

Autos & Mobility Industry Briefing -- 4th March to 10th March 2019

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)

- Is prepared to move some engine production from Hams Hall, UK to Steyr, Austria in the event of an unfavourable Brexit. (The Guardian)
- The Nedcar plant could be preparing for incremental (post-Brexit) Mini production after purchasing 38 hectares for site expansion. (Dutch News)
- Reportedly working on an €800 million deal to buy Audi out of a shareholding in the Bayern Munich football club and then take on the role of sponsor. (Manager Magazin)

Daimler (history)

- Incoming CEO Kaellenius is open to sharing battery cell design with other companies if it suited Daimler's vehicles
 and was cost effective. (Reuters)
- Unveiled an all-electric V-Class people mover with a 100 kWh battery. (<u>Daimler</u>)

FCA (history)

- Unveiled the Centoventi, all-electric city car concept at Geneva. Fiat says that in order to keep prices low, the car will have a modular battery pack. Buyers can opt for a cheaper, small, battery and then rent larger units for a limited time when they really need the range. Another idea previewed by the concept is for customers to choose the colour by wrapping the car after it leaves the factory -- vastly reducing plant complexity. Design cues in the car suggest it is destined to be the next generation Panda. (FCA)
 - Significance: Making a larger battery pack available for a short time -- provided supply is freely available and reasonably priced -- looks like a very sensible solution to overcoming the cost issues that battery electric vehicles are likely to experience for most of the next decade. If the design is sufficiently neat, there is no reason why packs could not be compatible across vehicle lines.
- CEO Manley said he is open to "any deal that would make Fiat stronger" when asked about the potential for a tie-up with PSA, but ruled out a sale of Maserati. (Detroit News)
- Revealed the Alfa Romeo Tonale C-sized plug in hybrid SUV, probably the car FCA has promised Italian unions it will <u>build at the Pomigliano factory</u>. <u>Executives expect</u> it to be the brand's biggest seller. (<u>FCA</u>)
- Alfa Romeo is recalling around 60,000 cars because the adaptive cruise control might refuse to adapt. (<u>Detroit News</u>)
- Might not drop diesel in Europe by 2022 if consumer demand for the fuel type remains at a level where the company feared it would lose 15% or more in sales volume. (FI)

Ford (history)

• Introduced a new nameplate for large trucks: F-600. The new model sits below the F-650 and F-750 in the line-up with a similar size to Super Duty but more powerful loading carrying capabilities. (Ford)

- Former employees at the now-defunct Chariot on-demand bus service criticised the brand's management, although no one could explain how, even with improvement, the business would have made money. (Bloomberg)
- A profile of CEO Hackett expounded his virtues in helping the company to embrace user-centric design
 methodologies but failed to give many concrete examples of where this is happening beyond prototypes for
 autonomous vehicles. (The Atlantic)
- Mahindra's MD says the firm will build an electric vehicle using Ford's platform and wants Ssangyong to be included in a three way partnership. (Economic Times of India)
- The turnaround plan for the Russian business reportedly envisions closing two plants in the country and producing only commercial vehicles in future. (Reuters)

Geely (includes Volvo) (history)

- Proton's CEO expects the brand to turn a profit in 2019. (Malaysiakini)
- Volvo might not sell Polestar electric cars in the USA if tariffs on Chinese imports are increased. (Reuters)

Honda (history)

- Intends for 100% of European sales to be electrified vehicles by 2025, accelerating the prior plan by five years. Unlike some other competitors, Honda appears more explicit that "electrification" means full hybrid and above cars, and not electrically augmented mild hybrids where the car cannot move without the combustion engine. (Honda)
- Invested in charging network ubitricity. (<u>ubitricity</u>)

Hyundai / Kia (history)

- Looking for partners to finance the development of a new corporate headquarters in Seoul, South Korea. (Reuters)
- Developed a smartphone-based key that lets owners share the vehicle with up to four others. Unlike many
 contemporaries, Hyundai's system works using near field communication, rather than transmission to the vehicle
 modem. (Hyundai)
- Hyundai may cease operations at a plant in Beijing, China. The firm was keen to stress that the move would be a suspension, not full closure. (<u>Reuters</u>). Kia might also close a Chinese plant. (<u>Reuters</u>)
- Hyundai is reportedly in the final stages of talks to invest \$250 million in Ola. (IB Times)

Mazda

Took the wraps off the CX-30 crossover at the Geneva show. (Mazda)

Nissan (includes Mitsubishi) (history)

- Nissan CEO Saikawa reportedly told employees he intends to stay in role for another three years, seemingly
 contradicting earlier comments that he would be headed for the exist much sooner. (<u>Bloomberg</u>)
- Nissan said stories about a plan to reduce production of Qashqai and Leaf in Sunderland by going from three shifts to two were rumours, but didn't issue an outright denial. (Sky News)
- Mitsubishi unveiled the Engelberg Tourer SUV and suggested that the car can be used as a back-up generator if the
 customer adopts the firm's Dendo house concept for connecting the car to the home grid. Previous concepts of this
 nature have centred on battery electric vehicles, thus haven't been able to explore this idea before. (Mitsubishi)
- Announced that the e-Power range of motor-as-generator vehicles will launch in Europe by 2022. Concepts shown by Nissan at Geneva hint that the Qashqai and X-Trail will both receive the powertrain. (Nissan)
 - O Significance: Nissan's choice to launch the technology in Europe suggests (in line with the findings of Ad Punctum's research in partnership with Evercore ISI), that motor-as-generator will be a useful part of the powertrain portfolio, providing an all-electric driving experience with a cost closer to a conventional gasoline engine.
- Renault, Nissan and Mitsubishi are discussing a new governance structure that would oversee joint projects, in a way
 that would not require a change to the shareholding structure. (Renautlt)
- Carlos Ghosn was granted bail but wasn't allowed to attend a Nissan board meeting. (BBC)

PSA (includes Opel/Vauxhall) (history)

- Believes that L4 self-driving capability would add €15,000 to the vehicle price, and a solid L3 system will cost around €5,000. At these prices, PSA sees the likely take-up as being in single digit percentages. (Auto Express)
 - o Significance: With VW giving interviews citing a €50,000 cost for L3 capability, it seems as though nobody really knows for sure.

Renault (history)

• Renault, Nissan and Mitsubishi are discussing a new governance structure that would oversee joint projects, in a way that would not require a change to the shareholding structure. (Renautlt)

Tesla (history)

- Workers at the Gigafactory have complained that Tesla makes them take unpaid time off when production stops due to a shortage of supplier parts. (<u>CNBC</u>)
- After <u>making price cuts</u> and announcing a move to online only sales, Tesla abruptly reversed course, increased prices
 and said it would only close some stores. (<u>Tesla</u>)
 - O Significance: Two contradictory strategic moves coming within days of each other is grounds for severe concern. Moving to online only sales was a massive bet, one that should only have come after considerable soul-searching and analysis to give confidence that the move made sense (which on the surface it did not). Whilst it is a net positive that Tesla seems to have now chosen a more sensible route, this raises red flags over the decision making process.
- The third generation of supercharger offers a 250 kW rate. Tesla will start shipping the new units in 2019 and says it can offer the "fastest production charging experience", something that may confuse users of 350 kW stations from the likes of Porsche. (Tesla)
- German regulators told Tesla to end its practice of including estimated savings from using electricity in lieu of fuel as a method of lowering the headline price. (Reuters)
- Secured funding from Chinese lenders for the initial Shanghai factory costs. (<u>Tesla</u>)
- CEO Musk said that although the \$35,000 Model 3 would enter production this month, it will not be widely available for some time. (Reuters)
- Investors threw a giant wobbly over news that Model 3 imports were being blocked by Chinese customs officials. Tesla said the problem was down to labelling and the World moved on. (Reuters)

Toyota (history)

• Executives said that a "bad" Brexit could result in a withdrawal from UK manufacturing, but their comments implied that this would be at the end of the new Corolla's product cycle rather than in the immediate future. (Bloomberg)

VW Group (history)

- Recalling nearly 75,000 Audis of various types to fix problems with fuel leaks. (<u>Detroit News</u>)
- Porsche will increase the production capacity of the all-electric Taycan above 20,000 units per year, but won't say by how much. (<u>Bloomberg</u>)
- Bentley says that battery technology needs to lead to a doubling of energy density before the brand can consider it as a suitable alternative to internal combustion engines for products like Bentayga. The brand believes that fuel cells may be the answer, but sees the technology as more than 10 years away. (Autocar)
- Although VW continues to explore potential sites for a new plant in Eastern Europe, works council representatives
 are reportedly unimpressed and plan to vote against the scheme. (<u>Handelsblatt</u>)
- Porsche is currently studying a successor to the 918 Spyder supercar and hasn't yet decided whether it should have a hybrid or all-electric drivetrain. (Autocar)
- Bugatti unveiled a one-off "voiture noire" coach-built Chiron derivative. Bugatti says the car has been sold for £9.5 million and the project pretty much broke even. (Autocar)

- CEO Diess believes that automakers are trading at a discount because the market does not believe they can make the
 transition from vehicles with internal combustion engines to all-electric power and that explaining the transition plan
 will be critical to winning investor confidence. (CNBC)
- VW's commercial vehicle chief said autonomous vehicles require at least five years of further research and the sensor set cost needs to fall to around €6,000 €7,000 per car. (Reuters)
- Audi showed the Q4 e-tron all-electric SUV. (Audi)
- Audi is experimenting with installing used lithium-ion batteries from road cars into plant vehicles such as forklift
 trucks and tugs. The firm believes that the repurposed batteries could be more efficient than the traditional lead acid
 packs originally fitted. However, Audi's description of a recycling process that includes stripping down the donor
 pack, testing the cells and then re-packaging into a completely different configuration serves to demonstrate that the
 recycling process hasn't been fully thought-through. (Audi)
- Says that there may be no business case for combustion engine powered city cars like the Up! as emissions legislation in Europe will make them too expensive to produce; and that poorer customers will suffer as a result. (Autocar)
 - O Significance: VW's comments appear designed to shock politicians into reconsidering emissions limits as they imply several falsehoods: (1) that car makers only approve profitable programs; (2) that city cars are the entry-level vehicle of choice, when b-sized cars are a far larger segment.

Other

- Morgan announced that Investindustrial was taking a majority stake in the firm for an undisclosed sum. (Morgan)
- **McLaren** is preparing a fourth model line, positioned as a grand tourer, to be unveiled later in the year. How it will compare to rivals is unclear since the car will (unusually for the segment) have a mid-engined layout. (McLaren)
- **McLaren's** CEO says that solid state batteries will likely be ready for application in vehicles between 2023 and 2025 and that the brand is thinking about a 2+2 car. (Autocar)
- Aston Martin unveiled the mid-engined "concept" Vanquish sports car, along with a new V6 engine. (Aston Martin)
- **Aston Martin** gave more details about the 003 supercar, philosophically a slightly bigger, slightly more practical version of the Valkyrie. The car will use a hybrid V6 engine, <u>data from the Valkyrie</u> suggests that the electric drive will yield an additional 150+ bhp. (<u>Aston Martin</u>)
- **Karma** heralded a big reveal of the brand's plan and future products at the Shanghai show. (Karma)
- **Mahindra** sees the future in terms of three segments: shared and autonomous robo-taxis; SUVs and; luxury cars like the recently unveiled **Pininfarina** Battista. (<u>Autocar</u>)
- **Mahindra's** MD says the all the brand's electric vehicles will be conversions from models with internal combustion engines, except for a car built using Ford's electrified platform. (Economic Times of India)
- **NIO** reported financial results for the full year. There was a loss of \$(1.4) billion on \$(720) million of revenue. Sales in January and February have also disappointed -- seemingly on course to drop more than (50)% on a quarter over quarter basis. NIO will no longer commission a plant in Shanghai, saying that production from a JAC-owned plant was enough for the next two to three years. (NIO)
- **Koenigsegg** debuted a new supercar called the Jesko. The car features a new in-house designed transmission, an uprated engine, a claimed top speed near to 300mph and a price tag of \$3 million. Koenigsegg says it will only make 125 examples -- and 90 of them have already been sold. (Koenigsegg)

News about other companies and trends ...

Economic / Political News

- UK passenger car sales in February of 81,969 units were up 1.4% on 2018. (SMMT)
- German registrations of passenger cars for February were 268,867 units, up 2.7% on prior year. (KBA)

Suppliers

- Chipmaker Renesas will slow production at Japanese plants, primarily due to reduced demand from China. (Reuters)
- Schaeffler is looking to close or sell five European plants as part of a profit improvement plan. (Handelsblatt)
- Dana took a stake in heavy goods vehicle developer Hyliion. (<u>Dana</u>)

- **Continental's** full year 2018 revenue was €44.4 billion, with EBIT of €4.0 billion, down (12)% on a year earlier. The firm said it still intends to meet 2019 profit goals. (Continental)
- Autoliv and TRW were fined €368 million by the EU for running a cartel that sold steering wheels, seat belts and airbags at inflated prices. (Economic Times of India)
- Michelin completed the acquisition of 88% of Indonesian tyre maker Multistrada. (Michelin)

Ride-Hailing, Car Sharing & Rental (history)

- Ride hailing firm Taxify changed its name to Bolt (because it doesn't just offer taxis anymore). (Bolt)
- FlixBus is in talks to acquire rival Eurolines. (<u>TechCrunch</u>)
- Grab announced it has raised a further \$1.5 billion from SoftBank to bring the Series H total to \$4.5 billion. (Grab)

Driverless / Autonomy (history)

- Lidar developer Innoviz reportedly raised \$100 million but wouldn't confirm it. (Reuters)
- **Uber** has been found not criminally liable for the fatal accident between a self-driving vehicle and a pedestrian in Arizona, USA. The safety driver may still be charged. (BBC)
 - O Significance: It is unclear what precedent this sets, does it mean that: companies are not responsible for poorly performing safety systems, so long as there is a safety driver or; that so long as firms can show why a car acted in a certain way, they will not be held criminally liable even when there is a fatal accident? Either way, self-driving car developers will see this news as positive.
- Computer vision developer Brodmann17 raised \$11 million. (<u>TechCrunch</u>)
- **Waymo** will offer its proprietary perimeter lidar sensor to selected partners. More powerful units used for longer-range vision aren't yet available (and you can't have one if you are building a driverless car). (<u>Waymo</u>)
- **PSA** believes that L4 self-driving capability would add €15,000 to the vehicle price, and a solid L3 system will cost around €5,000. At these prices, PSA sees the likely take-up as being in single digit percentages. (<u>Auto Express</u>) **VW's** commercial vehicle chief says a L3 system costs €50,000 per car. (<u>Reuters</u>)

Electrification (history)

- Charging provider Eneco acquired Dutch rival Flow Charging. (Eneco)
- Spartan Motors showed off three all-electric commercial vehicles under the Utilimaster brand. (Spartan)
- **FCA** unveiled the Centoventi, all-electric city car concept at Geneva. Fiat says that in order to keep prices low, the car will have a modular battery pack. Buyers can opt for a cheaper, small, battery and then rent larger units for a limited time when they really need the range. (<u>FCA</u>)
- McLaren's CEO says solid state batteries will likely be ready for use in vehicles between 2023 and 2025. (Autocar)
- Charging network **ubitricity** raised €20 million from investors including **Honda**. (<u>ubitricity</u>)
- **Mitsubishi** unveiled the Engelberg Tourer SUV and suggested that the car can be used as a back-up generator if the customer adopts the firm's Dendo house concept for connecting the car to the home grid. Previous concepts of this nature have centred on battery electric vehicles, thus haven't been able to explore this idea before. (<u>Mitsubishi</u>)

Other

- German car insurance start-up FRIDAY raised \$114 million. (EU Startups)
- PAL-V says it is ready to enter production with a 90 vehicle run of the Liberty flying car. (PAL-V)
- **Goodyear** showed off a concept tyre for flying cars that can double as a rotor fan. The technolohy involved looks phenomenally expensive. (Goodyear)
- Harley Davidson has diversified by acquiring children's electric bicycle maker StaCyc. (Reuters)
- Air traffic control firm AirMap received undisclosed investment from Temasek and Honeywell. (AirMap)
 - Significance: If drone taxi firms are going to take off, they need air traffic control to be capable of handling
 many times the number of flights dealt with today. Companies like AirMap aim to provide the tools that could
 make that a reality.