u>)
- Two firms that were collaborating to produce an electric homage to the three wheeled Isetta have parted ways. **Artega** and **Micro-Mobility** will now produce their own, probably nearly identical, vehicles. (<u>Inside EVs</u>)
- **Fisker** has decided that it will sell, rather than simply lease, the Ocean SUV after all. The brand intends to produce 1 million vehicles between 2022 2027. (Fisker)
- Aston Martin appears set to introduce digital rear and wing mirrors after showing some prototypes developed with help from supplier Gentex. (Autocar)

# News about other companies and trends ...

## Economic / Political News

- US light vehicle SAAR in December of 16.7 million units fell (4.6)% on a year-over-year basis. (Wards)
- German passenger car registrations in December of 283,380 units rose 19.5% on a year-over-year basis. In the full year, 3.6 million cars were sold. (KBA)
- Passenger car sales in the **UK** of 148,997 units in December rose 3.4% versus prior year. In the full year, 2.3 million cars were sold, (2.4)% worse than 2018. (SMMT)
- **Spanish** passenger car registrations of 105,853 units in December, up 6.6% from a year earlier. In the full year, 1.2 million cars were sold. (<u>ANFAC</u>)
- Italian December passenger car registrations of 140,075 units rose 12.5% from prior year. Full year sales of 1.9 million units rose 0.3%. (UNRAE)
- French passenger car registrations in December of 211,194 units rose 27.7% versus a year earlier. In the full year, 2.2 million units were sold, up 1.9% on 2018. (CCFA)

## Suppliers

- Koito acquired full control of the India Japan Lighting JV from Lucas TVS. (Deal Street Asia)
- Eaton sold off its fluid conveyance division. (Eaton)
- **Veoneer** said it had fewer confirmed orders than originally forecast but remains convinced that things will come good, blaming deferments by customers. (<u>Veoneer</u>)
- Grupo Antolin will use Eyesight's driver monitoring system in its interior products. (Autocar)
- **Bosch** showed off the latest sun visor technology; a transparent digital screen that can turn dark in exactly the right place to cast a shadow on the driver's face. Given the low cost of a conventional sun visor, it is uncertain whether the idea will ever become a production reality. (Engadget)

## Dealers

• Indian car repair firm **GoMechanic** raised \$15 million and aims to expand its network of affiliated garages from 215 to 1,000 by year-end 2021. (Deal Street Asia)

## Ride-Hailing, Car Sharing & Rental (history)

- **Uber** completed the takeover of **Careem**, although it hasn't yet received approval in some smaller markets so these have been packaged into a subsequent deal. Uber says the Careem brand will remain in service. (<u>Uber</u>)
- **Uber's** co-founder and ex-CEO Travis Kalanick exited stage left and left the board. (<u>Uber</u>)
- A judge struck down rules in **New York** limiting the idling time of ride hailing drivers (caps on total fleet size and minimum wages for drivers are unaffected). (<u>Reuters</u>)
- The mayor of Los Angeles threatened to make ride hailing fleets go all-electric. (FI)
- HERE's mobility arm said 2.5 million vehicles are signed up to its platform. (HERE)

## Driverless / Autonomy (history)

- **Uber** is rumoured to be building a 600 acre autonomous vehicle test site near Pittsburgh, USA. (Business Insider)
- **Bosch** entered the lidar game, saying it had the first long-range sensor suitable for automotive applications. No other details were given, and Bosch's claim appears based on their subjective interpretation of "long-range", since other companies (e.g. IBEO) already supply production vehicles. (Bosch)
- Robosense is selling its entry level lidar for \$1,898. The previously stated production cost target is \$200. (Robosense)
- Tata Elxsi and AEye are collaborating on a robotaxi system. (<u>Tata</u>)
- Yandex's fleet has logged 1.5 million miles of autonomous driving. (BBC)
- **Hyundai's** CEO slightly revised the declared timeline for autonomous cars. Having <u>previously talked</u> about a solution from the JV with **Aptiv** being on the road by 2022, the plan is now: develop the system by 2022, rollout in company fleets in 2023, then sale to 3<sup>rd</sup> parties in the second half of 2024. (<u>Hyundai</u>)

### Electrification (history)

- South Korean charging network Daeyoung Chaevi received a "large" investment from Kakao. (ET News)
- **Californian** authorities said charging networks could no longer charge by the minute. They will still be able to charge extra fees if people remain parked in the space once the vehicle has been charged. (Electrek)
- Nemanska Lithium filed for bankruptcy protection after price falls left the business case for its new Quebecois mine in tatters. (FI)
- Battery developer **ProLogium** keeps saying in its marketing materials that conventional lithium ion batteries are unstable and at high risk of fires. No statistics accompany the claims. (<u>ProLogium</u>)
- **Byton** received investment from **Marubeni**. The Japanese trading house apparently hopes the deal will secure a supply of Byton's used batteries that can be put into service as stationary storage. (Nikkei)
  - Significance: The deal implies that whilst automakers are fretting about how to organise second life of vehicle batteries, specialist investors are prepared to take a long term view, and could make useful partners.
- VW showed a concept video for a mobile charging station based in a car park. The system is made up of two elements, a battery pack on wheels that is put next to the car to charge the car's battery and a robot tug that tows it from the charging station to the car and back again. The use of an animated video and dimensions of the battery pack suggest this is not something VW have yet mastered. (VW)
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## Connectivity

• Software firm **Pivotal**, a provider of connected car infrastructure for major OEMs and in which **Ford** had invested, was acquired by **VMware**. (<u>VMware</u>)

## Other

• Bicycle rental firm Mobike said it lost 205,600 bikes due to vandalism or theft during 2019. (Tech In Asia)