

Autos & Mobility Industry Briefing -- 18th December to 27th December 2017

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)

- Mini will launch a range of home fit personalisation options, manufactured using rapid prototyping techniques. The components are specified online; manufactured by BMW in Germany and then shipped to the customer. (Autocar)
- Partnered with Solid Power to develop solid state batteries for a future electric vehicle platform. (Solid Power)
- Expect the cut in US tax rates to increase net income by between €0.95 billion €1.55 billion. (BMW)

Daimler (history)

- Acquired a 50% stake in French ride hailing company Chauffeur Privé with the intention of buying the rest of the company by 2019. (Daimler)
- Will start a dynamic shuttle service in Berlin in partnership with Via and German public transport operator BVG. The initial fleet of 50 vehicles is forecast to eventually reach 300. The service is currently planned to run for two years before an evaluation of its merits will take place. (Via)
- Said changes to US tax rates would improve 2017 net income by around €1.7 billion and €1 billion after some unrelated offsets were considered. (<u>Daimler</u>)

FCA (history)

- Recalling 1.8 million trucks worldwide to correct problems with the parking brake (transmission interlock). (FCA)
- Maserati has implemented an extended Christmas shutdown that will affect all models. (Auto Evolution)

Ford (history)

- US union officials called on the company to raise the wages of its Mexican employees so that they were less competitive and actions such as the recent decision to build Ford's first mass-market electric vehicle in Mexico might not take place in future. (Economic Times of India)
- Ford Focus RS vehicles appear to be exhibiting a design defect that results in far higher than normal engine replacements -- potentially exacerbated by owners modifying their vehicles after purchase. (Autocar)
- Issued a recall for around 12,000 vehicles in the US. One of the problems looks as though it could have been easily fixed if Ford had installed vehicle connectivity that allowed over the air updates. (Ford)
- Released an open letter to employees condemning harassment after newspaper reports uncovered a raft of issues at some US plants. (<u>Detroit News</u>)
- Released photographs of a partially-disguised next generation Focus to build interest ahead of the 2018 launch. The effort uses #timetofocus on Twitter -- perhaps poorly timed as it is likely to be overwhelmed by people planning new training / diet regimes post 1st January 2018. (<u>Auto Express</u>)

Geely (includes Volvo)

Bought an 8.2% stake in truckmaker Volvo Group for \$3.8 billion, Geely will get 15.6% voting rights. (Autocar)

Hyundai / Kia

- Executives said that all Hyundai and Kia vehicles launched after 2019 will be connected cars and all vehicles built after 2025 will be connected. (ET News)
- Will release a safe-stopping mode in 2021 that acts if it detects that the driver is no longer capable. (ET News)

Nissan (includes Mitsubishi)

- Nissan's Canadian finance arm suffered a data breach in which customer data was taken. (Nissan)
- Offering customers in Japan free home solar panels if they buy a Nissan Leaf and agree to a 20-year electricity supply contract. (Nissan)
- Announced a series of executive moves. (Nissan)

PSA (includes Opel/Vauxhall) (history)

- Faurecia will acquire heavy truck engine emissions specialist HUG Engineering. (Les Echos)
- Announced a series of executive moves. (<u>PSA</u>)

Renault (history)

• French media speculated over the top internal and external candidates to replace Carlos Ghosn, predicting that a CEO-designate will be chosen by February. (Les Echos)

Tata (includes JLR)

- Land Rover is reportedly planning to release an all-electric version of the new Defender. (Motoring)
- Fleet managers looking for £40k commercial vehicles with impaired package, small load space, no sliding doors and leather seats can now order a Land Rover Discovery Commercial. (<u>Auto Express</u>)

Tesla (history)

- Some Tesla suppliers have said that orders for December and early 2018 imply that Model 3 production may reach a weekly rate of 5,000 units earlier than the end of Q1 2018 target. (Electrek)
- CEO Elon Musk said on Twitter that the company will launch a pick-up "right after" Model Y. He also answered some questions about the vehicle saying it would be similar in size to a Ford F-150. (Business Insider)
 - Implication: Although the online dialogue between Tesla fans and Musk set the internet ablaze, something seems a little off. Musk has set expectations for a release date in 2020 but also indicated that external dimensions hadn't been fixed. That doesn't sound right for a vehicle supposedly so close to production. By the way, "Founders Series" Roadster reservations can still be made (they are supposedly capped at 1,000 units).
- In a bid to increase residual / scarcity value of the original Tesla Roadster, Elon Musk said he would send one of his own into space. (Hotha Hardware)

Toyota (history)

- Said that by 2025 every vehicle will have an electrified version (HEV -- which may include 48V / PHEV) or be fully electric (BEV / FCEV). In the early 2020s the company will have 10 BEVs models worldwide and will introduce FCEVs on top. By 2030 the company aims to sell 1 million BEVs / FCEVs each year and 4.5 million HEVs / PHEVs -- equating to an expected sales mix of around 10% BEV / FCEV. (Toyota)
 - Implication: Whilst this announcement represents a step forward in electric vehicle planning by Toyota, some of the logic still seems troubling. If there are at least 10 nameplates by 2030 then an average vehicle line volume of less than 100,000 units per annum seems inadequate from a profitability perspective. In fairness, as by far the richest OEM, Toyota can afford to be a bit fuzzy on how its estimates fit with consumer trends -- at least it has acknowledged electrification as a trend to be taken seriously.

- Will merge two existing leasing subsidiaries into a single entity with a broader mission that includes mobility services. The new arm will be called Toyota Mobility Service Co. (Toyota)
- Merging three existing subsidiaries to create a conversion and accessories business. The rationale for the move appears to be a simpler business structure and efficiency gains. (Toyota)
- Launched a new online leasing system in the UK called NGage. This allows customers to receive and sign documents digitally, which Toyota expects will improve turnaround time and reduce mistakes. (Toyota)
- Released production and sales forecasts for 2018. The company expects overall sales to increase around 1%, although production will drop by (2)%. (Toyota)

VW Group (history)

- Porsche executives said that sales of the Panamera hybrid were such a success that the model could soon become constrained by battery supply. (Euro News)
- US regulators gave approval to the fix for Audi 3.0 litre diesel vehicles. (Reuters)
- Audi is recalling almost 1.3 million vehicles due to risk of fire. (<u>Autocar</u>). Separately, Audi is recalling 52,000 vehicles to fix fuel lines that may leak. (<u>Detroit Free Press</u>)
- The 3rd party inspector appointed after the US emissions scandal has said changing VW's culture will be a "three year marathon" and that it was still unclear why the company had chosen to defy the testing regime rather than comply with it. (Manager Magazin)
- Bugatti said that it has 300 orders for the Chiron model and delivered 70 vehicles in 2017. (Europa Press)
- The chairman of Porsche's works council called for emails sent after work hours or when employees were on vacation to be blocked and deleted. (<u>Handelsblatt</u>)
- CEO Müller said that he believes the company must conduct greater political lobbying on transport issues, regardless of whether the position it advocates is popular. (<u>Handelsblatt</u>)
- German dealers expressed unease at several of the points in VW's proposed new contract, concerned that VW is attempting to ring-fence customer support so as to cut dealers out in future. (Autohaus)
- Guaranteed the future of its Dresden "transparent factory" until 2025 and increased e-Golf production from 30 units per day to 70. (<u>Handelsblatt</u>)
 - Implication: This agreement is the latest in a long line of tough choices avoided by VW. Facing up to previous mistakes by not sinking anything further is a hallmark of good capital allocation. Instead, a company that bases its strategy on industry-leading scale makes a long-term commitment to a facility with 385 staff.

Other

- Aston Martin is recalling around 5,500 vehicles in the US due to problems with parking brakes and fire hazards. (<u>Reuters</u>)
- **SAIC Capital**, the investment arm of Chinese carmaker SAIC announced a partnership with Plug **and Play**, a startup talent spotter. (<u>SAIC</u>)
- **Subaru** issued a press release saying that a report stating it had falsified emissions data was incorrect and it was working with government authorities to explain its validation techniques. (Subaru)

News about other companies and trends ...

Economic / Political News

- The OEM trade body in **India**, **SIAM**, released a report detailing measures that could be taken to reach the governments aspiration of widespread electrification by 2030. SIAM says that by 2030 40% of sales could be fully electric, with 100% fully electric sales by 2047. (Economic Times of India)
- The **Chinese** government is reportedly planning measures to stop subsidies for EVs as soon as 2018. (<u>Bloomberg</u>)
- The main German carmakers announced that they would extend their **diesel scrappage incentive** programs to June 2018, citing the success in encouraging replacement of old vehicles (70,000 trade-ins for VW). Carmakers followed suit in other countries too (e.g. Toyota extended their Uk program for an additional month). (<u>Manager Magazin</u>)

Suppliers

- Plastic Omnium acquired two companies to improve its hydrogen offerings. Swiss Hydrogen produces fuel cell control equipment and Optimum CPV makes hydrogen tanks. (Plastic Omnium)
- **ThyssenKrupp** reached an agreement with steelmaking employees to facilitate the merger of its European steel business with Tata steel. The deal is targeted at final agreement in 2018. (Economic Times of India)
- Faurecia will acquire heavy truck engine emissions specialist HUG Engineering. (Les Echos)
- **Gestamp** appointed a new CEO. (<u>Gestamp</u>)

Dealers

• German dealers expressed unease at several of the points in **VW's** proposed new contract, concerned that VW is attempting to ring-fence customer support so as to cut dealers out in future. (<u>Autohaus</u>)

Ride-Hailing, Car Sharing & Rental (history)

- Didi Chuxing said that it had raised \$4 billion to fund expansion, investments in AI and electric vehicles. (Didi)
- **Uber** was declared to be a transport company for regulatory purposes within the EU after it lost a court case.
- Although it was hailed as a massive blow, the impact on most of Uber's existing operations is minor. (BBC)
- **Grab** launched ride hailing services in Cambodia. (<u>Grab</u>)
- An article suggested that autonomous vehicles could herald free ride hailing, with users agreeing to visit sponsoring companies to get their trip paid for. (The Atlantic)
 - Implication: Aside from the examples that the article mentioned (where some high-margin businesses pay taxi drivers to set punters on their doorstep in preference to rivals), the economics of the idea simply don't stack up. Global advertising spending is a bit more than \$500 billion, of which Google and Facebook take about 20%. A fully developed ride hailing market would have costs in the trillions of dollars, so even if all advertising spending were directed to offering free rides it would only cover a fraction of journeys.
- Uber hired a new COO -- he worked with the recently appointed CEO at their previous employer. (TechCrunch)
- Uber is selling its leasing business to Fair.com, some of the payment will be in Fair.com shares. (Business Insider)
- **Denso** announced that it had invested in ride hailing and car sharing fleet management technology provider **Ridecell** and the two companies would work together to find uses for Denso's technology in on-demand vehicles. (<u>Ridecell</u>)
- Electric scooter sharing service **Scoot** said that it would add "hundreds" of electrically assisted bicycles to its network in San Francisco. (<u>Press Release</u>)
- Car-pooling start-up **Carsmartt** announced that it was creating its own crypto-currency called Coinsmartt. The company claims that this will be fully interchangeable with other currencies and has been implemented to reduce transaction fees. (Press Release)
 - Implication: Initial coin offerings enter the word of on-demand mobility... it remains to be seen what real advantage the elimination of transaction fees have for both drivers and customers (they will still pay % of the bulk transactions they must make to feed the system). The advantages for Carsmartt are more obvious -- it will control redemptions against fiat currency.
- **Daimler** will start a dynamic shuttle service in Berlin in partnership with **Via** and German public transport operator **BVG**. The initial fleet of 50 vehicles is forecast to eventually reach 300. The service is currently planned to run for two years before an evaluation of its merits will take place. (<u>Via</u>)
- **Daimler** acquired a 50% stake in French ride hailing company **Chauffeur Privé** with the intention of buying the rest of the company by 2019. (<u>Daimler</u>)

Driverless / Autonomy (history)

- **Quanergy** opened a new lidar factory that would allow mass production of its S3 solid state lidar. The company says that the current price of the unit is a "few hundred" dollars and believes it will drop to below \$100. (<u>Quanergy</u>)
- Indian self-driving vcargo vehicle start-up **Ati Technologies** said that it plans to have a vehicle (which the firm is designing from a blank sheet of paper) available for sale in early 2019. The software controlling the self-driving vehicle was written in one month. (Economic Times of India)

- **Waymo** is reportedly working with insurance company **Trov** to provide compensation for accidents or lost and damaged personal items. The intent is that the insurance in bundled with the fare. (<u>TechCrunch</u>)
- Autoliv said it will demonstrate a concept that integrates voice and gesture recognition with in-cabin sensors to create a vehicle that can interact with occupants as if it were an additional passenger and also adapt its driving style based on non-verbal cues. (Autoliv)

Electrification (history)

- Spanish company **Endesa** said that its incentive scheme for employees to buy electric cars was singlehandedly responsible for around 7% of the industry volume for electric cars. (Europa Press)
- **NIO** launched the ES8, saying that the vehicle came with an advanced driver assistance system, battery swapping (in 3 minutes) and battery rental. There is a 70 kWh battery pack, providing over 500 km of range. (NIO)
- **Morgan** said that it would put its electric three-wheeler into production in late 2018 in partnership with Frazer-Nash. The car will have a range of around 120 miles. (<u>Auto Express</u>)
- Chinese electric vehicle maker **Kandi** said that it will buy **Jinhua An Kao** for \$4 million because of the company's battery swapping technology. (<u>Kandi</u>)
- The founder of the solid state battery firm **Dyson** purchased to help it deliver an electric car program has left the company. It isn't clear if this will affect plans for the vehicle. (<u>Autocar</u>)
- McLaren engineers said that half an hour of high performance track driving requires battery capacity equivalent to 500 miles of on-road driving. (<u>Autocar</u>)
- Nikola trucks received a \$10 million investment from Wabco. (Autocar)
- Faraday Future has reportedly secured an additional \$1 billion in funding. (The Verge)
- The US electric infrastructure scheme that **VW** has agreed to fund as part of its emissions settlement picked **Greenlots** to carry out installation work. (<u>Green Car Reports</u>)
- Mysterious electric car start-up **EVELOZCITY** was reportedly created by ex-**Faraday Future** executives with backing from would-be Faraday Future investors put off by the behaviour of the controlling shareholder. (<u>Electrek</u>)
- BMW partnered with Solid Power to develop solid state batteries for a future electric vehicle platform. (Solid Power)

Connectivity

- LG and HERE agreed to cooperate on an LG-provided telematics service that will run on HERE's platform. (LG)
- Chery said it will work with Linkmotion to create a technology platform for connected vehicles. (Telematics News)
- **Continental** said that recent V2X tests in China with 4G networks had delivered average latency (delays between sending and receiving signals) of 11ms and had a best result of 8ms. (<u>Continental</u>)
 - Implication: The tested latency is an interesting benchmark. Whilst impressive on a standalone basis, it shows that with current technology autonomous vehicles with a centralised AI are probably unsafe (i.e. the overall system latency would include sending information to the AI and then the processing / decision making time of the AI). As Continental point out, it does show promise as a way of sending emergency messages to vehicles.

Other

- Limebike published a research paper on the benefits of bicycle sharing. It contains general statistics in addition to city specific case studies. (LimeBike)
- **Mobike** will receive investment from Japanese messaging app **Line** and the two will partner to integrate bicycle rental into the app's features (including payments). (<u>TechCrunch</u>)
- Ola and Yandex both made food delivery acquisitions. Yandex will buy Foodfox, adding to its UberEats franchise (<u>Reuters</u>) and Ola will take on the Indian operations of Foodpanda. (<u>Deal Street Asia</u>)