



# AD PUNCTUM

## Autos & Mobility Industry Briefing -- 17<sup>th</sup> December to 23<sup>rd</sup> 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)

- Received regulatory approval for the mobility joint venture with Daimler. ([BMW](#))
- BMW's works council chief criticised the company for relying on external partners for battery cells saying that BMW was "dependent" on its suppliers and should have made Tesla bankrupt by now. ([Manager Magazin](#))
- BMW iVentures invested in AI chipmaker Graphcore as part of a \$200 million funding round. ([Graphcore](#))
- Showed off its latest state of the art self-driving hardware, giving an insight into the power demands of current prototypes. BMW's L3 chip draws a respectable 25W but the L4 (200W) and L5 (600W) chips probably need a fair bit of work before they are production ready for long range or high utilisation roles. ([Autocar](#))
- Reportedly in talks with Daimler on a component sharing agreement that will potentially cover batteries, autonomous driving technology and vehicle platforms. ([Bloomberg](#))
- Currently operating a test fleet of 80 autonomous cars globally. Believes that a new working practice called large scale scrum has improved the efficiency of technology development. ([BMW](#))

#### **Daimler** (history)

- Received regulatory approval for the mobility joint venture with BMW. ([BMW](#))
- Dropping prices in China for US-built vehicles after import tariffs were reduced. ([Handelsblatt](#))
- Reportedly in talks with BMW on a component sharing agreement that will potentially cover batteries, autonomous driving technology and vehicle platforms. ([Bloomberg](#))

#### **Ford** (history)

- Recalling 874,000 pick-up trucks in North America to fix corrosion problems that can cause fires. ([Ford](#))
- Announced a limited edition run of 80 Lincoln Continentals that have been modified to have suicide rear doors. The price tag is described as "north of \$100,000". ([Detroit Free Press](#))
  - Significance: In addition to being an interesting test case about whether limited editions could have an appeal in the mass-market (albeit in this case at uninterestingly low volumes), the cost compares favourably with the multi-million pound special editions launched by the likes of Aston Martin, Jaguar and Ferraru and reveals the extent of price gouging in this resurgent sector.
- Developed a noise cancelling dog kennel that it won't sell just to prove that it has the technology to solve problems no one has. ([Detroit Free Press](#))

#### **Geely (includes Volvo)** (history)

- Geely-controlled Saxo Bank plans to buy Dutch lender BinckBank. ([Deal Street Asia](#))
- Forming a joint venture with CATL to produce car batteries. ([Geely](#))

## General Motors (history)

- Laying off 50 workers at the Brownstown battery plant, suggesting that the cessation of Chevrolet Volt will not see an increase in sales of other hybrid vehicle types. ([Detroit Free Press](#))
- Although the Lordstown, Ohio plant is “unallocated”, GM said the “next steps” will be part of the 2019 negotiations with the UAW union. ([Reuters](#))

## Hyundai / Kia (history)

- Launching fingerprint recognition to unlock and start cars in Q1 2019, starting with the Santa Fe SUV in China. The system has an error rate of one in 50:000; better odds than playing the lottery. ([Auto Express](#))
- Will build a 250,000 unit capacity car plant in Indonesia, with electric cars set to be amongst the products built, according to government ministers. Hyundai said no firm decisions had been taken. ([Reuters](#))
- Created a joint venture to build commercial vehicles in Algeria from 2020 onwards, aiming to capture around 25% market share. ([Hyundai](#))

## Nissan (includes Mitsubishi) (history)

- Eliminating 1,000 jobs at two Mexican plants due to falling demand. ([Reuters](#))
- Mitsubishi strengthened strategy oversight at a board level, with a bias towards external directors. ([Mitsubishi](#))

## PSA (includes Opel/Vauxhall) (history)

- Faurecia invested in user experience assessment firm ESP Consulting. ([Autocar](#))
- Reportedly shrinking the executive committee of Opel so that fewer areas are not integrated with the rest of PSA. CEO Tavares is said to be still contemplating how to best balance visible independence for Opel with the desire for maximum operational efficiency. Falling sales of Zafira and Insignia have caused a surplus labour problem estimated at 600 people. ([Handelsblatt](#))

## Renault (history)

- Will take a “significant” stake in JMCG’s electric vehicle subsidiary JMEV and will elaborate more on plans for the Chinese market once the deal is approved by Chinese authorities. ([Renault](#))
- CEO Ghosn was released and then re-arrested on addition charges meaning that he may be in prison until the new year. ([Reuters](#)) Ghosn’s lawyer said that he believes his honour will be restored in court. ([Reuters](#))
- Internal company documents allegedly show Renault and Nissan trying to create executive pay schemes that would not be subject to full public disclosure. Renault said none of the proposals mentioned went ahead. ([Reuters](#))

## Tesla (history)

- Will refund US customers who receive lower tax rebates because of delivery delays (Tesla owners will be entitled to less money after 31<sup>st</sup> December because the company has made so many electric cars). ([Reuters](#))

## Toyota (history)

- Published the 2018 environmental report for its North American operations. ([Toyota](#))
- Toyota AI Ventures invested in Sea Machines, a start up working on autonomous ships. ([Toyota](#)) The company also put money into Elementary Robotics. ([Toyota](#))
- Released a new offering aimed at ride hailing companies that bundles telematics with the vehicle to more effectively scheduled maintenance and keep vehicles on the road for longer. The telematics suite also enables usage based insurance through a third party partner. ([Toyota](#))

## VW Group (history)

- VW's initial analysis of EU CO<sub>2</sub> target reductions of 30% by 2030 had reportedly settled on a figure of 1.2 million pure electric vehicles per year being needed across the group. The final figure of a 37.5% reduction has supposedly increased this by a further 600,000 units -- or seven additional vehicle lines. CEO Diess said that the company would still be able to achieve the tougher 2030 target but would have to revisit its footprint plan. ([Handelsblatt](#))
  - Significance: Absent a mandate to sell a fixed number of pure electric vehicles (currently unclear but presumed not to be in the final agreement), the number of electric cars required by an OEM is a factor of their mix and efficiency of plug-in hybrid and conventionally powered vehicles. In fact, many carmakers have plug-in hybrid vehicles on sale today emitting less than 50g / km CO<sub>2</sub>, implying that a firm could meet the new targets without selling a single battery electric vehicle (so long as they only offered vehicles with impressive CO<sub>2</sub> performance -- and were immune to consumer demand for electric-only models).
- Rumoured to be planning a one third reduction in manning levels at plants in Emden and Hanover over the next ten years as electric vehicle sales increase. VW is said to hope that natural attrition, early retirement and redeployment to other factories will be enough to meet the target. ([FAZ](#))
- The head of VW's in-house self-driving unit, AID, has a "high opinion" of Waymo but thinks GM's Cruise is "hyping a bit". He says that 90% perception accuracy is now standard but things get tough at 95%. ([The Verge](#))
- Said to be planning to write off the investment in ride hailing provider Gett (VW's stake is apparently only valued at €16 million versus the \$300 million+ VW has given the business -- we shall see in the 2018 FY accounts). ([Reuters](#))
- Acquiring a majority 75.1% share in telematics firm WirelessCar. VW plans to use the company's technology for vehicle to cloud data exchange in its forthcoming services. ([VW](#))
- Implemented a new executive pay scheme. There will be no personal performance bonus and incentives will be geared towards success of the entire group, rather than brands. There is also a clawback provision. ([VW](#))
- Porsche is recalling 74,585 Panameras to fix problems with the power steering. ([Porsche](#))

## Other

- **GAZ** is in talks to have US sanctions removed. ([Reuters](#))
- Chinese electric car start-up **CHJ Automotive** is buying **Lifan Motors** for 650 million RMB (~\$94 million), rather than outsourcing production to the company as had been originally intended. ([Nikkei](#))
- **Maruti Suzuki's** chairman says that pure electric small cars will be an infrastructure and cost challenge for many years in India and prefers compressed natural gas for cutting emissions. ([Autocar](#))

## News about other companies and trends ...

### Economic / Political News

- The UK automotive trade body called for a **no deal Brexit** to be taken "off the table" saying that there was no way that it would be an impossible event for most companies to manage. ([SMMT](#))
- Detailed rules for the EU's proposed **2025 and 2030 CO<sub>2</sub> targets** for cars (37.5% lower by 2030) and vans (31% lower by 2030) will be drawn up and submitted in the "coming months". ([EU](#))
- The EU car making trade body reacted with predictable anger to the **2025 and 2030 CO<sub>2</sub> targets**, saying employment was under threat but not explaining why non-EU carmakers were being handed a competitive advantage given that all have to offer fleets with the same overall efficiencies and are all subject to the same technology costs. ([ACEA](#))
- Germany's transport minister said that **diesel's image** needed to be rehabilitated to achieve future emissions targets, but that it was the job of the manufacturers to convince consumers. ([Manager Magazin](#))

### Suppliers

- **Grammar** and **AllyGrow** opened a jointly-operated research facility in India, mainly aimed at boosting Grammar's in-house R&D efficiency. ([Grammar](#))
- **Veoneer's** CFO is leaving. ([Reuters](#))
- **IAV** agreed to pay a \$35 million fine to settle charges it helped **VW** cheat on **US** emissions tests. ([Reuters](#))

- **Tower's** COO is stepping down and will not be replaced. ([Tower](#))
- **Goodyear** is expanding production capacity at its Slovenian plant by 25%. ([Goodyear](#))
- **Samsung** is reported to be the source of **Tesla's** next-generation driver assistance hardware. ([Green Car Reports](#))
- **Continental** has automated cars that test tyre durability. ([Continental](#))
- **South Korea's** government is starting a \$3 billion rescue fund for suppliers struggling to cope with Chinese competition and falling orders from **Hyundai** and **Kia**. ([Nikkei](#))

## Dealers

- Augmented reality developer **Blippar** shut down. The firm had been working on car sales applications. ([Blippar](#))
- Online used car retailer **Shift** agreed to use part-owner **Lithia Motors's** physical infrastructure to store and deliver vehicles, saying it is now positioned to reach one billion dollars in annual revenue soon. ([Shift](#))
- **Mitsubishi** says a dealer site needs to generate an average of 30 kW each day through renewable energy to be self-sustaining. ([Autocar](#))
- **US used car prices** are up on a year-over-year basis but down versus the prior month. ([JD Power](#)) **UK used car prices** have continued to grow, but the rate of increase is slowing, to 4% year-over-year in November. Electric car prices have risen by almost 12%. ([Motot Trader](#))
  - Significance: Higher used car values are supporting cheaper leases. As growth in new car sales fall off, OEMs need used car values to hold up well otherwise profitability will be adversely affected.

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

- Short term rental firm **Fair** raised \$385 million in a round led by **SoftBank**. The company provides cars to ride hailing drivers and partners with **Uber**. ([Fair](#))
- Ride hailing firm **Ola** will invest \$100 million in Indian electric scooter rental start-up **Vogo**. ([Reuters](#))
- **Lyft** has gone on a hiring binge, snapping up senior design talent. ([Lyft](#))
- Researchers think they have cracked the problem of modelling taxi demand in unusual scenarios. ([IEEE Spectrum](#))
- **Driveitaway**, a car rental firm aimed at ride hailing drivers acquired peer-to-peer rental app **Whip** and ended a partnership with **HyreCar**. ([Driveitaway](#))
- **VW** is said to be planning to write off the investment in ride hailing provider **Gett** (VW's stake is apparently only valued at €16 million versus the \$300 million+ VW has given the business). ([Reuters](#))

## Driverless / Autonomy (history)

- Lidar developer **Luminar** announced that it is partnering with **Audi's** autonomous driving subsidiary AID. AID said that the Luminar product was "clearly above the pack in terms of range and density". ([Luminar](#))
- **Uber** received approval to restart self-driving vehicle tests in Pittsburgh. ([Uber](#))
- **Zoox** released a safety report about the company's approach to self-driving vehicles. Zoox detailed their chic-looking remote operations centre, suggesting they believe cars can easily be driven from large screen iMacs. ([Zoox](#))
- **Pronto.ai** head Anthony Levandowski said he had sat in a self-driving car on a car cross-country trip lasting four days. He apparently did not have to take control of the vehicle at any time and the whole journey was accomplished with a basic set of maps and cameras. ([The Guardian](#)). Levandowski says the demonstration served to show how a driver assistance feature will be more than capable. ([Pronto](#))
- **Leddartech** will collaborate with French light shaping firm **Cailabs** to improve lidar performance. ([Leddartech](#))
- **Rinspeed** is working with **Luxoft** on an autonomous version of the microSNAP reconfigurable vehicle. ([Luxoft](#))
- The head of **VW's** in-house self-driving unit, AID, has a "high opinion" of **Waymo** but thinks **GM's** Cruise is "hyping a bit". He says that 90% perception accuracy is now standard but things get tough at 95%. ([The Verge](#))
- **BMW** showed off its latest state of the art self-driving hardware, giving an insight into the power demands of current prototypes. BMW's L3 chip draws a respectable 25W but the L4 (200W) and L5 (600W) chips probably need a fair bit of work before they are production ready for long range or high utilisation roles. ([Autocar](#))
- **Ouster** detailed the robustness tests it has devised for its lidar units -- with short videos of the rigs in action. ([Ouster](#))

## Electrification (history)

- Solid state battery developer **24M** raised \$22 million. ([Inside EVs](#))
- **Geely** is forming a joint venture with **CATL** to produce car batteries. ([Geely](#))
- **Engie** and **Arval** have launched a combined vehicle and charging infrastructure leasing scheme aimed at European businesses to help them adopt electric vehicles without a high upfront cost. ([Engie](#))

## Connectivity

- Driver monitoring developer **Cambridge Mobile Telematics** raised \$500 million from **SoftBank**. ([Bloomberg](#))
- **Haas Alert** and **Zenuity** formed a strategic partnership to feature real-time infrastructure data in driver assistance systems. ([Haas](#))
- **Grab** has run into problems with crowdsourced mapping initiative **OpenStreetMap** because it has been making a series of inaccurate map updates that are replacing (better) user generated content. ([TechCrunch](#))
- **VW** is acquiring a majority 75.1% share in telematics firm **WirelessCar**. ([VW](#))

## Other

- **Shell** bought 49% of renewable power firm **CleanTech Solar**. ([Deal Street Asia](#))
- Elon Musk's **Boring Company** showed off a one mile stretch of underground test track that Musk says will whisk specially adapted cars around at 155 mph. Since test runs were limited to around 50 mph at the press day, there was no way to verify the claims at present. ([Business Insider](#))
- Electric skateboard brand **Boosted** raised \$60 million. ([TechCrunch](#))
- Bicycle rental firm **Ofo** is under "immense cash flow pressure" according to the CEO. ([Reuters](#))
- **Uber's** Jump bicycle rental division is using swappable batteries in new models of electrically assisted bikes and has created a retrofit kit for older versions. ([TechCrunch](#))
  - Significance: One of the problems faced by dockless electric bike and scooter operators has been recharging, leading to schemes such as paying users to take custody of scooters and charge them privately. Removable batteries will make it easier to maintain the fleet centrally and ensure better uptime.