

# Autos & Mobility Industry Briefing -- 10th December to 16th December 2018

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)

• Invested in cyber security firm Claroty. (BMW)

#### Daimler (history)

- Said it has signed up for battery purchases worth €20 billion and will have 130 electrified vehicles (including 48V) on sale by 2022. Daimler reiterated the 15% 25% mix of total sales target for Mercedes by 2025. (Daimler)
- Will let third party repairers access remote diagnostics from Mercedes vehicles, but only where the owner has given permission and only for the types of data Mercedes deems relevant. (<u>Daimler</u>)

#### FCA (history)

- Threatened to review future Italian production plans if the country raised taxes on gasoline and diesel cars. (Reuters)
- Planning extra downtime at some US factories in January. (Detroit News)

### Ford (history)

- After Ford followed-through on earlier suggestions that it would reject alternative plans for the Bordeaux automatic transmissions plant, French president Macron called the move "hostile" and vowed to find a recovery plan. (<u>Reuters</u>)
  - Significance: <u>During an earlier closure attempt in 2009</u>, the French authorities talked Ford into funding a buyer for the site, who subsequently collapsed. Ford was then obliged to take back the plant and seems determined to avoid a repeat.
- Confirmed that it was in talks with German unions about ending production of the C-MAX in Saarlouis. The loss of the product will mean the cessation of the night shift and about 1,500 redundancies. (<u>Reuters</u>) The move is slightly tricky for Ford since at the start of the year it gave assurances that the 3 shift pattern and C-MAX were not under threat. (<u>Saarbrucker Zeitung</u>)
  - Significance: The future for C-MAX looked dim once the Focus was replaced without an accompanying new
    product and Ford would need to make substantial investment to keep the product running beyond 2020 when
    EU rules on CO<sub>2</sub> emissions become tighter. Ford's communications with suppliers indicate a similar fate for
    Mondeo, S-MAX and Galaxy.
- Stopped production of Fiesta and Ecosport in Russia until at least the start of 2019. Ford said it was because it had completed the production plan for 2018. Some analysts blamed slow sales. (Wards)
- Moving employees out of transmission production at Van Dyke into SUV factories. (Detroit News)
- Released the 2019 Ford Trends Report. (Ford)
- Worked with a third party to design an algorithm-based tool designer for positioning jogs used by line workers. (<u>TCT</u>)

## Geely (includes Volvo) (history)

• The first Proton vehicle to use Geely underpinnings, the X70 SUV was launched by Malaysia's prime minister who made a series of apparently supportive comments about Geely's role but may still harbour ambitions for an independent Malaysian car company. (ABC News)

#### General Motors (history)

• Said that 1,100 employees at plants facing "unallocation" have taken up offers to fill some of the 2,700 vacancies GM has across the US. (<u>CNBC</u>)

#### Honda (history)

- Developed an off-road autonomous vehicle based on a quad bike chassis. (Honda)
- Will show a concept wireless vehicle to grid charging system at CES 2019. (Inside EVs)

### Hyundai / Kia (history)

- Plans annual fuel cell production capacity of 700,000 units by 2030 for Hyundai and Kia, of which half a million will be used for vehicles and the rest will go to off-highway and industrial applications. Hyundai says an investment of 7.6 trillion KRW (~\$6.7 billion) will be required and 51,000 jobs will be created. (Hyundai)
  - Significance: Apart from the statement of intent, the productivity of 51,000 employees being required to design and build fuel cells seems remarkably poor versus the supply chain of an internal combustion engine or battery electric vehicle.
- Announced a series of executive moves, including the first non-Korean R&D chief. (Hyundai)

### Nissan (includes Mitsubishi) (history)

- Opened a new software development centre in Kerala, India. (Nissan)
- Journalists said that Nissan was making unusually large cash transfers from its Chinese subsidiary to the Japanese parent to build a war chest for a potential fight with Renault. Nissan said it was business as usual. (<u>Bloomberg</u>)
- Sources said Nissan plans to appoint more external directors. In addition to providing oversight, the move could have the (useful?) side effect of diluting Renault's board presence (but not its shareholder voting rights). (<u>Reuters</u>)
- Mitsubishi is moving to a new headquarters in Tokyo. (Mitsubishi)

#### Renault (history)

- A Board review found no issue with Carlos Ghosn's Renault but did not pass comment on his Nissan remuneration, saying the firm's lawyers are still looking into the matter. (<u>Renault</u>)
- At present, Renault is not considering a permanent replacement for Ghosn. (Renault)
- Reportedly called for an extraordinary meeting of Nissan shareholders following the Carlos Ghosn scandal. The French government is said to be pushing the appointment of Michelin's CEO as Ghosn's replacement. (<u>Reuters</u>)

#### Tata (includes JLR) (history)

• Rumoured to be working on a JLR recovery plan that will see the loss of 5,000 jobs. (FT)

#### Tesla (history)

- Sending a message to those who might be tempted to mess with the company by suing a former employee, who CEO Musk called a "saboteur" for \$167 million. (CNBC)
- An unflattering expose into Elon Musk's behaviour suggested he was rule to people and sometimes ordered that they be made redundant with only minor provocation. (Wired)
  - Significance: Perhaps Tesla is less Auto 2.0 than it hopes. Musk's behaviour wouldn't be out of place in a 1980s car factory. The firm may want to prepare for what comes next though: the shopfloor reaction. One of Ad Punctum's more publishable anecdotes is the time a senior executive interrupted some poor operative with an inane comment about the production process only to be brushed off and told (impolitely) that they were a

distraction. The executive's response of "do you know who I am" triggered the line workers to cry in unison "Can anybody please help!? We've got some bloke over here who doesn't know who he is".

## Toyota (history)

• Recalling around 65,000 vehicles in the US to replace Takata airbags that have already been previously upgraded with new ones from a different supplier. (Toyota)

## VW Group (history)

- Audi will show a concept next-generation in car entertainment at CES 2019. (Audi)
- Moia's CEO said the approval processes required to launch the ride hailing service in Hamburg and Hanover had been tedious and that without change, they were a risk to Germany's competitive position. (FAZ)
- Audi appointed the interim CEO on a permanent basis. (Audi)
- VW's employees in Germany are in a 70.8% good mood, up from 70.6% last year. They are concerned about the firm's public perception but think it is a fantastic employer. (<u>VW</u>)
- Has reportedly tasked the Seat brand with developing a small BEV to be sold to car sharing fleets. (Europa Press)
- Will brand all driver assistance and automated driving technologies for VW vehicles as IQ.Drive. (VW)

## Other

- Aston Martin are reportedly developing an inline six-cylinder gasoline engine, with hybrid elements, aiming to replace the Daimler-sourced V8 sometime in the 2020s. (Autocar)
- Subaru announced a series of executive changes. (<u>Here</u>), (<u>Here</u>) & (<u>Here</u>)
- StreetScooter won an order for 500 electric vans from German car sharing provider Uze Mobility, which aims to offer the vehicles free of charge to users because they will be emblazoned with advertising. (<u>Handelsblatt</u>)
- VinGroup, owner of VinFast, set up an in-house VC fund. (Deal Street Asia)
- **XPENG** launched sales of the all-electric G3 and plans to open 70 dealer stores in around 30 Chinese cities and have 200 super charging stations by the end of 2019. (<u>XPENG</u>) XPENG's CEO says the company needs annual sales of over 100,000 units to breakeven and that it has 3,000 R&D staff, 98% of whom are based in China. (<u>Bloomberg</u>)
- **Pininfarina's** PF0 supercar will be called the Battista and will sport 1,900 hp with a range of 450km. (Autocar)
- **NIO** launched the ES6 all-electric SUV at an event named NIO day that the firm hopes will catch on. It also said that so far it has delivered 9,726 of its ES8 model and opened 26 stores so far. (<u>NIO</u>)
- **Gordon Murray Design** and **Shell** unveiled the final design of the flat-pack OX utility vehicle that the two companies believe will find widespread application in rural India. (<u>GMD</u>)
- A company developing **microwave ignition** technology for internal combustion engines says it can reduce CO<sub>2</sub> emissions by up to 30% and be retrofitted to existing products. (<u>Energy Live News</u>)
- **CH-Auto** and **Mullen Technologies** signed a cooperation agreement that will see Mullen co-develop, manufacture and sell the Qiantu K50 electric sportscar in North America. (<u>Mullen</u>)
- Lightyear will offer its solar powered car via a leasing scheme offered by LeasePlan. Although Lightyear's original launch timing has slipped (from 2019 to 2020), the high level attribute targets remain the same. (Lightyear)
  - Significance: Given the initially low residual values of pure electric cars, due to misplaced concerns about the durability of the batteries, it will be interesting to see what steps Lightyear and LeasePlan take to establish and protect used values ahead of launch.

# News about other companies and trends ...

## Economic / Political News

- The Chinese cabinet agreed to return car import tariffs to their prior level of 15%. (BBC)
- A **European** court overturned part of the 2016 real world testing rules, saying that it has set excessively high limits for nitrogen oxide. The EU now has one year to re-write the regulations. The effect on customers who have already purchased vehicles is uncertain (but diesel owners would be most affected). (Economic Times of India)

- European trade body **ACEA** got into a spot of bother by playing down the difference between two systems being considered by the EU to combat speeding. One limits the vehicle's speed based on known local speed limits, whereas the other (which ACEA prefers) simply displays the limit to the driver. ACEA said the accident rate was about equal, its technical advisors said about 1,300 more lives would be saved annually with automatic limiters. (The Guardian)
- After initially failing to reach a deal on new **2025 and 2030 emissions targets**, the EU parliament and member states agreed on a 37.5% reduction versus 2021 levels. For 2025, the improvement required is 15%. (<u>Bloomberg</u>)
- European passenger car registrations for November of 1,158,300 units were down (8.1)% on a year earlier. (ACEA)

## Suppliers

- Continental published a study into consumer attitudes towards a variety of automotive technologies. (Continental)
- Textiles supplier **UTT** has been acquired by a subsidiary of **Indorama Ventures**. (<u>Indorama</u>)
- Knorr-Bremse purchased the commercial vehicle steering business of Hitachi Automotive. (Autocar)
- **Continental** is offering an automatic door opening system that will detect collisions and open when the owner walks near. Whether the system is a luxury that customers can afford is less clear. (Autocar)
- Brose and Plastic Omnium are partnering to create lightweight doors. (Autocar)
- After **Goodyear** said it would close a plant in Venezuela, the government announced it would reopen and all 1,160 jobs would be saved. (<u>Reuters</u>)
- Motherson Sumi and Leoni are rumoured to be in merger talks. (<u>Reuters</u>)
- Continental is building an automotive interiors plant in Pune, India that will start production in 2020. (Continental)

### Dealers

- Used car sales website Vroom raised \$146 million from investors including US dealer AutoNation. (TechCrunch)
- German online car listings firm **Scout24** may be the subject of a private equity bid. (<u>Bloomberg</u>)
- US online used car wholesaler **BacklotCars** raised \$8 million. (<u>Startland News</u>)

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

- **Uber** lost a court case in Germany where it argued that EU transport rules should take precedent over German regulators. The loss means that ride hailing operators in the country will have to operate to (what they sometimes consider arcane) regional rules. (<u>Reuters</u>)
- Taxify is rebranding as Hopp. (Business Insider)
- Hertz has created a scheme where customers can rent a car using biometric data, but rather than improving the service for all, it is only available to members of their rewards program. (Hertz)
- Yamaha will invest \$150 million in Grab. (TechCrunch)
- Firefly, a start-up that sells digital advertising on ride hailing cars, raised \$21.5 million. (FINSMES)
- **Grab** opened a new research facility in Malaysia. It now has over 1,800 technical staff working in seven development centres across Asia. (ZDNet)
- Public transport route planning start-up **Optibus** raised \$40 million. (VentureBeat)
- Lyft's scheme to get car owners to leave their cars at home for a month apparently attracted 130,000 applicants for 2,000 places. (Lyft)
  - Significance: Although it is dangerous to draw too many conclusions from a scheme that was free and lasting only one month, it indicates that there are a substantial number of cash-strapped car owners who are open to alternative modes of transport if the price is right.

## Driverless / Autonomy (history)

- The 2018 **AI Index** report was published. Much of the publication is given over to statistics on paper publishing and university course entry but the pages on technical performance help quantify the latest state of the art. For instance, in object recognition in context, an essential component for self-driving vehicles, the highest average precision is 72%. The expert opinion "what's missing?" section also makes for interesting reading (<u>AI Index</u>)
- **Waymo's** test fleet in Arizona has been attacked 21 times according to local police, with offences ranging from pointing a gun at the cars to a Jeep driver who repeatedly brake-tested them. With 400 Waymo cars roaming the

streets and the low severity of some of the incidents it was unclear whether vehicles were being "targeted" as headlines suggested or this is a normal amount of problems over a two-year period. (Telegraph)

- **BASF** has a paint in development that reflects lidar better but it is unclear how performance will benefit unless all legacy cars are resprayed. (<u>Cnet</u>)
- Although self-driving vehicles still can't identify **black ice**, one team has shown a possible path towards a solution: lidar is used to gauge how much sunlight is falling on a patch of road and this is combined with weather and other data to guesstimate how likely it is to develop icy conditions. (Digital Trends)
- Bosch will unveil its own autonomous vehicle concept at CES 2019. (Bosch)
- **Continental** published a consumer survey around driving habits and opinions on driver assistance and automated driving, conducted in several countries. There is considerable scepticism on the benefit and timescale for autonomous vehicles -- something that is unlikely to change whilst the technology is not widely available. (<u>Continental</u>)
- First-hand feedback of **Waymo's** driverless ride-hailing service in Phoenix surfaced (seemingly by mistake). A repeat customer said that they had been generally impressed but noticed that the vehicles often took longer routes to avoid difficult manoeuvres and the pick up and drop off points were restricted meaning that on one occasion they were set down a block away from their intended destination. Their experience of disengagements (one in four trips) was substantially higher than Waymo's reported figures from testing in California. (Ars Technica)
- A group of companies including Toyota, Velodyne, Intel and ARM have joined an open-source initiative for autonomous driving called the **Autoware Foundation**. (<u>Autoware</u>)
- Further adding to the fragmentation of SAE levels 0 5 for driver assistance, **BMW** executives talk about level 2, 2+, 3 and 3 minus. (Automotive News)

## Electrification (history)

- Electric car maker **Picchio** has developed a battery swapping station which takes two minutes to complete the operation. The company believes that this will be a good solution for car sharing. (<u>Picchio</u>)
- **California** will only buy zero emission buses from 2029 onwards and thinks it will retire the final fossil-fuel powered bus by 2040. (Economic Times of India)
- A Bavarian consortium including **BMW** and **Porsche** unveiled a 450kW charger. (Porsche)
- Honda will show a concept wireless vehicle to grid charging system at CES 2019. (Inside EVs)

#### Connectivity

- **Daimler** will let third party repairers access remote diagnostics from Mercedes vehicles, but only where the owner has given permission and only for the types of data Mercedes deems relevant. (<u>Daimler</u>)
- BMW invested in cyber security firm Claroty. (BMW)

#### Other

- Electric scooter rental start-up **Dott** has raised €20 million for a European launch starting in 2019. (<u>TechCrunch</u>)
- McLaren have become a 50% partner in a professional cycling team. It isn't yet clear whether this is a precursor to launching a bicycle rental scheme. (BBC)
- Parking provider **ParkJockey** announced an investment from SoftBank and the acquisition of **Impark**, which has over 3,600 locations in North America. (<u>ParkJockey</u>)