



# Making Mobility Smart

Automotive Transformation is well underway, as advancing technologies, economic factors and lifestyle trends foster a new era of mobility.

As you navigate your company's journey in the ever-evolving mobility ecosystem, PwC is committed to create Smart Mobility with you.



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# Automotive News Europe

SPECIAL SUPPLEMENT

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# TALK from the TOP

Leading auto executives share their views on the biggest topics affecting the industry



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# Crunch time

Aston Martin CEO counts on first SUV to return struggling brand to profit



Photo: Bloomberg

## Meet the boss

- **NAME:** Andy Palmer
- **TITLE:** Aston Martin President and CEO
- **AGE:** 56
- **MAIN CHALLENGE:** Delivering Aston Martin's first SUV on time and to standards exceeding those of rivals already on the market.



By the middle of the 2020s all of our cars will have a hybrid offering.



Aston Martin has just unveiled the DBX SUV, a vehicle that will be crucial to the company's survival after lower-than-expected demand for its core sports cars pushed it to losses in the second and third quarters. CEO Andy Palmer has had to increase the company's debt to cover the DBX's final development ahead of deliveries in mid-2020. Palmer told *Automotive News Europe* Correspondent Nick Gibbs that he is confident the SUV will win the company new customers and pave the way for the promised rollout of a mid-engine sports car and the Lagonda luxury electric brand.

### How important is the DBX?

Every car we launch is important because of the way the business runs. But in terms of changing the company so that we address each of the luxury clusters, this is really important. So far we have replaced the core GT and sports cars – our historical ground. This is the first model that expands the portfolio.

### How many can you sell in a full year?

About 4,000 a year with a peak of 5,000.

### What does that mean for 2020 sales?

I can't give forward-looking data but we are about 6,000 to 6,500 units this year.

We will not have a full year of DBX but we've more sport cars coming: the Vantage roadster arrives next year, and the mid-engine car [the Vanquish, comes in 2021]. The DBX will represent the largest-single volume.

### Where will DBX customers come from?

Today more than 70 percent of Aston Martin customers have an SUV in the garage, so the hard work is already done. We just need to convert those people from their daily driver into an Aston Martin SUV. They are coming out of Porsche Cayennes and Range Rovers. What we are looking to do is cream

off the top of that premium SUV sector. The Cayenne has been an important benchmark in the development of the car. Our cars don't compete directly, but they [Porsche] are a very credible source when it comes to ride and handling, and build quality.

**The reveal was in Beijing and Los Angeles. Why those two places?**

China and the U.S. are the car's biggest markets, but also it's a signal that we are a very traditional British car company trying to be more global in our approach. The DBX has, in particular, been very much designed with Chinese and American customers in mind.

**The DBX will be V-8 gasoline only at a time when SUVs have come under attack from environmental activists. Will this affect demand?**

The whole industry is under the spotlight in terms of CO2 so obviously it's important to make increasingly efficient SUVs. Do I think there's a wholesale change from SUVs back to another type of vehicle? I don't see it at the moment. If you look at the startup EV makers they are all basically starting with SUVs. If you look around the world, the SUV is the preferred body type.

**Aston's first hybrids will be versions of the Valkyrie and V6 Valhalla hypercars. How quickly will the SUV get a hybrid variant?**

We are not yet disclosing our cadence of hybrid rollouts, but by the middle of the 2020s all of our cars will have a hybrid offering.

**Will they be plug-in or full hybrids?**

We are looking at both. I'm not a big fan of the plug-in hybrid because you are adding weight and complexity. My preferred delivery is a self-charging hybrid. The only reason for thinking otherwise is the definition of regulations and getting the CO2 credit and in some places that might push us to add a plug.

**Some analysts, notably Max Warburton of Bernstein, are skeptical about the roll out of the Lagonda luxury electric brand by 2023. Is that still the plan?**

We still work from that basis. Max's commentary is that it's a lot to do, and I would be first to acknowledge that, but we have also achieved a lot. When we

announced the Second Century plan there were plenty of people speculating whether we had the capability to do everything we said, but I think we have already exceeded some of those people's expectations. The most difficult car we did was the DB11 because it was essentially a new factory, new electrical architecture, new engine, new platform. Nothing that we will do will be as difficult as that. Moving into the SUV format with the DBX has also challenged us, but we have delivered everything on time so far.

**You have reduced your vehicle sales guidance to 6,500 from 7,000 for 2019. Why?**

Our sports cars are growing both in volume and in market share, but the Vantage market is difficult. It borders on premium and that market is more in line with automotive TIV [total industry volume].

**The Vantage starts at about 125,000 pounds, which drags down your average selling price. Is it a market you need to be in?**

What the Vantage allows us to do is to climb a ladder into luxury. None of the other luxury automakers provide that step, so you go from a high-end Porsche into the luxury arena. Vantage provides a platform to do that inside the brand. It's also a platform on which we build our specials and our racecars, so we have credibility when we do stuff like Le Mans.

**You have recently talked about actions to improve efficiencies and reduce costs. What actions have you taken?**

The DBX is being developed much more efficiently than we anticipated and that impacts capital expenditure. When we drew the development costs curves we followed those we experienced with the DB11, but what we found is that we have been able to operate much more efficiently than in the past in terms of manpower spend or changes to tooling in the design. That has allowed us to reduce our forecast on capex by quite an extraordinary amount. In February, we gave a guidance of 320 to 340 million pounds, however, in July we revised it to 300 million pounds. The increase in virtual testing is a huge benefit. We operate in a lean environment where everyone is looking at places where it's possible to eke out improvements.

**The value of Aston Martin's shares has fallen about 80 percent since the company went public in October 2018. Was the IPO a mistake?**

There's no point in looking backward. The share price is obviously a disappointment and I have to acknowledge my role in that. But we have to get on and improve it. I think the importance of the DBX, and whether we can deliver it efficiently, will also affect the share price.

ANE



Palmer says the Aston Martin DBX was designed with Chinese and American customers in mind.

# Rapid rebound

Bentley boss predicts profitable 2019 and record-setting 2020



Photo: Bloomberg

## Meet the boss

- **NAME:** Adrian Hallmark
- **TITLE:** Bentley Chairman and CEO
- **AGE:** 57
- **MAIN CHALLENGE:** Preparing Bentley to launch its first electric car as early as 2025.



**We will have a good year, but we are not going for a record. Next year, it would be hard not to have a record year.**



Adrian Hallmark has had a tough time since returning to Bentley as CEO in February 2018 after 13 years away from the UK luxury brand, seven of which were spent at Jaguar Land Rover. Lengthy delays launching three key models – the Continental GT coupe and convertible, and Flying Spur sedan – pushed the brand to a rare loss last year as dealers were deprived of cars to sell. Bentley returned to profit in the first six months, leaving Hallmark confident about a strong 2019 and an even better 2020. This will provide him with momentum as he starts to prepare the brand's longtime base in Crewe, England, to add

production of Bentley's first electric car. Hallmark spoke with *Automotive News Europe* Correspondent Nick Gibbs.

**Last year Bentley posted a full-year financial loss but you were profitable in the first half of this year. What contributed to that?**

Last year was a perfect storm. A huge effort had gone into creating replacements for three fantastic nameplates [the Continental GT coupe and convertible and Flying Spur sedan] and it took us 18 months longer than we planned to launch them. We have just started selling the Continental GT in America – one

year after it was released in Europe. And it's still not in China, which means we have existed this year with 40 percent of our world markets lacking our core models. The Continental GT is due in China in the first week of December. So, are we going to be profitable for the full year? Yes, as long as China is back this year. If so, we will have a good year, but we are not going for a record.

**How about in 2020?**

Next year, it would be hard not to have a record year.

**Your six-month report mentioned cost reductions. What has been cut?**

We have reduced people and non-people-related costs significantly compared with the forecast for this year. We have reduced running costs by a quarter.

#### So you have had layoffs?

We released 450 people in total. About 380 of those were full-time employees. The rest were temporary employees. And all of those 380 were as a result of a voluntary early-retirement offer. We improved the takt time [time spent on each station] from more than 12 minutes to 9 minutes on all of the assembly lines and in the paint and trim areas. If you go back through automotive case studies, I would expect that reduction is as big or probably bigger than what any factory has done in a 12-month period.

#### Do you need Brexit to be finalized before you expand Bentley's manufacturing footprint in Crewe?

Yes and no. There are two levels of expansion that we need as a company. One is to upgrade and professionalize what we do today, and the other is to prepare for new products and new technologies. It's important to separate the two because we don't want to be doing basic infrastructure upgrades when the clock is ticking to build a new car or a new assembly hall for the car.

#### What needs to be done to prepare for new products?

It's all about electrification. You asked whether Brexit uncertainty held back our investment. It's actually not been about Brexit. It's been about getting the company straight, getting it profitable and having a clear view of when the right time would be to bring the first full-electric cars to market. We have said 2025 is the earliest we can get a credible battery-electric Bentley [on the road]. Therefore, the next phase of our investment would be linked to that electrification. We are still working on whether we produce the cars on the same line or have supplementary build areas that bring in sub-components in a different way.

#### Does Bentley's battery-electric car need to be a stand-alone model?

It's more about market opportunity than product portfolio. Which segment do you want to go into first? Are there any segments where we are not yet fully ac-

tive in price or body style or are there subsegments where we would want to enter? We could take one of the existing nameplates and that could be the first electric car, but we wouldn't take an existing car and try and fit batteries into it because there's a compromise from a range and efficiency point of view.

#### Are you planning to use the PPE luxury EV architecture from your parent, Volkswagen Group?

The ambition is that we would go onto a new group architecture. Therefore, we are currently working to define all the parameters that we would need. PPE is a group approach and different brands are leading different parts of it.

#### What part is Bentley leading?

I can't comment.

#### You have spoken about cars becoming bigger and smaller. Would a future battery-driven Bentley be smaller?

Smaller is a relative thing because we are not going to build a Mini. It would be space optimized. Take the Jaguar I-Pace. The interior volume is the same as the Range Rover, but it's about 35cm shorter. We would always build it so

that the interior is Bentley-sized and to Bentley's standards. You don't need as much overhang, but that also doesn't mean we want to build a small car. We just don't want to waste space on the outside either. We see the battery-electric vehicle architecture as being a liberator of that potential.

#### Does an EV platform inevitably mean it's going to be a crossover?

I think electric cars will be slightly higher because of where the batteries are now. However, with new battery technologies, it will be possible to make cars that are lower as well as cars that are taller because the increased power density will overcome the aero resistance.

#### Does that mean you will be moving to solid state batteries?

I'm not saying that we are guaranteed to go solid state, but that is already on the radar within that mid-2020s period. They are about 30 percent lighter for the same power as lithium-ion. An I-Pace has 720kg of batteries so going to 500kg instead of 720kg makes a difference. Also, think about how that changes the packaging. **ANE**



It took Bentley longer than planned to launch its new Continental GT coupe (shown).

# Flexible future

BMW r&d chief sees rising demand for diverse, multifunctional powertrains



## Meet the tech boss

- **NAME:** Klaus Fröhlich
- **TITLE:** BMW Board Member for Development
- **AGE:** 59
- **MAIN CHALLENGE:** Keeping vehicle architectures flexible until electrification becomes the predominant technology worldwide.

Electrification will come but the speed of adoption will vary greatly. That is why BMW r&d boss Klaus Fröhlich believes that future vehicle architectures will need to be flexible enough to rapidly adapt to tougher global emissions rules as well as changing customer tastes. He shared his thoughts on this and more with *Automotive News Europe* Associate Publisher and Editor Luca Ciferri during multiple conversations this year.

**Except for the full-electric i3, BMW only uses flexible architectures that can accommodate internal combustion, plug-in hybrid and battery-electric powertrains. Was this the right call?**

A flexible architecture is the best solution for the next five to 10 years, but clearly if the world turns fully electric, we will develop dedicated architectures.

**How flexible are your architectures?**

Ten years ago when we developed the CLAR architecture that debuted in 2015 with the 7 series, we would have needed to add 800 kg to 900 kg of batteries to offer a BEV vari-

“ Too much fast charging could wear out the battery in just two to three years, which would make a customer very unhappy. ”

ant. This would have killed the architecture, not to mention the sheer driving pleasure we aim to offer with every car we make. We had expected that over a decade battery density could increase by 2.5 times. By 2020, we will be close to 2.7 times. Therefore, in 2021 we will update the CLAR architecture with a new central floor that can house higher density batteries. This will permit our plug-in hybrids to travel 80, 100 to 120 km in full-electric mode as well as allowing us to install a larger fuel tank than we have in our current plug-in hybrids. Using the updated CLAR also will let us offer BEVs [battery-electric vehicles] on the architecture because our forthcoming i4 is basically a battery-powered 3 series.

**What is the biggest hurdle to the mass rollout of full-electric vehicles?**

BEVs cost more because of the raw materials to make the batteries. This won't change. Prices could eventually increase as demand for these raw materials rises.

**What is a BEV's most critical technical challenge?**

Charging. Each cell needs an individual charging cycle to minimize the risk of overheating. This reduces the life and the range of the battery. Too much fast charging could wear out the battery in just two to three years, which would make a customer very unhappy given the high cost to replace a battery pack.

### How often should a battery-driven car be fast charged?

Not too often. Ideally it should be every 20 charging cycles.

### Why, then, is BMW one of the founding investors in European fast-charging infrastructure builder Ionity?

We had to because in 2017 no one was willing to invest [in a charging infrastructure]. Now the situation is completely changed. Energy providers and oil companies are investing, so the charging infrastructure is coming. That's good news because this is not our core competence.

### What has BMW learned from the customers who are already driving its electrified models?

What we have learned, which is significant because by year-end we will have 500,000 electrified models on the road, is that customers recharge either at home or the office. Charging elsewhere seldom happens.

### What is the global sales outlook for electrified models?

The best assumption is that electrified vehicles will account for 20 percent to 30 percent of worldwide sales by 2030, but with a very diverse global distribution. China's big east coast cities will become purely electric pretty soon while western China will rely on gasoline engines for the next 15 to 20 years due to a lack of infrastructure.

### And for Europe?

In Europe there is reluctance to jump directly to BEVs, so plug-in hybrids are the right solution. They will be used as BEVs during the week and run on gasoline on weekends or long trips. We expect plug-in hybrids to account for up to 25 percent of [European sales], gasoline and diesel will have more than 50 percent and the rest will be BEVs.

### How about the U.S.?

Most of the U.S. does not need BEVs. We could offer high-performance plug-in hybrids in the M space, providing a lot of fun to the driver as well as [environmental] credits for us. We see BEVs mainly in the west coast and parts of the east coast, while the rest of the U.S. will continue with conventional gasoline engines.

### And the rest of the world?

Russia, the Middle East and Africa are

areas where there is no recharging infrastructure at moment.

### Will BMW streamline its internal combustion engine offerings?

Regulations on internal combustion engines are accelerating and getting more diverse all over the world. We have to update our engines every year, especially for China. Because this costs a lot of money, we have to streamline our offerings. On the diesel side, production of the 1.5-liter, three-cylinder entry engine will end and the 400-hp, six-cylinder won't be replaced because it is too expensive and too complicated to build with its four turbos. However, our four- and six-cylinder diesels will remain for at least another 20 years and our gasoline units for at least 30 years.

### What about big gasoline engines such as the V-8 and V-12?

The V-12 may not have a future given that we only produce a few thousand units each year and the several thousand euros of added cost it takes to make them compliant with stricter emissions rules. When it comes to the V-8, it's already difficult to create a strong business case to keep it alive given that we have a six-cylinder high-powered plug-in hybrid unit that delivers 441 kilowatts (600 hp) of power and enough torque to destroy many transmissions.

### What is the future for fuel cells?

A fuel cell is a BEV without a battery but a

fast charger that is called a fuel cell and a 700-bar hydrogen tank somewhere in the car. We develop fuel cells with Toyota and will begin pilot production of the second generation of these models at the beginning of the next decade on the X6 and X7.

### Is the cost still prohibitive?

Right now a fuel cell powertrain costs about 10 times more than a BEV's system. We plan to have those costs equalized by 2025 with the third generation of our scalable fuel cell system, which could result in volumes in the hundreds of thousands.

### Are higher volume fuel cell passenger cars about six years away?

I think that the future developments of battery cells could make them the most suitable solution for passenger cars by 2025. We foresee fuel cells as a viable solution for light- and heavy-duty trucks, which are facing very tough CO2 reduction targets and already use very efficient diesels, so the next step could only be electrification. But you cannot electrify a heavy truck with batteries, because reducing the payload from 6 tons to 7 tons is absolute nonsense. With a single recharging station, you can refuel a fleet of 100 hydrogen-powered light trucks overnight. About 200 highway refueling stations could serve thousands of heavy trucks across Europe, which means that on the infrastructure side, this is feasible. [ANE](#)



**BMW has found that its customers recharge electrified models such as the i3 either at home or at the office. Charging elsewhere seldom happens.**

# Clearing the air

Citroen chief explains PSA's CO2-slashing strategy and bold expansion plan

Last year, Linda Jackson took on the leadership of PSA Group's low-emissions vehicle business unit. That means in addition to her duties as CEO of the Citroen brand she is tasked with making sure the company is compliant with stricter emissions regulations. Jackson explained how electrification will help the group meet those targets in an interview with *Automotive News Europe* Associate Publisher and Editor Luca Ciferri and Correspondent Peter Sigal.

## Will electric vehicles always be more expensive than internal combustion models because of the battery cost?

You can't simply look at the cost of the battery or the cost of the car. For the customer, the total cost of ownership (TCO) is the real measurement. You need to take into account that electricity is cheaper than fuel. If you look into the future, there will come a time when the TCO for an electric car is equal to or even better than a gasoline or diesel model. Even now, we are trying to make sure those costs are about the same because, otherwise, what's the advantage for the customer in buying electric?

## What is PSA's strategy for meeting its 2020-21 EU emissions target?

It's not just about the fact that we want to avoid paying penalties. It's also ethical: We have a corporate responsibility as a global company to meet those targets. Our strategy is comprehensive, and we are working on all fronts. First, we have set ourselves a target of around 7 percent of our sales being LEV [low-emissions vehicles, meaning full-electric vehicles and plug-in hybrids] by 2020. It's also the mix of gasoline and diesel sales. And it's technological as well. We have worked to make our platforms lighter, which also helps to save CO2, and we are trying to make our gasoline engines more efficient.

## Diesel sales are declining less than many people expected. Given that, do you still need to sell 7 percent low-emissions vehicles?

The percentage of diesel new passenger cars in the EU is about 30 percent and has been stable for the past six months. Is that going to move down 10 percent-



### Meet the boss

- **NAME:** Linda Jackson
- **TITLE:** Citroen brand CEO; head of PSA Group's low-emissions vehicle business unit
- **AGE:** 61
- **MAIN CHALLENGE:** Helping PSA meet its emissions targets and increasing Citroen's sales outside of Europe.

“We have seen an increase in EV and plug-in hybrid sales, but that could change overnight because of incentives.”

age points by the end of next year? Nobody knows, but having that 7 percent target lets us manage that uncertainty.

## How much of that 7 percent will be EVs versus plug-in hybrids?

At the moment we have seen an increase

in EV and plug-in hybrid sales, but that could change overnight because of incentives. The customer is very much led by incentives. We will stick to our overall target of 7 percent, and we will manage that as the market moves.

### What are the sticking points preventing consumers from buying EVs and plug-in hybrids?

For a manufacturer, it's about educating people about what electric cars are. PSA is launching lots of new electrified vehicles next year, but at the same time we are launching a suite of services that will show you where you can park, where you can charge, real-time range and other things through your smartphone. We need those services to address the concerns that people have. For example, one customer asked if he could charge his vehicle when it rains. Once people get into an EV, they love it, but you have to take away their fears, some of which are real. We need to have a very simple, clear message that it's not just about having an electric car but how do you live with one.

### How much of the cost of emissions compliance can you pass on?

The cost of doing business at the moment is electrification and autonomous cars and driver assistance technology. To survive you need to invest in all of these things. The question after that is: How much can you charge your customers? Let's be honest: an electric car or plug-in hybrid costs more. [PSA Group CEO] Carlos Tavares has compared those costs to paying more for organic food. I think that comparison makes sense.

### What is Citroen's electrification strategy and timeline?

We will launch the C5 Aircross plug-in hybrid next year. After that we will launch a new C-segment [compact] car with a full-electric variant.

### Will that car be the first EV on PSA's EMP2 platform or will it be based on the CMP architecture?

It's on the E-CMP platform, so it's the first C-segment car on the CMP platform. It will replace the C4 Cactus, which is also on a stretched B-segment [small car] platform, for us in Europe. It's a very important launch. Starting next year every model we introduce will have either plug-in hybrid or a full-electric version, depending on the platform, as well as diesel and gasoline variants – as long as diesel is relevant. By 2025, 100 percent of our range will have electrified versions. That includes light-commercial

vehicles, which make up 20 percent of our sales.

### What are Citroen's goals for expanding outside of France?

It's the second part of our journey. We have consolidated in Europe and increased our sales. Now we need to be more international. There are three parts to our growth plan. We still have aspirations to grow in Europe, where we have a 4.8 percent market share and want to get that to more than 5 percent. The second is that we are rebuilding our operations in China. It's our No. 1 market outside Europe, so we have to do it. The third is new frontiers, starting with India. We are developing a line of vehicles for India that we call "C Cubed" for Cool, Comfort and Clever. They will be manufactured in India, starting in 2021, and we will have more than 90 percent local integration. It's a completely new vehicle program, and we will adjust it for other markets.

### Is this PSA's answer to Dacia?

No, and this is no disrespect to Dacia. These vehicles will have the same elements as a Citroen, with a unique and attractive design as well as comfort features relevant to that market. The way we can make it cost effective is to build it in India or other markets.

### Will the vehicles appear as other PSA brands?

No, C Cubed is a Citroen program.

### Will there be an inexpensive EV in that lineup?

The vehicles we launch in India will have an electric version. But if we come back to Europe, that is one of the reasons we are testing the Ami One concept [shown at the 2019 Geneva auto show]. I've never done a concept car that I haven't in some way tried to bring to market, and that may be true of the Ami One, but many, many people have tried to [bring an inexpensive electric car to market], and it's tough to make the business case

### You have also said that Citroen will have a new midsize car. What is the status of that project?

We will have a D-segment car in our range. It's a business case I need, especially for China, where there is still a strong sedan market. It will be launched after our new C-segment hatchback. If you go back to the CXperience concept from 2016 [at the Paris auto show], that hints at where we are going. It is not about doing a traditional three-box D-segment car with lots of chrome and leather, but to come up with something that is refined, unique and with ultra-comfort. **ANE**



The C5 Aircross plug-in hybrid, which arrives next year, is a key part of Citroen's electrification plans.

# Costly change

Dacia battles to keep prices down as pressure rises to add CO2-reducing tech

**D**acia is a huge success in Europe for parent Renault Group because it delivers on its “value-for-money” philosophy. However, the cost of achieving emissions compliance, especially with electrified powertrains, could pose a threat to the low-cost brand’s profits and sales. Philippe Buros, a veteran of Dacia in Romania who is the chairman of Renault’s Europe region, talked with *Automotive News Europe* Correspondent Peter Sigal about how Dacia will manage this transition.

## Does Dacia need electrified powertrains in Europe to bring down CO2 emissions and how will you do this?

First of all, our CO2 emissions are global for Renault Group, including Dacia. The main selling point for Dacia is “value for money,” and as part of that Dacia takes technology that Renault has, but after a delay. So, Dacia will pick up everything that Renault has in terms of electrification, because we will be required to electrify the brand, either with full-electric cars or hybrids. It’s true that Dacia is not electric today but there are many brands in Europe that aren’t electric, either. I think that everyone will have to go electric because it’s an underlying trend.

## Do you think Dacia should have lower emissions for environmental reasons?

Yes, and our customers will be asking for electrification. When Dacia started to grow most of our customers in France lived in rural areas, but today we have a lot of buyers in cities such as Paris. They

will want an electric Dacia. But, they will want one that is less expensive than an electric Renault.

## Will Dacia get a version of the Renault Zoe EV?

Maybe, but it would have to be the same price difference as between a Dacia Sandero and Renault Clio [small hatchbacks]. Today, one of the ways we are reducing emissions is with LPG [liquefied petroleum gas] options. When you do LPG it lowers your emissions and it’s also a dual-fuel system.

It’s especially popular in Italy, Poland, Spain and Switzerland. We are the only brand that offers the whole range with LPG versions. In Italy we have the highest share of the LPG market, ahead of Fiat. For the Duster, more than 50 percent of sales in Italy are LPG and that is growing.

## When will the cost of a full-electric vehicle come down enough for Dacia to have one?

I think in two or three years we will electrify Dacia.



## Meet the Europe boss

- **NAME:** Philippe Buros
- **TITLE:** Renault Group Chairman of Europe Region
- **AGE:** 58
- **MAIN CHALLENGE:** Adapting the low-cost Dacia brand to changing emissions and technology requirements.

**Dacia customers are less concerned about novelty than Renault customers.**

**In general, the cost of all vehicles is going up because of emissions regulations. Can Dacia continue to offer “value for money” as its main selling point?**

The problem with the regulations is that you are adding 1,000 to 1,500 euros to the cost. When it's a 100,000-euro car, it's easier to absorb. When it's one that costs 8,000 or 9,000, that is 10 percent or more. That is why there is a delay [in Dacia using Renault technology] and why we are trying to wait as long as possible to amortize the technology.

**Safety regulations such as new NCAP testing will add to costs. How are you dealing with that?**

Prices everywhere will go up, but we have to ensure that the price gap between Dacia and the rest of the market, which is about 20 percent less, is maintained. Otherwise, volume will go down. But we have to continue to offer “value for money” and a relatively high level of equipment but at a lower price. It's not just a car with four wheels.

**Do you plan to use other technologies from the Renault-Nissan alliance, such as lane keeping or adaptive cruise control?**

Yes, but our customers aren't asking for that. Their needs are simpler: to get from Point A to Point B. For this they want air conditioning, electric windows, power steering but they don't want a self-driving car because they know they will never get a self-driving car at 10,000 euros. When we are required to put it in, we will do so. But we will try to do it as late as possible, otherwise it will break Dacia's business model.

**Dacia's lineup has been mostly the same in recent years, although the Duster was completely renewed at the end of 2017. When can we expect new models, such as a new Sandero?**

Nothing has been finalized. Something will happen in the next two years be-

cause we have to renew Dacia, but I can't tell you on what platform.

**Do Dacia owners keep their cars longer than Renault owners?**

Dacia customers are less concerned about novelty than Renault customers. They are pragmatic. They want a car to get themselves and their families around safely, but they are not worried about fashion.

**What about the Dokker, your small van. Will that move to a newer Renault platform, and will light commercial vehicles become more important to Dacia?**

We can't reveal anything yet, but that would be logical. Renault will launch a Kangoo [car-derived van], and we will see for what price equation we could make a Dacia version and whether we will do it. We relaunched Dacia with a “net price” business model. You can't compete in the fleet market with that philosophy. If you do fleets, you start to discount. And then people will buy fleet cars to re-sell to individuals. That is why it's complicated for Dacia to do fleets or utility vehicles.

**Dacia tries to avoid channels such as short-term rentals in Europe, right?**

Yes. It's just like the fleet market. The rental cars will be resold after three or four months, but at a 20 percent or 30 percent discount, and it would break our business model. We do sell a little bit in those channels, but in France, for example, 80 percent of our sales are retail.

**Dacia now has plants in Romania and Morocco. Do you need to expand your production footprint?**

We are in two countries with well-trained

workers and reasonable costs. There is no reason to change.

**Are there other markets where Dacia could be introduced, or will you continue to brand some Dacia models as Renaults to be sold outside of Europe?**

In Europe, there are two different customers: a Dacia customer and a Renault customer. The Dacia customer often stays with Dacia. When he is young, he will more likely have bought a used car and then moved up to a Dacia. He will stay with Dacia. It's rare to have a Dacia customer move to Renault. We need to keep the brands separate because Dacia and Renault customers don't want the same things.

**The Duster has been an incredible success. Have you thought about creating variants of it?**

No, because the success of Duster is based on the price and the cost. The more you increase the diversity of your range, the more you raise the costs and the more you have to raise prices. We only raise our prices at the level of inflation, or maybe a little bit less. There is always a temptation to say, in France, we have about 2 percent inflation, we could raise prices 3 percent. But we have to maintain our business model of offering value for money.

**What is the next step for Dacia? More volume or more efficiency?**

We will continue to push value for money; we have found a good balance between the price and the content of the cars. If we raise the content we will have to raise the price. If we do that we will be competing with Renault. **ANE**



**Dacia aims to ensure that the price of models such as the Duster remains about 20% below rivals.**

# Plugging away

With threat of CO2 fines, EV profitability must improve, Hyundai's Schmid says



## Meet the COO

- **NAME:** Thomas Schmid
- **TITLE:** Hyundai Europe COO
- **AGE:** 60
- **MAIN CHALLENGE:**  
Avoiding CO2 fines while renewing the product range in 2020.

Hyundai Europe COO Thomas Schmid forecasts that the cost of electrification will force automakers to focus on a healthy business by cutting marketing costs and limiting sales incentives. Electrification is still too costly to reach the smaller segments, even in the midterm and even in the form of a mild hybrid, says Schmid, who has been Hyundai Europe's COO since 2015. Plug-in hybrid vehicles will not be a long-term solution, either, as sales depend too heavily on government incentives, he says. The 60-year-old Austrian national discussed these topics and more with *Automotive News Europe* Correspondent Andrea Malan.

### European automakers are rushing to get ready for the transition to the 2020 European CO2 emissions limits. How will it impact the market?

Every carmaker has the same basic task: Improve profitability due to the tremendous cost of electrification. Therefore, and you already see it in the markets, everyone is trying to reduce incentives. There is maybe one exception: That's the Volk-



**The [charging] infrastructure problem is critical, and it's unlikely we will have a widely available network in 2 years.**



swagen Group. They need huge volumes to keep a high cash flow because they are currently financing all their investments out of cash flow. Other automakers, such as Fiat Chrysler, reduced their incentive levels, and you see it in the market share now. That is also true for Renault or PSA Group and for Japanese companies such as Toyota and Mazda. Everyone is more focused on a healthy business. To me that's an indication that this increase in registrations might not happen because they can already now reduce the production of high-CO2 vehicles. That would be a smarter way to tackle the problem.

### Looking to 2020, will the market be up or down compared with 2019?

There are two risks. No. 1 is the 95 grams per kilometer CO2 limit with its high penalties [for noncompliance start in 2020]. Manufacturers will try to balance. That means no one will push for high volumes. That's why the market will suffer a slight decline. You actually see it already, if you compare the data with previous forecasts. The second risk is Brexit.

### What would be the impact of Brexit on Hyundai?

The UK is our second-largest EU market after Germany.

### Can you put a figure on it?

We risk a 10 percent loss in the UK, which we have to compensate for elsewhere.

### Will Hyundai meet its EU CO2 reduction target next year and avoid fines?

Of course. We are preparing to supply electric vehicles in sufficient volume and to deliver them without long delivery times to our customers. However, everyone has to sell many more battery-electric vehicles. That raises some questions: Does the European market have that many customers who want to buy a full-electric car? How long will it take for the national governments to put in place a strategy to roll out a sufficient number of charging stations? When will customer be able to get their electricity with a single card everywhere?

### Hyundai will push EVs in 2020-21 to reach your CO2 reduction goals. Does that leave you vulnerable by 2022 and for the rest of the decade?

Yes, that's a concern. It's likely that by the mid-2020s we will see competition [for EVs] reach the level we see today for cars with internal combustion engines.

### What are the pros and cons of a wider choice of EVs available to buyers?

Well, it would be an opportunity for European customers, and [if there is a strong uptake] it would allow us to slowly lower prices for electric vehicles. But we would still need in Europe 50,000 additional charging stations just to enable long-distance driving. We know 80 to 90 percent of people live in apartments. Do they have parking on the street or in the garage? If not, where are they going to recharge? The infrastructure problem is critical, and it's unlikely we will have a widely available network in two years. It's more likely to take 10 years. Given these obstacles, it is not possible that full-electric vehicles will have a 30 to 40 percent market share, contrary to some forecasts. This just won't work.

### Why has Norway achieved this?

The structure of living in Norway is different. They have lots of public charging stations already. People who live in apartments have second houses in the country and recharge during the weekend. And many of them have two cars – one electric and one diesel. In addition, several countries want to ban the sale of combustion vehicles by 2030 or shortly after. In that case, it's likely that everyone will keep the car longer, maintain it better, so repair shops will see

their business grow. We would move into an almost old-timer used-car market.

### Plug-in hybrids offer CO2 results of around 30g/km. Are they a solution?

At the moment, plug-in hybrids show very low CO2 values thanks to the testing procedure. But in some countries, like the Netherlands, incentives for plug-in hybrids were canceled when the government realized that people never recharged the battery. They just use the combustion engine, resulting in much higher consumption. With the introduction next year of the real-driving emissions (RDE) test, the data will change for plug-in hybrids because this procedure includes highway driving. When the battery is empty, you face the problem that CO2 values jump dramatically. The idea was that plug-in hybrids would allow you to go into the city in electric mode and use the combustion outside. You already see it in the figures that plug-in hybrid sales are decreasing due to the removal of incentives in some countries. They are down a two-digit percentage every month, while hybrid and full-electric cars are still growing very fast.

### Is it too early to commit to plug-in hybrids as a solution because of all this uncertainty?

It's a solution in the transition period, particularly for the heavier cars. But you still see a dramatic month-by-month decline in plug-in hybrid sales.

### What new products can we expect to see from Hyundai in 2020? Is the new Tucson imminent?

Some spy pictures [of the Tucson] have already been published. We are renewing our product range, so we will have a very busy 2020. We revealed at this year's Frankfurt auto show the new i10, whose deliveries will start in January. Then we will launch a new or updated model every two months. Sorry that I can't say more than that right now.

### Will the Tucson get a mild-hybrid powertrain like the current one? Will it be more electrified?

Our future vehicles will all be more electrified than what you see with mild hybrids. The exception will be minicars such as the i10. Currently, we don't see a feasible business case for such vehicles [battery-drive small cars] because

the cost of electrification is too high. We see ourselves as providers of mobility for all people. In the near term, there is no chance to have a full-electric vehicle for 10,000 euros (\$11,000). Even a hybrid powertrain makes the car 3,000 or 4,000 euros (\$3,300 to \$4,400) more expensive. Therefore, we are not electrifying small segments.

### Not even with a mild hybrid?

Even this kind of technology is too expensive, and for this kind of car, it doesn't have such a large CO2 effect. So we are optimizing the combustion engines, adding a start/stop mechanism and so on.

### Will the minicar segment disappear in the next five to 10 years as the added costs to reduce CO2 from 95g/km to 60g/km CO2 would be too high?

That's an issue, because in 2030 the average CO2 emissions limit will have to be reduced by 37 percent from the current one – that's a no-go without electrification. On the other hand, the hype around electrification at the moment is driven by legislation, both at the city and state level. There is a high risk that this [move toward electrification] will never work out because the infrastructure doesn't exist. That means the entire society has to change its behavior on mobility. Automakers also have a social responsibility. Minicars and small cars are the segments where you have the highest demand in Europe. **ANE**



Hyundai will start deliveries of the new i10 in January.

# 'That's the price'

JLR exec on how automaker avoided 'dirty discounting game' in China

Jaguar Land Rover plunged to a 3.6 billion pound (4.2 billion euro) loss during its last financial year, ending a long streak of consistent growth and strong profits. Most of the loss came from a 3.1 billion pound write-down on investments in February after 2018 sales in China collapsed 22 percent. That prompted a 2.5 billion pound cost savings drive, including the loss of 4,500 jobs, as the Tata Motors-owned company reassessed its priorities. The tough decisions are paying off as JLR reported a 156 million pound pre-tax profit during its second quarter that ended in September. Felix Bräutigam outlined how the automaker aims to keep heading in the right direction, particularly in China, in an interview with *Automotive News Europe* Correspondent Nick Gibbs.

## JLR has struggled in China. What is your strategy there now?

Since 1994 we have had three to four cyclical downturns in the Western world, which is normal, but the Chinese market was growing each and every year. Then, all of a sudden, last year it was down, which was seismic. One of the reasons why we had a difficult 2018 was that we took a conscious decision not to offset the overall slowdown by pushing volume at any cost, so we cut production. We are in it for the long run. If we start a really dirty discounting game in China and buy market share in a relatively young market, what does that do to our brand? It says we are a discount brand and that doesn't match what Jaguar and Land Rover should stand for.

## Is your China business now sustainable?

We see green shoots in China. We didn't just take out production. We worked intensively with retailers, we simplified our product offer and we worked on the cost side. Now we are growing again. I'm not saying we have completed the turnaround, but we have the patience. It's such a young market, whatever we do right and wrong now will influence our success in China, which will be the biggest premium market for the next 10 to 20 years. But at the same time the market is still declining so we face headwinds on a more macroeconomic level.



### Meet the sales boss

- **NAME:** Felix Bräutigam
- **TITLE:** Jaguar Land Rover Chief Commercial Officer
- **AGE:** 52
- **MAIN CHALLENGE:** Putting enough distance between JLR's two brands and their competition to create sustainable demand without needing to discount.



**We want to be in enough niches that we can be enticing to enough Chinese customers who say:**

**'This is exactly what I want.'**



### Was it perhaps inevitable that the Chinese gold rush would end?

In the early 2010s you could shift volume and make a lot of money on the way. There is still a lot of gold but it will be more and more expensive to extract. It's a huge market, 1.4 billion people. However, it's also becoming probably the world's most aggressive and most fought-over premium automotive market. It will be a relatively dirty market [because of the pressure to discount]. This is a game we don't want to play. We are relatively small, so we want to be in enough niches that we can be enticing to enough Chinese customers who say: "This is exactly what I want." So, when they say, "Can we have a discount," we say, "We go out of our way for you, so, I'm sorry, but that's the price,"

### Based on that, should Jaguar be making XE and XFs sedans?

It is an entry into our brand, and when you look at other premium brands, their entry level is much lower. In China we produce a stretched version of the XE to better appeal to Chinese tastes. We were a bit unlucky in that it launched right as the market was crashing, but we still believe it's particularly appealing to Chinese customers, because it's still a huge market for sedans.

### What does the new Land Rover Defender add for you?

We have been a two-legged stool for a couple of years. Land Rovers are supposed to be the most capable in their segment. The Range Rover family adds refinement and luxury. Discovery adds versatility. The missing leg on the stool was Defender, which is about ultimate 4x4 unstopability. Now we can be much more specific.

### The Defender also looks pretty versatile. Are you worried about taking customers from the Discovery?

The Discovery creates a whole stream of customers for whom the Defender is not the right car. The Defender might draw them in, but maybe they will think it's perhaps not 100 percent for them, so they will have a second look at the Discovery.

### Are you frustrated that the Discovery is not doing better?

A little bit. We think it deserves better. It's a full eight-seater. It's truly versatile.

It doesn't have to replace the Defender because we have given the Discovery its space back. It would have been very natural to launch the Defender and Discovery in parallel. That way it would have been very clear: This is the most capable family SUV [the Discovery] and this is the most rugged, unstoppable modern 4x4.

### Are you worried about the environmental and safety backlash targeting SUVs?

Zero emissions, zero accidents. That's our goal and we are on a good path. We are relentlessly driven to reduce the number of accidents, but this has nothing to do with the size of the car. It's all about the car's intelligence.

### What about the emissions? What is your response to those calling for a ban on SUVs?

In any walk of life we need choice. We live in democracies. The effect of different car types is much less influential than the drivetrain. We were the first established premium manufacturer to launch an EV with the Jaguar I-Pace. That's an SUV/crossover and it has zero emissions. And if plug-in hybrids are really used smartly, the CO2 impact is quite minimal.

### Will Jaguar continue to build sports cars in the future?

Yes. We share a strong belief that Jaguar should always have a sports car. What shape or form that will take, we are deep in that discussion.

### The new Jaguar XJ will be based on the MLA platform for electrified cars. Will you add combustion engines later?

MLA allows us to be super flexible. There are big changes ahead with autonomous cars, connected cars, EVs and car-sharing. The big challenge is forecasting which of these four will be really relevant to customers in which market at which point in time. That means it's no longer the game of fast swallowing the slow, the big swallowing the small. The smart and flexible will be the most successful. This is a strength of Jaguar Land Rover. We are relatively small and very flexible. MLA is one answer. It will deliver outstanding full-electric vehicles, however, there will still be markets without the charging infrastructure or customer demand, so, MLA allows us to continue delivering super-efficient plug-in hybrids or mild hybrids on the same platform. **ANE**



Jaguar Land Rover expects a big boost from the new Defender.

# Charging ahead

Kia COO Herrera confronts CO2 barrier, embraces an electric future



## Meet the COO

- **NAME:** Emilio Herrera
- **TITLE:** Kia Europe COO
- **AGE:** 57
- **MAIN CHALLENGE:**  
Gaining market share and avoiding CO2 fines.

**K**ia has increased sales in Europe for 11 consecutive years and its sales are steady this year in a declining market with a 1 percent rise in the first nine months to boost market share to 3.2 percent from 3.1 percent. The main task for Emilio Herrera, who became Kia Europe's COO in April 2018, is to continue the upward trend despite the huge challenge posed by the need to comply with the new European Union CO2 emissions limits. The Spanish executive is confident that Kia will avoid paying fines for missing EU CO2 targets. He says automakers will have no choice but to electrify their ranges, even in smaller segments. Herrera discussed Kia Europe's electrification strategy with *Automotive News Europe* Correspondent Andrea Malan.

### Renault aims to launch a 10,000 euro (\$11,000) electric car in Europe within five years. What is your opinion?

That is a very bold statement. One of our biggest challenges is to make EVs

profitable, and the smaller the car, the more complicated that is. Therefore, a 10,000-euro EV is very challenging and not very realistic. We know how difficult it is because we are looking to produce an electric version of the Picanto mini-car. There is nothing confirmed yet, but we're really looking at it. But I don't think that it could be less than 10,000 euros, unless you strip the vehicle down to the bare bones.

### What's the base price for your gasoline-powered Picanto?

It's 10,000 euros.

### How much would an electric version of the Picanto cost now?

Close to 20,000 euros. You have to add 8,000 to 9,000 euros to the gasoline price. So as long as there are fiscal incentives to support sales of EVs, it could be feasible. But I think those incentives will be gone in five years because there will be so many EVs on offer by then that the governments would not be able to support them.

### Are you that bullish about the future of full-electric vehicles?

Yes, I'm optimistic. Why do we believe that the EV market will grow? The main reason is that we have no other choice. Why is Volkswagen suddenly heading in this direction now? Not because they like it but because they are forced. Volkswagen Group sells 4 million cars in Europe; they need to offset that with EVs to avoid paying the EU's CO2 fines. Now, Volkswagen says when they start the mass production in December [of the ID3 battery-electric car] that they will be able to sell it for 30,000 euros (\$33,000). I think it's a bold statement. It's a compact-segment vehicle; we're not talking about a Smart. We at Kia today are not capable of launching an electric vehicle at 30,000 euros.

### If governments are withdrawing incentives for EV purchases why build an electric Picanto?

We will have no choice. We will have to do it. The A and B segments [minicars

and small cars] are so important in Europe. In Italy, those segments account for 50 percent of the market. We will have to have an A-segment car that is electric. Our goal is to have an electric car in almost every main segment where we compete. Even if it's not confirmed today, I think we have no choice.

#### How much is a well-equipped Picanto?

Let's say 16,000 to 17,000 euros.

#### Is that close to what you could charge for an electric Picanto?

That would be a very reasonable price for an electric Picanto – 16,000 to 17,000 euros. But it's not easy. Even that is a challenge. Now, if we think that the government's support will still be there, then the price difference can be offset by the subsidies. But take a country like France, which is heavily pushing EVs. The government is giving 6,000 euros for an EV, plus another 2,500 if you scrap your vehicle. That's a huge investment of public money. If the share of EVs gets to 20 percent, and you have to pay 6,000 euros for each one ... is that sustainable? And besides, a lot of the income from governments in Europe also comes from taxes on gasoline and diesel fuel. If we reduce fuel consumption, maybe they tax electricity, so electric cars are going to become more expensive to charge.

#### Would having EVs on the same platforms as combustion cars give you more flexibility?

If you have a dedicated EV platform, it's easier and the packaging is also easier. If you have a traditional platform, let's say the one we use for the Ceed, and you want to make this car an electric vehicle, it's not so easy because of the packaging. Where do you put the battery? It's feasible but it's more complicated. If you start with an electric platform, it is much easier.

#### Does that mean the electric Picanto would be on a dedicated platform?

The only vehicle it could share its platform with is the Hyundai i10, if they also wanted to build an electric version. More generally, in the future we will have both dedicated EV platforms and flexible platforms for both combustion cars and EVs. One example is the Imagine concept we showed at the Geneva show this year. The plan is for this

 **Our goal is to have an electric car in almost every main segment where we compete ... I think we have no choice.** 

to become a mass-produced vehicle in one or two years and to have a dedicated electric platform.

#### Are plug-in hybrids a long-term solution in Europe?

With today's range of nearly 60 km, people who consistently charge the battery at home can use it to commute to work every day using only the electric motor. Plug-in hybrid sales, however, have been very volatile. Demand really depends on the support given by the different governments. The best example is the UK. Once the government removed its support plug-in hybrid sales dropped 50 percent. People are not ready to buy them. Something similar happened in the Netherlands. Meanwhile Sweden in July 2018 started a scheme that was favorable to plug-in hybrids so sales skyrocketed. Fifty percent of our sales in Sweden are plug in hybrids. We have our highest market share ever in Sweden because of that. In the future the different technologies will coexist and manufacturers will have to find the right balance. One area where we are all challenged is by the limited supply of batteries.

#### Is it also true for plug-in hybrids?

It's the same, only the battery is smaller. We have signed contracts with just two suppliers, LG Chem and SK Innovation. When we signed those contracts two or three years ago, nobody was expecting these sales figures.

#### How long are those contracts?

We are trying to renegotiate them, but it's not easy because they are seeing demand from every manufacturer.

#### So the battery availability problem isn't solved yet?

It's improving. We have managed to secure more supply from local suppliers, but it was very difficult to increase the supply this year.

#### But the problem next year and in 2021 is that you will need the batteries in Europe. Otherwise, you will pay big fines for missing EU CO2 reduction targets, right?

Correct. This is exactly what I told our vice chairman [Euisun Chung]: Either we have the EVs, or we have to pay huge fines. I told him there are five possible scenarios. 1) You pay the fine, which is a no-go at a Korean company. 2) You reduce your volume significantly to offset the CO2. 3) Pool with Tesla. 4) Leave the European markets, which is what Infiniti did. 5) Make sure you have enough EVs so that they offset the CO2 from the combustion cars. That is what we will do.

#### How will that work?

We're lucky to have the cars and more batteries starting next year so that the 40,000 EVs we plan to sell will help us offset the CO2 from the rest of the cars.

#### How will the market evolve in 2020 as the new CO2 limits take effect?

The number of cars offered in the market will decline. Therefore, there will be less price competition than we have this year. I have heard competitors say they will cut sales to rental cars. The same is true for self-registrations, which are also less profitable.

#### How many EVs will you sell this year?

This year we will sell 20,000 battery-electric vehicles and 15,000 plug-in hybrids between Optima and Niro. We will also sell 30,000 Niro hybrids.

#### How many of those 35,000 full-electric and plug-in hybrids are sold to fleets?

It's a very low percentage, lower than for combustion cars. Even when we sell to fleets, we don't give them big discounts because there is more demand than supply from the many corporations that want to have green fleets. For example, [German software company] SAP asked us for EVs and we told them we could only deliver 100, which is less than they wanted, so I don't have to give a discount. **ANE**

# Controlled growth

Lamborghini CEO taps the brakes on brand's record sales rise

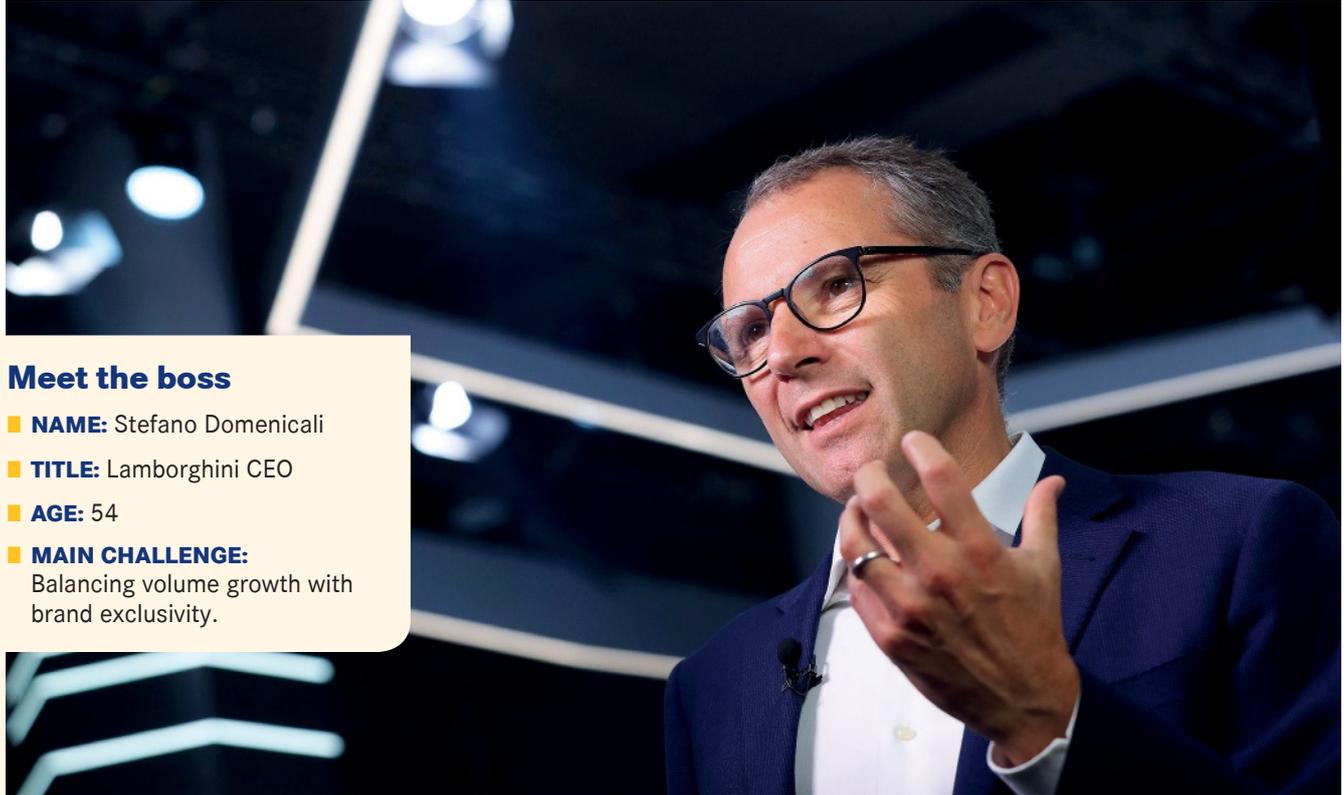


Photo: Bloomberg

## Meet the boss

- **NAME:** Stefano Domenicali
- **TITLE:** Lamborghini CEO
- **AGE:** 54
- **MAIN CHALLENGE:** Balancing volume growth with brand exclusivity.

“ Properly managing dealer inventory is a delicate business exercise with a lineup of cars priced between 100,000 and 300,000 euros. ”

Lamborghini is on course for a global sales record for the ninth consecutive year in 2019. Starting in 2020, however, its volume is expected to stabilize at less than 8,500 vehicles a year to preserve the brand's exclusivity and protect resale values. To push annual sales above 10,000 the Volkswagen Group subsidiary needs a fourth model, which isn't due before 2025. Lamborghini CEO Stefano Domenicali discussed these topics and more with *Automotive News Europe* Associate Publisher and Editor Luca Ciferri.

### Is Volkswagen Group considering an IPO or a divestiture of Lamborghini?

Those decisions are made by our share-

holders and the VW Group supervisory board. What I can say is that all this interest around Lamborghini means that the team here has done a good job.

### What are the biggest achievements?

Last year we increased sales by 51 percent to 5,750 units and revenue by 40 percent to 1.42 billion euros. This year we will set once again new records for sales – about 8,200 units – and revenue. Recognition and appreciation of the brand has also grown significantly. To give an example, we have customers who are willing to pay 25,000 euros more than the list price of a new Urus to get immediate delivery of a used model.

### Is the waiting time for the Urus still a big issue?

On average, we are at about nine months, which is fine for a high-end SUV. It takes about a year to get the S version of the Aventador while the Aventador SVJ is sold out. It takes six months to get a Huracan. These waiting times are OK in most markets, but we see a growing trend in the Far East, Middle East, California and Florida where customers want to buy the car they see in the showroom. Properly managing dealer inventory is a delicate business exercise with a lineup of cars priced between 100,000 and 300,000 euros.

### What percentage of Urus sales are conquests?

About 70 percent of its customers are new to the brand.

### What is the retention rate for your supercars?

More than 70 percent are repeat customers.

### Are the buyers about the same age?

No. Most Urus buyers are 45 to 55 years old while our supercar customers are between 30 and 45.

### The Urus accounted for more than 40 percent of your first-half global sales. Will that number grow or shrink for the full year?

The Urus will account for about 55 percent of our 2019 sales. That is roughly 4,500 units, which is its full capacity for a year.

### Could you expand Urus production even further?

We have the capability to do this but not the willingness right now. This year sales in Russia will grow twofold to 126 units and twofold in India to more than 40 units. Sales in Italy have grown threefold to about 200 units. We could eventually boost Urus production to help shorten the waiting times in markets such as these, where the model has performed well above our expectations.

### Could Lamborghini top 10,000 sales a year with its current lineup?

No. We plan to reach about 8,500 units in 2020 and then to stabilize there for a while. The supercar segment is expected to grow about 3 percent a year and we can't expect the Urus to keep growing forever. Therefore, a fourth model would be needed to get us to 10,000. The model won't arrive before 2025 at the earliest.

### Will the fourth model be the rumored 2+2 GT?

This is what we have in mind. The package and the design are almost final, but the entire project is on standby. As our target is to reach the market between 2025 and 2027, we need to see what the available platform and powertrain options – including full electric – will be then within the VW Group. The only thing clear is that any Lamborghini model should offer the best performance within the group from that specific architecture.

### If sales hover at about 8,500 from 2020 until 2025-2027 won't that impact your revenue growth?

We expect moderate but stable revenue growth. One contributing factor is spare parts. Not only will the number of cars on the road grow at a steadier pace, by more than 8,000 units a year from less than



Lamborghini needed just 3 months to sell the 63 units of the Sian limited-edition hypercar (shown). It costs 2 million euros plus taxes.

4,000 two years ago, but the mileage is also growing. Urus customers drive about 15,000 km a year, compared with about 4,000 km for the Aventador and 6,500 for the Huracan. Other factors contributing to our bottom line are increasing revenue per unit and the expansion of our few-off and one-off projects.

### Is the 2 million-euro Sian the first of those so-called "few-off" projects?

Yes. The Sian coupe will have a 63-unit run, which we sold out in three months just showing potential customers a 1-to-3 scale model and some computer-generated videos of a model that did not exist yet.

### What will be the next "few-off" model?

A track-only hypercar developed by Squadra Corse [Lamborghini's motorsports arm] and designed by the Centro Stile in Sant'Agata Bolognese. The car will debut in 2020. The limited-edition car's aerodynamic and mechanical specifications will be optimized to bring out the best from our iconic 6.5-liter, naturally aspirated, 830-hp, V-12 engine.

### How about your plans for the one-offs?

We have two clients for bespoke Aventadors. These models will have one-off exteriors and interiors but will remain street legal. They should be delivered by the end of next year.

### How much does a one-off Lamborghini cost?

They start at 3.5 million euros.

### Are you still planning a plug-in hybrid version of the Urus?

The plan is for a V-8 plug-in hybrid, which will be the most powerful Urus, but we are still working on the performance, which is impacted by the added weight of the batteries, e-motor and power electronics. This variant will be the leading powertrain offering in markets with CO2-based taxation.

### Will there be a race series created specifically for the Urus?

Yes. We will start with a Race of Champions for the Urus STX in 2020 where 80 percent of the race will be held on a track and 20 percent off-road. The plan is to move to a proper dedicated championship in 2021.

### How do one-make race series such as the Super Trofeo for the Huracan help your bottom line?

We have three different regional championships [in Europe, North America and Asia] in which more than 60 Huracan Evo racecars have competed in 2019. These variants cost 245,000 euros plus tax in Europe and require an additional 36,000 euros per car to race the full season.

### How will Brexit affect Lamborghini?

We are closely watching all developments on the topic because the UK competes with Japan to be our second-largest global market. The UK is extremely relevant to us.

ANE

# Profit warning

Mazda Europe chief races to slash brand's CO2 but EU fines loom in 2020

Yasuhiro Aoyama, who took the helm of Mazda Europe in March, arrived at a difficult time. Starting next year, automakers will face tougher CO2 emissions regulations in Europe. It's unlikely Mazda will comply despite huge investments to make its combustion engines cleaner and to add the full-electric MX-30 small crossover to its lineup. The EU fines will likely jeopardize the company's profitability in Europe. Aoyama explained how Mazda will respond in an interview with *Automotive News Europe* Correspondent Andrea Malan.

## Is Mazda profitable in Europe?

Yes, we are currently profitable in Europe. Maintaining profitability, however, mainly depends on the euro/yen exchange rate. In addition, next year we will face the potential of CO2 penalties. We are in a transition period between two generations of technology. When we have completed the transition, including the electrification of our product portfolio, our goal is to pay no fines for CO2 emissions. From that moment we want to start increasing our operating profits and return on sales in Europe. That is our strategy for the long term.

## Is Mazda at risk of facing CO2 fines again in 2021 when emissions limits become even stricter?

It is difficult to give a forecast for 2021 because multiple variables need to be taken into account, not only regulation. We must also consider volumes and profit margins. In 2021 and beyond, we will see the full deployment of our latest technologies. So we will need to carefully manage profits and volumes over the next few years.

## Mazda recently unveiled its first full-electric vehicle, the MX-30. What role will the crossover play in Europe?

To avoid CO2 penalties, the electric vehicle is an indispensable part of our strategy, combined with the efficiency improvements made to our combustion engines.

## How many MX-30s will you sell in Europe next year?

We are still working on our 2020 budget [which will cover April 2020-March



### Meet the Europe boss

- **NAME:** Yasuhiro Aoyama
- **TITLE:** Mazda Europe President and CEO
- **AGE:** 54
- **MAIN CHALLENGE:** Electrifying Mazda's lineup to comply with tougher EU CO2 limits without sacrificing on profitability.



Since Skyactiv-X launched, 60% of the orders for the Mazda3 are equipped with the engine.



2021], so we haven't decided on a concrete number. We will have to sell as many battery-electric vehicles as possible so that we can reduce our potential of facing a CO2 penalty.

## Who is the MX-30's target customer?

We consider it an urban, commuting vehicle for young buyers who love driving. We want to bring the same Mazda characteristics to an electric vehicle.

**The MX-30 will start at 35,000 euros. Isn't that a bit expensive for a vehicle which Mazda has defined as a second car?**

We know that the EV prices will change as more competitors bring their new models to the market. Therefore, we believe that depending on the package you offer, there will be demand for relatively small vehicles at a relatively higher price point. We are positioning our car in that sub-segment. The current price is for the launch edition. We will carefully monitor the market response and, if needed, quickly revise our strategy, which will be very agile.

**Why did Mazda equip the MX-30 with a relatively small battery with a 200 km range?**

We based the battery size on the needs of our target customers, who are young, urban buyers. The second factor was that when we did a life-cycle assessment, which considered not only the emissions caused while driving but the emissions from the production of the battery, we found that a 35.5 kilowatt hour battery would result in CO2 emissions similar to our diesel models. That is why we selected a right-sized battery for our first battery-electric vehicle. We understand, however, that some customers require cars that can provide a longer range. Therefore, as a second step, we will deploy a rotary-engine based range extender to the vehicle. We also need to closely monitor how fast battery capability progresses. If it improves significantly we may consider a bigger battery in the future.

**The decline in diesel sales in Europe has stabilized and in some cases demand for the powertrain has risen. What is your forecast for diesels next year?**

It is very hard to precisely predict how the diesel share will evolve. That's why we employ a multi-solution strategy. Our Skyactiv-X SPCCI (spark plug controlled compression ignition) is a very good solution to counter the declining diesel trend. That being said, every time I drive a diesel on a German autobahn it reaffirms my belief that it is the most suitable powertrain for long-range travel in Europe.

**The new Skyactiv-X engine launched in Europe this year. What role will it play and how many do you expect to sell in 2020?**



**Mazda expects the CX-30 to become its best-selling model in Europe next year.**

Since Skyactiv-X launched, 60 percent of the orders for the Mazda3 are equipped with the engine and the share is 45 percent for the Mazda CX-30 crossover. We hope this momentum will help lower our CO2 emissions level in 2020. Interest in the Skyactiv-X engine is much higher than we had expected.

**What will be Mazda's best-seller in Europe next year?**

Currently our best-seller is the CX-5, but based on the sales momentum we have seen since the launch of the CX-30, we believe it will become our best-selling model next year.

**Will the traditional small car segment, where you offer the Mazda2, continue to be Europe's largest and most competitive in the midterm or will it be surpassed by small crossovers?**

In every segment we see a shift from hatchbacks and sedans to crossovers. The small hatchback or sedan continues to play the role of entry car in the life of most customers in Europe. This is true in Japan and other Asian markets. Therefore, from a global perspective we definitely need to remain in the small car segment.

**Will the MX-30 only be sold in Europe or will Mazda also offer the car in Japan, the U.S. and China?**

Given the importance of minimizing CO2

penalties, we will start selling it in Europe first. As far as other countries are concerned, we are still in a study phase.

**Who will supply the battery packs to the MX-30?**

Panasonic.

**Mazda is also working with Toyota on electrification technologies. Will the future battery-electric vehicles from Mazda be the fruits of the work you are doing with Toyota?**

As you know, the MX-30 has been entirely developed by Mazda. But we have established the so called EV-CAS (EV C.A. Spirit Corporation), a 50-50 joint venture with Toyota. This joint venture is doing research to develop the most efficient electric vehicle platform. In the future, many companies will be able to derive their electric vehicles from this platform. Mazda is contributing to the joint development with its model-based engineering and model-based design research processes. We may leverage the jointly developed platform design in the future, but at the moment nothing has been decided.

**When can we expect the next electric vehicle from Mazda?**

At this moment nothing has been decided. Considering the stringent CO2 regulations coming into force in 2025, we are studying many opportunities. **ANE**

# Hooked on hybrids

Mitsubishi Europe chief promises to strengthen lineup of low-emissions SUVs

Mitsubishi may be a small player in Europe, but in a declining market it increased sales 7 percent to 134,886 vehicles in the first nine months of 2019. The strongest growth is coming from the Outlander SUV, which is Europe's best-selling plug-in hybrid. More plug-in hybrids are coming next year, promises Mitsubishi Europe CEO Bernard Loire, who joined last year from alliance partner Nissan. He spoke with *Automotive News Europe* Correspondent Nick Gibbs about the brand's future.

## Mitsubishi Europe posted strong numbers in the first nine months. What is driving the increase?

What made the difference is that Outlander plug-in hybrid sales have grown significantly. Through September we sold 27,000 units of the plug-in hybrid in Europe, compared with 15,000 last year. If we keep this pace, we will reach 36,000 for the calendar year, up from 20,000 last year.

## Mitsubishi is doing well in Europe but sales in the UK, your second-largest market in the region, were down 14 percent if you remove the L200 pickup. Why?

Two key things have happened in the UK, the discontinuation of the plug-in hybrid incentive and Brexit has caused a bit of economic uncertainty. This puts a lot of pressure on the total industry volume and especially on the sales-channel mix. But we were anticipating UK sales would fall, and that decrease is offset by gains in other markets. For example, we are selling about 700 to 800 plug-in hybrids

a month in Germany, up from about 200 to 300 a month last year.

## Is the increase in Germany because of incentives?

Germany put in place an incentive for company-car users. It's not as big as in the UK, but it clearly helped. However, most of our sales are done with private customers. Mitsubishi in Germany is one of the best

performers in the private sector. [Mitsubishi says 69 percent of its German sales were to private customers in the first nine months compared with an average of 35 percent for overall market.] We ranked No. 1 in private-sales mix in September. Choosing a diesel or gasoline SUV is becoming a dilemma for some customers, therefore, some pick a very low-emissions SUV like the Outlander plug-in hybrid instead.



## Meet the Europe boss

- **NAME:** Bernard Loire
- **TITLE:** Mitsubishi Europe President and CEO
- **AGE:** 53
- **MAIN CHALLENGE:** Balancing demand for plug-in hybrids as incentives change.

France is a bit like Germany in that demand for the plug-in hybrid has completely exploded.

**In the first nine months, Mitsubishi's sales were up 51 percent in Italy and 40 percent in France. What is driving sales in those markets?**

We have to admit that we started from a low base. France is a bit like Germany in that demand for the plug-in hybrid has completely exploded. We have sold 4,000 units compared with 1,000 units during the same time period 12 to 15 months ago. The increase in Italy is driven by demand for the Space Star [minicar].

**One thing worrying government officials throughout Europe is that many plug-in hybrids aren't being plugged in, so they seldom run on electric power. Do you have evidence they are?**

We have internal studies, and it's clear almost all the cars are plugged in. Our owners charge at least once every three days.

**How do you know that?**

We conducted a survey.

**When will Mitsubishi add another plug-in hybrid and what is your long-term goal for electrification?**

In the second half of next year we will have a replacement of the current Outlander. It will be on an alliance platform. There also will be another smaller SUV coming at the same time.

**Last year your diesel mix was less than 20 percent excluding the L200 pickup. What is it now?**

It's almost nothing – excluding the pickup. We only have a diesel version of the Eclipse Cross [compact SUV] available in a few markets. The diesel mix of that is about 5 percent, and Eclipse Cross is about 20 percent of our overall sales, so it's 5 percent of 20 percent. It's very marginal, so we have decided to go gasoline and electrified only in the future. We stopped the diesel ASX [compact

SUV] and launched a new 2.0-liter gasoline version with 4wd and an automatic gearbox.

**When will you get rid of the Eclipse Cross diesel?**

That will probably go by the end of 2020.

**The Space Star/Mirage is a strong seller, but it has been around since 2012. Will that continue or will tougher emissions requirements force you to discontinue it?**

The emissions are tough, but we are competitive in this segment and sales of the car are rising. We will continue making the car. We will even have a product update in the near future.

**Do you still sell the i-MiEV electric minicar in Europe?**

Only in select countries such as Norway and Switzerland. We said we would have a new electric car. We have not disclosed when, but the direction we are going is plug-in hybrid, hybrid and EV.

**Will Mitsubishi meet the tougher EU CO2 emissions target that starts to take effect next year?**

Since 45 percent of our mix is under 95 grams of CO2 per kilometer we are OK for 2020. We benefit from the plug-in hybrid being at 46g/km.

**Does rising backlash against SUVs in Europe worry you?**

SUVs are part of our DNA as 77 percent of our sales in the nine months to September, including L200 pickup, were SUVs. We have to be conscious about

the perception of SUVs but the customer demand is there, especially for low-emissions SUVs. The Outlander plug-in hybrid is proving that.

**Is there anything to report on future synergies Mitsubishi will have as part of the Renault-Nissan alliance?**

The synergies are behind the scenes. This could include purchasing and component sharing but it's not things that are visible for the consumer.

**Your cars are either built in Japan or in Thailand. Does that expose you to geo-political headwinds?**

There are some tensions globally. The trade war between China and the U.S. is creating some currency volatility and we are facing slowdowns in markets outside of Europe. The international environment today is a bit more bumpy than a year ago and we are monitoring the exchange rate. At the moment the yen and even the Thai baht have been stronger than the euro. That is something we are looking at very carefully.

**Does that affect your profits?**

It does. This is a global issue. Exposure to currency has a direct impact on profits and it's up to us to react. We have to live with this. It was a bit adverse during the first part of the fiscal year.

**Do you react by changing prices?**

We try to think about consumers first. We believe we can manage this without applying the forex changes to our retail price. **ANE**



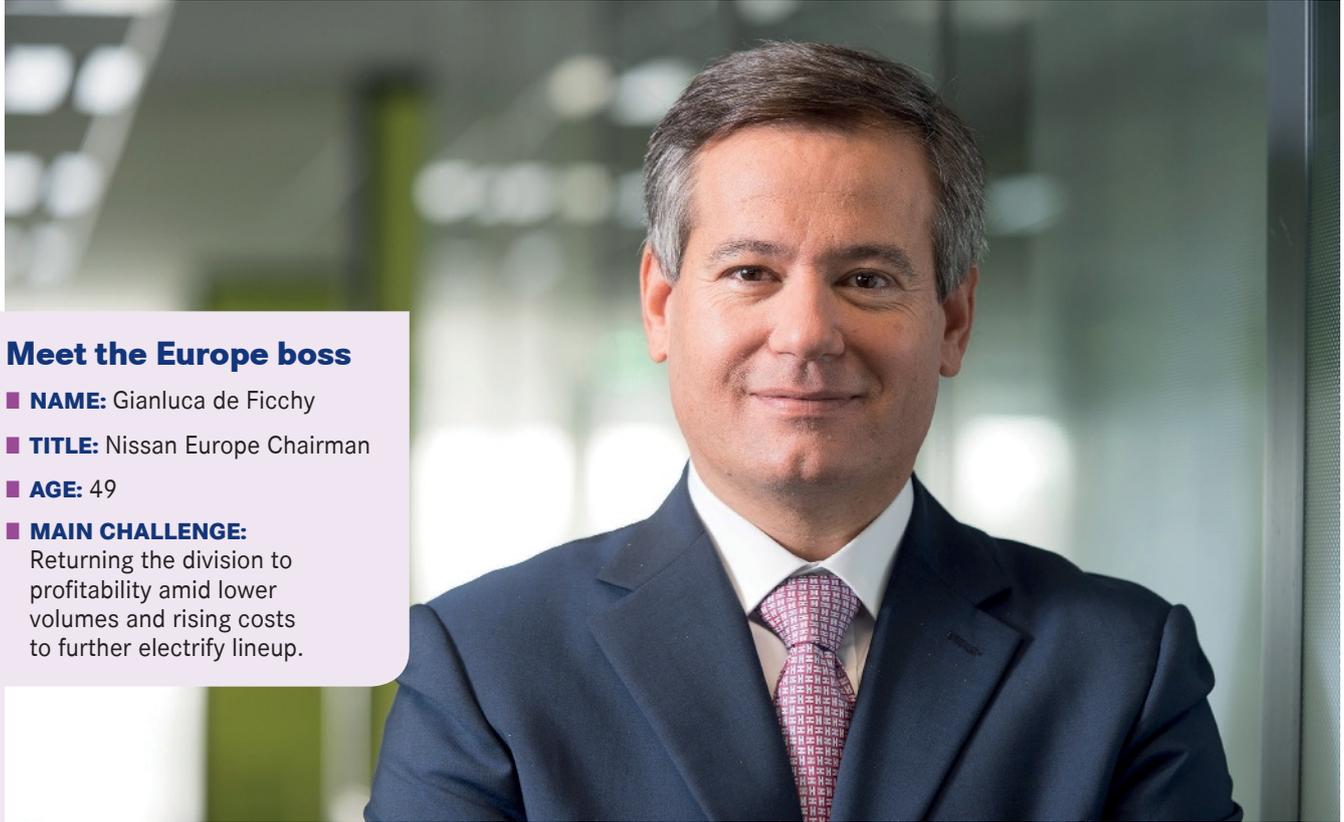
**Mitsubishi is on pace to sell 36,000 Outlander plug-in hybrids in Europe this year, up from 20,000 in 2018.**

# Value preservation

Nissan Europe boss suffers sales slide to prepare for profitable future

## Meet the Europe boss

- **NAME:** Gianluca de Ficchy
- **TITLE:** Nissan Europe Chairman
- **AGE:** 49
- **MAIN CHALLENGE:** Returning the division to profitability amid lower volumes and rising costs to further electrify lineup.



Since 2017, Nissan Europe's self-registrations have decreased by about 100,000 units.



Nissan's sales in Europe fell by over a quarter in the first nine months as the company suffered headwinds ranging from an aging model lineup, difficulties adapting to WLTP regulations and management turmoil related to the departure of its scandal-hit leaders Carlos Ghosn and Hiroto Saikawa. The sales decline has happened under the watch of Nissan Europe Chairman Gianluca de Ficchy, who was appointed to the role in April 2018. But, as he told *Automotive News Europe* Correspondent Nick Gibbs, the drop is a calculated move to cut unprofitable channels and get leaner ahead of a big push into electrification.

### Why have your vehicle sales fallen so sharply and what are you doing to stop the decline?

We have been undergoing a significant transition for the last one-and-a-half to two years. First, there have been many changes in the market with the new [WLTP emissions] regulations coming in. At the same time, we really wanted to focus on the most profitable channels and try to create a healthier business and a really good brand position for the future. Most automakers have been continuously pushing into channels such as rentals or fleets. Since 2017, Nissan Europe's self-registrations have decreased by about 100,000 units. I think the

value of the brand is something we have to preserve for the future.

### Despite the move to more profitable sales channels Nissan Europe still lost money in the first half. Why?

Yes, we are losing money, and we probably would not lose as much money if we weren't doing what we are doing. During a transition phase you reduce your volumes, resulting in a lack of synchronization between your revenue stream and your costs. We expected this.

### How are you reducing costs?

We are working to optimize the structure to fit the volume levels we will have in the future, not the current levels. We are doing this because we have an aging lineup.

### What is your time frame to renew your product range?

The lineup will be completely renewed in

the next year and a half. We are launching the new Juke now, then we will add the new Qashqai and X-Trail. Plus, the new electric crossover, previewed by the Ariya concept.

### How will the new models help your price structure?

The combination of our aging lineup and our move into more profitable channels meant we could not just focus on volume because it would create a significant discrepancy in the price position of the vehicles. We wanted to avoid this. All the new vehicles will have a reasonable price.

### What are the restructuring actions?

To try to be as lean as possible, we have restructured the Barcelona plant, affecting about 600 to 700 people, due to the reduced volumes. This process, which is underway now and was approved by the unions, includes voluntary redundancy schemes. We also cut the third shift at our Sunderland plant in the UK due to the contractions in volumes.

### Were there job losses at Sunderland?

Only about 100 to 200 people.

### This summer Nissan talked about worldwide job cuts of around 12,000 and a 10 percent reduction in capacity utilization. Are those 700 to 900 jobs the extent of the European losses?

We do not expect additional reductions.

### What is the future for Barcelona. Does it need another model now?

The strategy is to continue production of pickups [the Nissan Navara, Renault Alaskan and Mercedes X class are made there] and the e-NV200 electric van. We stopped production of the NV200 with the conventional engine but estimate the number of e-NV200s will rise significantly. Of course, as for any other plants, we are discussing locations for new vehicles.

### One report said you were looking to sell your European plants. Is that true?

We do not normally comment on speculation. We plan to continue producing the e-NV200 and the pickups in Barcelona. I do not see an opportunity to sell the plant at the moment.

### You previously said a hard Brexit would make your business case for Sunderland unviable. Is that still the case?



Nissan Europe expects a big boost from the arrival of the second-generation Juke.

If it means the implementation of WTO tariffs of 10 percent, the overall business equation is not sustainable for us because 70 percent of our vehicles are exported to Europe.

### Are you reconsidering whether to build the next Qashqai there?

Our assumption is that we will produce the Qashqai at Sunderland. If you want to make any change of that magnitude it takes time because it takes years to create the ecosystem needed to support the production of a new vehicle. We have been preparing the launch of Qashqai for a while.

### Where else could you produce it?

The best solution is to produce the car in the UK because Sunderland is one of the most efficient plants we have. It's also an exceptional factory in terms of quality. But I'm warning everyone that if there is a hard Brexit and the UK government and EU authorities do not agree to stop tariffs, that would make the overall equation unsustainable for us in the long run.

### What is Brexit's toll on Sunderland?

The high degree of uncertainty we have been living with is creating a problem because any decisions on where to locate a new vehicle for production are on hold.

### What is your diesel mix now and when do you foresee diesel sales ending?

We have seen a significant drop in diesel to

about 30 percent of sales. We are adapting ourselves to follow that trend, but a more relevant question is: What's the future of conventional engines? We underestimate the weight of the future regulation. One part of that is related to automakers hitting the fleet target of 95 grams per kilometer starting next year. We know how to be within the targets. But the EU says we have to go to 75g/km by the end of 2024. How many conventional engines can reach that threshold? None of them. So how is the business going to be sustainable if we do not adapt ourselves to that trend? The second factor is the impact of local taxes that customers will have to pay based on the level of CO2 their cars produce. For example, in the Netherlands the tax bill can be as high as 20,000 euros per car.

### What percentage of your sales will be electrified models by 2022?

In our most recent midterm plan we assumed the overall electrified market will be about 20 percent to 24 percent by 2022, but we want 42 percent in Europe.

### Why do you want to be that far above the overall market?

We want to position ourselves on the higher end because we are convinced that if you want a sustainable business model in Europe that meets both corporate and customer regulations, you need to be far above that average. We want everybody to know that Nissan is about electrification. **ANE**

# Running to glory

Opel boss on how he will make brand sustainably profitable

**M**ichael Lohscheller has accomplished in 14 months what no predecessor achieved in decades. He returned Opel to the black. The passionate marathon runner, who recently instituted a new monthly program called “Run With The Boss,” didn’t just turn around the perennial money-loser but brought it to record results that rival those of Europe’s top-performing volume automakers. Lohscheller spoke with *Automotive News Europe* Correspondent Christiana Hetzner.

**PSA CEO Tavares has said profitability brings freedom. Opel appears to be on track to reach its profit margin target of 6 percent in 2019, seven years ahead of schedule. What will you buy with your freedom?**

In the past, Opel had many different restructuring programs with many different names led by many different management teams and yet the goal of profitability was never reached. We agreed on concrete targets with the PACE plan including a long-term target of a 6 percent operating margin by 2026. The fact that we are on track to deliver our commitment on profitability – and we are pursuing our effort to do even better – is extremely important for our credibility externally but even more importantly internally. That’s why I’m representing Opel on PSA Group’s four-person managing board.

**How big a deal is that to you and your team especially considering that the head of the group’s flagship brand, Peugeot, is not on the managing board?**

PSA has a great set of strong brands, however, this is indeed the first time that Opel has a voice on the company’s top decision-making body. The move has been very well-received by our workforce. You wouldn’t believe how many employees have approached me to say how happy they are that Opel finally has a seat at this table.

**What have you been able to accomplish with that board seat that you could not before?**

On an operational level everyone on the 19-member Global Executive Committee can campaign for their ideas, so it’s more of a symbolic value by emphasizing



## Meet the boss

- **NAME:** Michael Lohscheller
- **TITLE:** Opel CEO
- **AGE:** 51
- **MAIN CHALLENGE:** Maintaining profitability while lowering CO2 emissions.

**The era of the very large SUV is over. They are impractical and opposition to them is rising within society.**

that Opel plays an important role in the group. PSA is all about performance. If you don't deliver, then it doesn't matter what board or committee you are on.

#### **What motivated the team to achieve the target seven years early?**

When you have a new owner after two decades of never-ending restructuring plans, people know change is not going to be incremental any longer. We used the opportunity to question everything about our operations.

#### **Such as?**

We reinvented Opel. We started with symbolic topics. Whether it was cookies at meetings or the personal chauffeur for the CEO, cost cuts were made across the board. When we temporarily cut working hours at our Rüsselsheim factory in January 2018, we also reduced hours here at headquarters. That never happened before. We reduced the number of senior executives by almost one-third to accelerate the organization. These moves did not go unnoticed. People saw a whole new company. This had a profound effect internally and helped the team execute much more quickly and easily. We couldn't have imagined that we would slash fixed costs by 28 percent last year. The biggest levers, however, were the reduced complexity combined with improved pricing power and revenue per car. They really made the turnaround possible.

#### **Can you sustain the 6 percent margin when automakers are indicating we are at peak profitability as CO2 compliance starts to hit the bottom line?**

First of all, we are very ambitious and will not slow down our efforts to continually improve our results. That being said, starting next year our results will be consolidated with the rest of the PSA brands.

#### **Why?**

The other brands, Peugeot, Citroen and DS

Automobiles, don't break out their results or issue earnings guidance, which is sensible because we are all one integrated group. You see the effects of the successful integration everywhere in the company. For example, the entire German sales team from our sister brands moved to Rüsselsheim from Cologne in November.

#### **Tavares said Rüsselsheim's manufacturing costs are 60 percent higher than at some of PSA's other plants even after the restructuring. Why is that?**

We have made substantial progress narrowing the cost gap with PCD (Peugeot, Citroen and DS) plants, but it is correct that we in Germany are the farthest behind and Rüsselsheim in particular. While we have high wage and energy costs here, that is not a valid excuse. There is no reason why Rüsselsheim cannot reach the benchmark. It's up to us to take out the complexity that is driving the costs. We will see tremendous improvements with the next generation Astra, built on a PSA platform as of 2021. Also, our flagship, the Insignia, which we currently build in Rüsselsheim, is the vehicle with the most options in our portfolio, but you can expect that will change in the next generation.

#### **Could you elaborate?**

Our model range was far too complex in the past. We want to focus on a certain number of models but get them right and then considerably reduce complexity within each model line. We are absolutely focused on managing the two issues driving our business: CO2 compliance and segment profitability.

#### **What will the next Insignia look like given midsize sedans are out of fashion? Could it be an SUV larger than**

#### **the Grandland X, something closer to 4.8 meters in length?**

The era of the very large SUV is over. The market doesn't have sufficient volume. They are impractical and opposition to them is rising within society. We are well positioned with our existing range of compact SUVs. What I can say about a next-generation Insignia is that simply assuming the body styles will continue exactly as they are now in the future is wrong.

#### **So you would rather have two small crossovers competing against each other in the same segment than expand into a new one?**

The successor to the Mokka X will be a standard bearer for our brand. It will have a much greater focus on lifestyle and will carry many elements of the very stylish GT X Experimental concept. That will help differentiate it more from the Crossland X going forward.

#### **What would the PSA-FCA merger mean for Opel?**

There's a chance for us to have greater economies of scale, but at the end of the day nothing changes in terms of our positioning in the market. Before and after, Opel and Vauxhall will still be the only German and British brands in the group.

#### **So Vauxhall stays?**

For sure. There is no other British volume brand around. We believe this is an opportunity, especially in the time of Brexit. We have seen a clear increase in volumes of our Vivaro, which is built in the UK, after we advertised it was, Made in Britain for Britain. Focusing on its unique Britishness is paying off. **ANE**



**Opel's flagship, the Insignia, offers the most options of any car in the brand's portfolio. Lohscheller aims to cut back on that complexity to cut costs.**

# Range expansion

Peugeot chief leads push to electrify, diversity brand's lineup

Peugeot, PSA Group's best-selling brand, is making a rapid transition toward electrification. Leading the way are the full-electric versions of the next generation of the 208 small hatchback and 2008 subcompact SUV, and plug-in hybrid versions of the 3008 compact SUV and 508 midsize fastback sedan. At the same time, Peugeot is broadening its lineup by adding a pickup truck and performance models. CEO Jean-Philippe Imparato spoke with *Automotive News Europe* Associate Publisher and Editor Luca Ciferri and Correspondent Peter Sigal about how the brand is changing.

**Peugeot showed the 508 Sport Engineered concept, a high-performance four-wheel-drive plug-in hybrid, at the Geneva auto show this year. What is the future of high-performance vehicles at Peugeot?**

The 508 Sport Engineered will be released next year, with orders opening in March, and the first one will be delivered in October 2020. There will be a sedan and a station wagon, as part of a line of high-performance vehicles. I think it will be a success, because the total cost of ownership (TCO) of this car – with 360 hp, four-wheel drive and emissions of less than 50 grams of CO2 per kilometer – will be only 300 euros a month more than the standard 508 plug-in hybrid. It will be the first Peugeot to have more than 300 hp. For us it's a way to send two messages: That we are ready technologically for the future, and also that we don't want the future to be boring.

**Will there still be a GTi range?**

No, this is our top level. This car is something I have been targeting for years, and I know that Jean-Marc Finot (the head of PSA Motorsport, which helped develop the 508 Sport Engineered) has been looking forward to it. That is because if you want to build a future in motor sports you have two constraints. First, it must be electrified, because no one will understand why, if the whole automobile market is switching to electric, that racing series aren't. And second, it must not be dependent on sponsors – it needs to generate its own money. Developing and selling this type of car will create profits



## Meet the boss

- **NAME:** Jean-Philippe Imparato
- **TITLE:** Peugeot brand CEO
- **AGE:** 53
- **MAIN CHALLENGE:** Electrifying Peugeot's lineup to help meet tougher EU emissions targets.



Something is clearly changing – lots of customers are now asking for electric.



that will help support the racing team, like AMG does for Daimler, for example.

**Peugeot's E-Legend electric, autonomous coupe concept inspired by the 504 Coupe from the 1970s was also very well received. Could you build that?**

It was a great message for us, but to go into series production would cost us

about 250 million euros. We decided that we needed to deal with the shift to electrification first. After that we will see if it's worth spending the money. But all the elements are in place to say, "yes."

**You have a very tightly focused lineup now, with SUVs and conventional variants in the small, compact and**

### midsize segments. Will you be expanding it?

In our global vision, in Europe we are focusing on electrifying the brand. But we need to increase our sales outside of Europe to better balance our regional mix. One thing we are doing is focusing on our light-commercial vehicle lineup, including our coming 1-ton pickup.

### The pickup is being developed with your joint venture partner in China, Dongfeng. What is the status of that project?

We will launch the pickup next year. I don't know what kind of volumes it will generate. I'm very conservative about that, therefore, we aren't saying that we will take 5 percent of the 6 million worldwide pickup market. We are focusing on matching our competitors' features and reliability. The truck must be unstoppable. We won't launch it, however, until the global ecosystem, such as spare parts, is ready, because it must be able to be maintained anywhere in the world, for example in Africa.

### What is your regional revenue mix?

In 2018, before we lost Iran [because of sanctions], we were at 50-50 Europe and rest of the world. Turkey and Argentina were down last year so we are now at 60-40 or 65-35. To protect my country mix, I need to be stronger in the maximum number of countries.

### How important is North America in building up revenue outside of Europe?

We don't have any profit-loss effect at this point. We are preparing the project [targeting sales there by 2026]. Next year we can be more precise on what type of product we could have.

### Will the next 308 be on PSA's EMP2 platform for compact and midsize cars, and will it have an electric or plug-in hybrid option?

Yes, it will be on the EMP2 platform. It will be a plug-in hybrid first, but could perhaps later have a full-electric drivetrain. Our compact and midsize cars will have plug-in hybrid drivetrains because it's a smoother way to switch from internal combustion to electric.

### What is your diesel mix today?

It was 43 percent last year and we are at 41 percent now. Until Euro 7 emissions

regulations come in, probably in 2024, we will let our customers choose their powertrain, whether it be gasoline, diesel or electric. After Euro 7, I think the diesel will die off, but if demand is still there, we will be there.

### The new 208, especially the electric version, is a very important car for Peugeot. What kind of order volume have you seen?

We launched the car in October in France. We had 12,000 orders in just one country; 52 percent were in the upper two trim levels [for models with a traditional powertrain], and 12 percent were for the electric version. I'm targeting around 10 percent electric – and those aren't pre-orders. They are real orders. I don't know what the global mix will be, but if we are around 4 percent to 5 percent electric in a country such as Italy, it will really help our emissions average in Europe. Something is clearly changing – lots of customers are now asking for electric.

### How do electric vehicles fit into your revenue mix?

First, the residual value of an e-208 is 2,500 euros more than an internal combustion one. That's because the energy mix of the market will be changing in the next several years.

### What is the cost difference for buyers?

In terms of total cost of ownership, in France it's 326 euros a month for both

electric and internal combustion [the 100 hp gasoline version with an automatic transmission], because electricity is less expensive than fuel, and the maintenance costs are lower. We can make money on electric cars if the level of incentives for electric is consistent with the difference between electric and internal combustion. Right now in Europe, there are 6,000-euro [purchase] incentives in France, Germany and the Netherlands, for example. If that changes I will have to pull other levers, but I will never sell a car that loses money.

### Peugeot is also introducing an electric version of the new 208 small SUV. Did you consider a plug-in hybrid instead?

We considered that, but the usage of the 208 and 2008 are very similar. We have found that it's 70 percent urban driving.

### Peugeot is also rolling out plug-in hybrid versions of the 3008 compact SUV and the 508 midsize car early next year. What are your targets?

I'm targeting 15 percent to 20 percent of total orders, based on a similar TCO between the plug-in hybrid and a 180-hp diesel with an automatic transmission. Those two versions will compete in the fleet market. Fleet managers are now building their budgets for next year. We are working with them, and we will see the fleet profile at the beginning of 2020, but I think it's credible to expect this level of mix. **ANE**



Imparato said that the Peugeot 508 Sport Engineered sends the message that “we don't want the future to be boring.”

# Merger maestro

Tavares shares views on epic bid to combine PSA and Fiat Chrysler



## Meet the boss

- **NAME:** Carlos Tavares
- **TITLE:** PSA Group CEO
- **AGE:** 61
- **MAIN CHALLENGE:** Successfully merging PSA and Fiat Chrysler.



**I don't care about the win for the brand, for the region or for the function. I want PSA to win as a whole.**



Many in the automotive industry are talking about the need to consolidate to overcome the challenges of emissions regulations and autonomous cars, but Carlos Tavares is doing something about it. In 2017, PSA acquired Opel/Vauxhall from General Motors and within 18 months the money-losing German/British brands were recording 5 percent operating margins. This year, Tavares is dreaming bigger, hoping to engineer a merger with Fiat Chrysler Automobiles that would create the world's fourth-largest car company. He spoke with *Automotive News Europe* Associate Publisher and Editor Luca Ciferri and Correspondent Peter Sigal about the road ahead.

### What is the rationale for a potential PSA-FCA merger?

The two companies are very complementary on technology and very complementary on geography. They have the confidence that comes from the fact that they have turned themselves around, and the maturity to understand that it's better to face the challenges ahead together rather than alone. All this is the foundation for synergies that could generate value for shareholders and stakeholders.

**In the proposed merger, you would be CEO for five years and the 11th board member, with five each from PSA and FCA. How would you use that power?**

The CEO is just a tool to make things happen, and the toolbox is very, very big. I want to be very humble. I'm privileged to have the opportunity to bring this deal to a conclusion with all the teams involved. I want to underline that Mike [Manley, FCA CEO] and I have a longtime relationship and mutual respect and trust for what we hope to build together. The [overall] CEO would be there to make sure the new company is moving forward in terms of technology investment, profitability, work-life balance and everything. Success for all of us would be that in a few years nobody remembers who appointed the board members.

**The chairman of the new company would come from FCA, and the vice chairman would come from PSA. Is the arrangement as fair as it could be?**

The top executives at each company should be at ease. These are two great companies based on the public numbers

published by both. Neither is currently in crisis. So, full respect to the current top executives of the two companies – *chapeau bas* (hats off), as we say in French. [PSA-FCA would be] such a big entity, with such a high level of things to be achieved, that we would need all of them. The second thing is that the only rule would be meritocracy: In the interests of everybody in the company, in each key position you should pick the best possible executive to deliver results for everybody to enjoy.

### Do you want to become a bigger automaker or become a mobility provider?

A bigger carmaker would be very helpful, because if you don't become larger to dilute your R&D costs and have a volume scale effect on the purchasing of components such as batteries you could be in trouble. It's especially helpful with electrification, because you will have leverage to buy kilowatt hours at the most competitive price. Those two factors are real. That is where it helps. And specifically, for people working in regions where there are going to be significant breakthroughs on CO2 objectives, scale would be a real benefit.

### PSA does not have a designated chief operating officer. How do you manage decision-making?

I am a strong believer in a matrix organization. At PSA we operate within three axes: the regions, the brands and the functions. Even within this three-dimensional operation, we have business units that go through and try to boost the system. For example, we could have the CEO of Peugeot reporting on volumes and profit, then the European head report on total profits, volumes, market share, quality and customer satisfaction for all brands in the region. On the functional side, we would look at whether we are ready to launch a new car, are manufacturing costs being reduced? So we are constantly reviewing the business in three dimensions.

### How is this beneficial?

It's very important to let the matrix breathe. People are human. They have different characters, and they express them in a personal way. If you "lock" the matrix, it will break because you can't force people to all act in the same way. In the end, I don't care about the win for the brand, for the region or for the function. I want PSA to win as a whole.



Tavares says PSA feels it has an ethical responsibility to reduce CO2. To do so it will offer models such as the full-electric Peugeot e-208.

### You are a big believer in agility. When your company grows, how do you maintain its maneuverability?

Adding Opel/Vauxhall to Peugeot, Citroen and DS was a good learning experience. What I'm trying to do is find the spirit in what we want to achieve as an efficient team. People come to me with a paper with, say, 10 bullet points. I will listen to what they are, then say, "OK, what is the spirit of what we want to do?" If people understand that then they won't ask you every day what they should or should not do. They don't have to ask me for validation. Therefore, you will have more time because people will have more autonomy. It is rewarding and they can unleash their potential in a way that is much more fulfilling for them, and it gives me much more time.

### Are you making fewer decisions now?

Certainly. But there are still topics where people don't feel comfortable enough to take a strong position, so they can use their monthly one-on-one, one-hour meetings with me to ask for guidance.

### One area, however, in which both companies are weak is China. How would a merger with FCA help?

At least for PSA, I can recognize that we haven't achieved very much in China. But if we come together it could give us a lever to get things done there. The fact that we would be together would, perhaps, open other doors or different doors than the ones we could open alone.

### On Jan. 1 new EU CO2 regulations will start to take effect and fleet emissions will have to drop sharply to 95 grams per kilometer. How will PSA flip that switch?

We have a very precise process. I can't say a lot about it because it's highly competitive, but it involves our production, our order book, and making our dealers actors in what we are doing, not just followers. For us, it's an ethical matter [to meet CO2 targets], not just a financial matter. Our employees' children might ask them someday, "What did you do to fix the global warming issue?" So, they want to say that despite working at a car company, they are contributing – and working really hard – to address global warming.

### Meeting emissions targets means electrification. Do you have any battery supply concerns, and should Europe have more battery factories?

We have secured enough battery supply for the next three years, but in the longer term the question will be there. That is why we support the idea of a European battery champion project. We understand that strategically, on a long-term basis, we don't want to be dependent on the Asian suppliers, despite the fact that we have excellent relations with them. But such a project cannot succeed if we don't get the appropriate support as a strategic investment from the EU. **ANE**

# Paying the price

Record-setting Seat CEO fights to boost profit while investing in EVs



## Meet the boss

- **NAME:** Luca de Meo
- **TITLE:** Seat President
- **AGE:** 52
- **MAIN CHALLENGE:** Remaining VW Group's most affordable brand despite added costs because of the move toward electrification.

Seat is on track to set another vehicle sales record this year, but the Spanish brand is struggling to remain the most affordable brand within the Volkswagen Group because of the high cost of electrifying its lineup. Seat President Luca de Meo discussed this and more with *Automotive News Europe* Associate Publisher and Editor Luca Ciferri.

### Will Seat top its sales record of 517,600 cars in 2019?

We have had double-digit growth this year [up 11.1 percent through October], and we expect to maintain this pace for the full year. The final quarter of 2018 was affected by the switch to the WLTP homologation rules. This year that won't be a factor.

### Do you expect a registration peak in November-December as models that emit higher levels of CO2 are off loaded before the EU's stricter fleet emissions limit takes effect in January?



**We increased our loyalty rate by 12 points to 40% in Europe's 5 largest markets.**



You won't see this at Seat because we won't do it. I prefer to end the year at its natural cruising speed and have a good start in 2020.

### Four years ago, you said that Seat's midterm target was to reach an operating margin of about 4.5 percent. Last year you also set a new record for revenue but despite doubling operating margin it stood at 2.2 percent. Why?

Like everyone in this industry, Seat is investing massively in electrification. That obviously dents short-term profitability. That being said, our contribution to the VW Group is more than what our operat-

ing margin shows because it also includes sharing platform costs, manufacturing investments and components purchasing.

### Has adding the Ateca and Tarraco SUVs helped Seat to increase brand loyalty as much as you had hoped?

They have. We increased our loyalty rate by 12 points to 40 percent in Europe's five largest markets.

### Seat has targeted annual sales of 40,000 Tarracos but through nine months you sold about 23,000. Why has it fallen short of the goal?

I am not totally happy with the sales re-

sults of the Tarraco. To address this we are fine-tuning its powertrain mix. This is happening because we have demand from the markets for front-wheel-drive versions with an automatic transmission, but we only had that transmission in pricier four-wheel-drive versions. Another factor for slow sales is that emissions levels are becoming an issue for midsize SUVs in markets such as France, the UK and the Netherlands. We will address this with a plug-in hybrid variant that arrives next year. Also, we have not yet launched the more expensive FR variant, which we expect could cover up to 30 percent of sales. Therefore, we have to be patient with the Tarraco.

**Last year, VW Group gave Seat responsibility to develop a sub-MEB architecture for full-electric vehicles. Could you update us on the progress?**

We are working on this at our technical center in Martorell (Spain) as well as in China with our joint-venture partner, Anhui Jianghuai Automobile Group (JAC). The current challenge is to see if – and to what degree – these two projects could converge. Right now, we are still at the technical-concept phase at both locations. We expect more clarity on how to proceed in about six months.

**Will this sub-MEB platform be used for EVs that are at or below 4 meters?**

That is the plan.

**Your first EV will be a variant of the Mii minicar. What are your expectations?**

Product wise, I have high expectations because for more than three years I have been driving an Mii modified by Seat to be full electric. It is the perfect car for urban mobility. Sales wise, it could account for between 5,000 and 10,000 units in 2020. The actual number that Seat will get will depend on production allocations decided by the group [the electric Mii will be produced alongside the VW e-up and Citigo EV].

**Is the by-brand EV mix neutral at VW Group because emissions are pooled?**

Correct. A volume of 5,000 to 10,000 EVs does not change a brand's average dramatically. This happens when you move from 10,000 to 70,000 EVs.

**Your second EV will be the el-Born compact, which will share its under-**

**pinings with the VW ID3. When will the el-Born go on sale?**

The plan is to be on the market by late 2020 and everything is proceeding well.

**What is the future for the Tavascan electric compact crossover concept unveiled by Cupra at this year's Frankfurt auto show?**

It is more than a design exercise to show what Cupra could do using the underpinnings of the forthcoming VW ID4. We really want to build the Tavascan and to make the production vehicle as close to the concept as possible.

**If the Tavascan gets approved, when could be on the market?**

Late 2022 to early 2023.

**PSA says that to be compliant with the EU's 2020-21 emissions targets it will need 7 percent of its overall sales to be either full-electric vehicles or plug-in hybrids. What is the percentage at Seat? Will this percentage rise as diesel sales decline?**

A 7 percent penetration of electrified model sales also applies to Seat. Our diesel share is a bit below the market, at 25 percent so far this year, but compressed natural gas models account for about 4 percent of our sales. That helps to lower our CO2 average.

**Cupra is growing with its Seat-derived portfolio. What is the future for the**

**brand once it adds its first Cupra-specific model, the Formentor crossover?**

With Cupra we started three years ago with 7,000 units. Last year we increased Cupra sales by 40 percent to 14,300 units – mainly due to demand for Cupra versions of the Leon. We were up by 80 percent to 20,600 through October thanks to the addition of the Cupra version of the Ateca. The plan is to reach 25,000 units this year. We will launch the Formentor by the end of 2020. It will be the true test bench for the Cupra brand's potential.

**What do you mean by test bench?**

When we conceived the Formentor, the plan was to debut it as a Cupra and later add a cheaper Seat variant to reach the volume planned for the project. We have now decided to scrutinize the potential of the Formentor as a Cupra-only model to see what we can reach in terms of volumes and margins.

**Do you expect the higher margins to offset the lower volume?**

This is exactly what we want to determine. Cupra variants now sell for 10,000 to 15,000 euros more than their equivalent Seat models. This has a massive effect on our margins. I am not going to disclose how much that effect is, but it makes me really happy and shows the great potential Cupra has as a stand-alone brand. **ANE**



De Meo would like to see Seat subbrand Cupra add the Tavascan to its lineup and to make the final version as close to the concept (shown) as possible.

# Steady improvement

Toyota Europe boss takes aim at tougher profitability target



## Meet the Europe boss

- **NAME:** Johan van Zyl
- **TITLE:** Toyota Europe President and CEO
- **AGE:** 61
- **MAIN CHALLENGE:** Adding plug-in hybrids and electric cars to Toyota Europe's successful hybrid mix without hurting margins.

More than half of Toyota's European sales are hybrids and their success is contributing to the automaker's sustained profitability in the region and putting it in a position to achieve the EU's tougher CO2 emissions reduction target that will come into force next year. Toyota will find it difficult to increase profits because the EU plans even tougher CO2 targets, which will push the company to add expensive full-electric vehicles and more plug-in hybrids in Europe. South African Johan van Zyl, who has led Toyota Europe since 2015, discussed this and more with *Automotive News Europe* Correspondent Nick Gibbs.

**Toyota Europe finished the first half of its financial year with a 4.2 percent profit margin. Where would you like to be?**

We always strive to be at around 8 percent, but Europe is a really tough market. I am quite satisfied with where we



**We will definitely stay in that segment [minicars].**



are at in our plan, which is about growing margin on a sustained basis. It's no use having one year at 8 percent and nothing the next year. I would like a steady increase in profitability. We will achieve sales and margin targets set in the 2015 five-year-plan one year early. That plan was ACE1000. The next phase is ACE2000, which goes to 2025.

**Does the new plan have an 8 percent margin target?**

I can't say what it's going to be, but it's not as high as that. If we achieve that it would be a miracle.

**Is this because of the cost of electrification?**

That is one thing. As our president,

Akio Toyoda, said: The industry is going through huge change.

**What is your capacity utilization in Europe?**

It's well above 90 percent, including Russia. We are running three shifts in Turkey and France and two shifts in Russia, the UK and the Czech Republic.

**In 2021 Toyota takes ownership of a joint-venture Czech Republic plant currently shared with PSA Group. The factory can build 300,000 cars annually. What will you do with it?**

I can't tell you now, but we will utilize the full capacity in future.

**You build the Aygo minicar there. Can you stay in that segment as CO2 tar-**

### gets get tougher?

We will definitely stay in that segment of the market. It's been a very good product for us. It brings young people to our brand. At some stage we will replace it [the Aygo].

### Will you need to electrify it?

We have to think about the future and ask: How will we ensure that we have an electrified version of an A-segment (minicar) or sub A-segment car that we will be able to utilize for cities?

### The Lexus UX is doing well and sits on your global TNGA platform. Could you also build the car in Europe?

I think it would be very difficult to localize. You would need to do a proper localization of componentry, not just assembly. Otherwise, you just transfer parts from one country to another. The volumes are not sufficient to justify it.

### What volume is needed to localize?

In my opinion, 100,000 units.

### When will Toyota sell more plug-in hybrids and EVs than traditional hybrids in Europe?

Even by 2030, our hybrids will still be a core technology and part of our core product mix. They will be enriched by plug-in hybrids and battery-electric cars. Fuel cell vehicles will also form part of the zero-emissions mix in future.

### Toyota was one of the first automakers to offer a plug-in hybrid with Prius, but that car hasn't gained much traction with buyers. Why?

From a style point of view, from a car point of view, the Prius plug-in will not get strong traction with European buyers. But we are looking at other plug-in hybrids, for example, some of our SUVs. Next year, we will launch some plug-in hybrids. [Toyota launched a plug-in hybrid RAV4 at the Los Angeles auto show in November.]

### With so many threats to achieving sustainable margins, what do automakers need to do to stay profitable in the future?

My personal view is that in a few years people are not going to buy cars they will just lease them. That doesn't necessarily mean sharing with somebody else.



Toyota Europe boss van Zyl believes a plug-in hybrid version of one of the automaker's SUVs will have more success than the Prius plug-in hybrid (shown).

It just means you get exclusive use of it, but you lease instead of buy.

### What are the consequences of making the shift to leasing?

To share in that profit stream you must be able to finance it. So, you will need a very strong balance sheet in the future to be able to cover this. That is the same with future mobility models such as car-sharing. Those cars are not sold. You need to finance those costs until you have recovered your money. The cash-to-cash cycle just gets longer and longer.

### The most recent Toyota annual report talked about reduced expenses. What reductions have you made?

In the ACE1000 plan that launched in 2015 we identified 11 areas we could change to create a much more sustainable business. It's not just cost cutting. Cost cutting is not a strategy. It's also about how we can improve our revenue stream and the value that we give our customers.

### Which of the changes that you made had the biggest impact?

First you need to look at the product itself, starting with the manufacturing side. How can we reduce in-house costs? How can we make efficient utilization of human resources. Outsourcing parts made a big contribution. We also looked

at all areas of marketing. How do you get a good return on marketing investment and keep growing the brand? That goal isn't to cut marketing expenses, but to make sure you spend where you get a good return.

### When it comes to Brexit, how big an issue are the rules of origin for Toyota. Will you be able to reach the percentage of local content needed to satisfy free trade agreements?

Rules of origin are very important. That is not just between the EU and the UK but between the members of the European customs union, such as Turkey. The UK will have to create the relationships with those countries so that we can still import parts tariff free and that those parts should qualify for rules of origin.

### Which is the percentage of locally supplied parts for the UK-built Corolla?

It is 30 percent.

### Toyota launched the new-generation Mirai fuel cell car at the Tokyo auto show. What is your European sales goal for the new car?

The infrastructure is not developed sufficiently enough for us to be able to sell thousands of them. We are, however, definitely going to sell many more than the first one [614 units]. Our idea is to sell 30,000 globally. **ANE**

# Methodical process

VW's Dahlheim focused on residuals, other challenges once EVs make inroads

Volkswagen's Christian Dahlheim is one of the few remaining executives to occupy an important VW Group role after CEO Herbert Diess flattened hierarchies and shifted responsibility from the group toward the brands. The former sales chief of VW's captive financial services division now is a kind of referee, coordinating the various go-to-market strategies to prevent cannibalization and boost profits. *Automotive News Europe* Correspondent Christiaan Hetzner spoke with Dahlheim about the VW Group's ambitious plans for electric vehicles.

**When prebooking began for ID3 in May it took only a day for the first 10,000 reservations to be collected. The second 10,000 required a month, and it was not until the car debuted in September that you hit your target of 30,000. Can we expect sales to tail off similarly after the first wave of demand is satisfied?**

You tend to see this sort of steep ramp-up in demand from early adopters, so the question is how long before a new technology finds broader mass-market acceptance. With the ID3, we have addressed two of the three main obstacles to electromobility: range and affordability, with infrastructure being the third obstacle. Don't forget, fleet customers need EVs to meet their own CO2 sustainability targets. We expect roughly half of the ID3s will be taken by fleet customers.

**These customers focus on total cost of ownership. Is this an argument that can**

**also work with your average car buyer?**

Private customers usually don't think in terms of what a kilometer costs them in cents nor whether it makes more sense to take the subways instead of the car based on prevailing fuel prices. That, however, will change with EVs when peo-

ple start to see how much less it costs to charge their vehicle at home versus filling up their tank at the fuel station – for example in countries such as France where electricity is cheaper.

**Even after an EV has exceeded its useful life, it still has a valuable asset:**



## Meet the sales boss

- **NAME:** Christian Dahlheim
- **TITLE:** Volkswagen Head of Group Sales
- **AGE:** 51
- **MAIN CHALLENGE:** Optimizing residual values across all brands, models and powertrains.

### the battery. What does that mean for residual values?

This is an important topic. With the share of leases expected to roughly double to more than 70 percent for battery-electric vehicles, a lot of these cars will end up being returned to us such that we have to sell them back into the market. Therefore, we calculate and budget necessary resources for the remarketing of EVs when they are sold. I believe we can achieve structurally higher residual values with an EV compared with a combustion car.

#### Why?

Roughly 4 percent of all VW Group worldwide sales next year will be EVs. When this first wave of off-lease cars are sold as used cars in three years, we expect battery-electric vehicles as a share of our overall business to have risen to roughly a tenth of volume. By extension, that means these vehicles will be entering a market where we foresee rising demand combined with a relatively low supply.

#### How does this impact VW's profitability?

The better we can control that process, the higher our residual values are, the lower the incentives are and the lower our overall distribution costs are. We believe optimizing the latter will deliver a significant contribution toward reaching our margin targets.

**When VW paid 3.3 billion euros eight years ago to acquire dealer group Porsche Holding Salzburg from the Porsche and Piech families, it was criticized as a sweetheart deal. Automakers should not be investing in a downstream operation with lower structural margins. Last year it sold nearly 1 million new and used cars, and this year it took over your Portuguese importer. What importance does it play?**

Beyond exclusively serving the Austrian and eastern European markets, they serve very important functions. They open up new markets for the group, such as Malaysia, Chile and Columbia, since their nimble structure and entrepreneurial savvy are particularly effective in small markets where the group is less well-suited. They also operate Porsche Informatik, which designed the Cross dealer management system that we use both internally as well as offer externally. We also benefit from learn-

“Every [VW Group] brand competes for the best [sales] results so it's my job to optimize profits across the entire group.”

ing how they manage their investments in dealerships, which they operate like an independent company, and we learn from their greater proximity to the customer. That being said, as the automaker we don't want to invest in bricks-and-mortar retail except in very select cases. We want our partners to invest their capital in our business because it is an attractive investment.

#### How would you describe your job compared with the sales chiefs at brands such as VW, Skoda and Audi?

Every brand competes for the best results, so it's my job to optimize profits across the entire group. For example, that could mean ensuring that a brand might not use excessive sales support to the detriment of others in a market where it is already strong. That's where I step in and correct the situation. I also handle the overarching issues, such as digitalization in retail. It makes no sense

for each brand to maintain its own IT system. We have synergies here in the tens of millions of euros we can leverage. But it's not just about costs. It's also a matter of operational speed.

**Last year the changeover from the New European Driving Cycle to the WLTP homologation test led to a major disruption in supply, costing the group 1 billion euros. You warned of a potential bottleneck this year as well due to WLTP. How big of a hit did you see?**

We have been much more successful in managing this, so I am confident our business won't be disrupted in a material way. Nearly 90 percent of all engine-transmission combinations are already available to customers. The financial headwinds are negligible this year.

**Next year we have the elections in the United States, and President Trump is likely to maintain pressure on the government in Beijing. Does that mean that China, your largest market, will not recover?**

It's true that the weakness is primarily a result of trade tensions with the U.S. and less related to other effects – such as the early introduction of China 6 emission standards in certain parts of the country, for example. We don't see a further decline, but we are forecasting a difficult 2020. In the midterm, however, we expect a recovery as the market is a structural growth story.

ANE



**VW believes it has addressed two of the key hurdles to the acceptance of EVs with the ID3: range and affordability.**

# Architect of change

VW Group strategist maps out automaker's engine-less future



## Meet the strategy boss

- **NAME:** Michael Jost
- **TITLE:** Head of VW Group Product Strategy; VW brand Chief Strategy Officer
- **AGE:** 57
- **MAIN CHALLENGE:** Decarbonizing the automaker's massive vehicle fleet.

Volkswagen Group's product strategy head, Michael Jost, is the architect and visionary behind the automaker's unprecedented rollout of electric vehicles. One of his biggest accomplishments was convincing German trade unionists in Emden, the longtime production home of the Passat midsize car, to agree to a risky transformation that will make it the third VW plant in Germany to switch entirely to making members of the brand's ID family. Jost spoke about this and more with *Automotive News Europe* Correspondent Christiaan Hetzner.

### Could you outline the VW Group's decarbonization strategy?

We want to reduce the global CO2 footprint of Volkswagen Group passenger cars to net zero by 2050. That means we need to produce the last combustion engine car around 2040, although there could still be some markets where we might have to sell a small number of cars with combustion engines, maybe in the lower single-digit percentage range.

“Our engineers are already working today on our final combustion engine architecture.”

If you count backward, that means the last combustion engine car has an SOP [start of production] around 2033. If you assume that is the second generation on a platform, then this platform has its SOP in or around 2026. Given the long development lead times, you can say that our engineers are already working today on our final combustion engine architecture.

**In the immediate future, VW Group needs to comply with new EU emissions reduction targets starting next year. Analyst PA Consulting estimates the group may have to pay up to 1.4 billion euros in fines for missing its mandatory target. Is this true?**

Next year and 2021 might be challenging since we will be ramping up our EV

models. We will work hard to be CO2 compliant and we are pretty sure we will reach all the goals set for the passenger cars. By 2022, the situation will be quite relaxed. We also don't foresee any problems in the subsequent years.

### What about when the CO2 target gets lowered again and Euro 7 rules come into effect?

By 2024 we will have the next wave of combustion engine and e-models, including an entry-level MEB car about the size of a VW T-Cross capable of going 200 km to 250 km on one charge and priced below 20,000 euros. At that point we think society's shift toward electromobility will largely be complete and we will not need to push these volumes.

### How will these MEB entry-level cars differ from today to reach that price?

One possible option could be the use of lithium iron phosphate battery cells instead of nickel manganese cobalt.

### Will EVs dilute your margins?

Naturally, we don't expect to immediately earn as much money with EVs as we do with a technology that we have perfected over decades. In the midterm, however, we expect that the enormous scale effects will help us achieve similar profitability with a battery-powered car as with an internal combustion engine car with some basic level of hybridization. That means we would have no further economic incentive to sell combustion cars over EVs. As far as the customer goes, we have already reached price parity with an ID3 that costs the same as an equivalent Golf diesel.

### Will VW artificially limit EV volumes to protect profitability during the transformation phase?

We do not see EVs as enablers that help us to continue selling our combustion cars. There was this notion that we only needed a certain number of electric cars to make our combustion engine car fleet compliant, because that's where we make our money. But that would mean we would block our own transformation and never achieve the necessary profitability with electromobility.

### If that is the case, why is VW only targeting 74 grams of CO2 per kilometer under WLTP by 2030? That doesn't sound as ambitious as your electrification rollout strategy.

That's our compliance target, but I can assure you that our business model is much more ambitious. We expect to amass CO2 credits that in today's terms would be worth billions of euros.

### Could you sell your CO2 credits as Tesla already does?

By that point, we expect we won't be the only ones moving in this direction, since there is no alternative to electromobility. I anticipate there won't be any material demand from our competitors for all these CO2 credits at that point. But if there was, we could offer them.

### VW brand EV boss Thomas Ulbrich expects there will be 33 MEB-based models across four of the group's

### brands by mid-2023. What else might we see in the future?

There is the ID Space Vizzion we just showed in Los Angeles last month. Besides that, we have decided what the next wave could look like, but we will wait and see how the current crop of EVs perform before making a decision in mid-2020 whether to release the funds for their development. So far, the ID3 already has 37,000 pre-bookings, and this excludes fleets. About 80 percent of those customers are new to the brand. We expect that once you drive an EV, you won't have any interest in going back to a combustion engine car.

### Is the interest you're seeing in your EVs topping expectations?

After showing the vehicles to our national sales companies, importers and dealers, every figure we are getting from our distribution channels is higher than the last. We already see demand exceeding capacity at Zwickau, so we will begin producing our compact SUV in Emden earlier than planned. Then the Emden factory will add production of our EV sedan, the ID Aero. As a result, however, the MEB entry model originally foreseen for Emden will have to move to another location. Since the vehicle is planned for around 2024, we have roughly a year before we have to determine what the optimal production location will be for that vehicle.

### How can you protect factory jobs when EVs are 30 percent easier to build than an internal combustion car?

We need to see the full picture. In the current value chain, we as an industry are not adding any value when it comes to fossil fuels save for the few cents to make the plastic bubble that serves as the fuel tank. There's not much room to innovate there. This changes with electric vehicles. We will produce battery cells ourselves in a joint venture with Northvolt. We can sign a contract to provide electricity via our Elli subsidiary, sell customers a wall-box for their home, or offer our mobile charging station for large events such as concerts. So while we may need fewer workers assembling cars on the line, our company can create whole new jobs here in Europe that never existed before because we simply imported all the energy that was needed to drive.

### So with all these EVs coming, do you still need diesels?

Yes, because they still make sense for large heavy vehicles and for people who drive long distances. Soon these diesels will be so clean that we will reach the limit of our ability to physically determine tailpipe output of nitrogen oxides. A next generation of portable emissions measurement systems (PEMs) would have to be developed before we could accurately gauge on-road NOx emissions at that point. **ANE**



The VW ID Space Vizzion wagon previews the design of what is likely to become the third EV under the ID family.

# 'Big step'

Volvo CEO outlines strategy to electrify lineup, become climate neutral

Volvo Cars CEO Hakan Samuelsson has set ambitious goals for the automaker. He wants half of Volvo's global sales to come from full-electric cars by 2025 and the other half should be hybrids. He also wants the company to become climate neutral by 2040 and to get there it must reduce its life cycle carbon footprint by 40 percent per car by the middle of the next decade. Samuelsson explained how Volvo aims to achieve these goals in an interview with *Automotive News Europe* Managing Editor Douglas A. Bolduc.

## When will EVs account for 10 percent of your global sales?

We should get close to that in about two years, assuming that the market will continue to grow.

## How will Volvo's margins be affected by your push to have full-electric cars account for half of your global sales by 2025?

In the short term, it will put pressure on our margins, but the electric cars will be profitable from day one. They probably will not provide the same level of per unit profit as our other models at first. That will take a bit longer. However, I definitely would not want to only have cars with combustion engines in my lineup five years from now. That would be really risky.

## Are your plug-in hybrids profitable?

Yes.

## How crucial are plug-in hybrids to helping Volvo meet the EU's tougher CO2 emissions target that starts to take effect in 2020?

They are absolutely crucial. Years ago we concluded that we needed to sell customers what they want, which is big, heavy SUVs. You cannot do this and reduce CO2 with a conventional powertrain. You would spend billions and maybe get a 2 percent savings. You have to electrify them.

## What percentage of your 2020 global sales will be plug-in hybrids?

Next year we want 20 percent of our sales to be plug-in hybrids. If people recharge them 50 percent of the time that corresponds to 10 percent of our cars es-

entially being full-electric cars already in 2020. It's a big step.

## Volvo still sells a lot of diesels in Europe. How will you convince customers to switch?

We need to show them we have an alternative that is as good as the diesel: the mild hybrid. If you have no intention of charging then a gasoline mild hybrid

should match the consumption of a diesel but without the NOx problems.

## How does Volvo anticipate the XC40 Recharge being used?

We did some customer research and I was surprised to learn that on average people are out with the cars 15 times a day. This includes picking up and dropping off kids at school and sports, grocery shopping



### Meet the boss

- **NAME:** Hakan Samuelsson
- **TITLE:** Volvo Cars President and CEO
- **AGE:** 68
- **MAIN CHALLENGE:** Making the company climate neutral by 2040.

and so on. There is a lot of driving going on in suburbia. So you probably need to offer more than 400 km of range otherwise you are on the short side. That range is easier to achieve with a smaller car.

### How important is it for Volvo to have battery cell production in Europe, the U.S. and China?

It is important because I think there will continue to be a big backlash against globalization. I think that is what is behind the current trade wars. We cannot expect that everything is produced in China and people in the U.S. and Europe will only work in the service industry. There need to be jobs in Europe and America for highly qualified workers such as building cars or other industrial products. I'm very glad we have a production footprint in all three regions [Europe, the U.S. and China]. The move toward electrification will help us do an even better job localizing production because we can reach a higher level of local content faster than we can with complicated combustion engines. Batteries will be localized from the start and so will electric motors.

### Volvo named China's CATL and South Korea's LG Chem as its electric-car battery suppliers but a Swedish firm, Northvolt, is getting started and already has a deal with Volkswagen Group. Will Volvo also do business with Northvolt?

They are a potential supplier, but in the first step we prefer to work with suppliers that can follow us globally and not just supply us in Europe. We went with LG Chem and CATL because they will build battery factories in Europe, the U.S. and Asia-Pacific.

### Is Volvo on track to sell a record 700,000 cars this year?

It's absolutely achievable this year and our ambition is to reach 800,000 next



Volvo wants plug-in hybrids such as the V60 Recharge to account for 20% of its global sales next year.

year. We are on the way because we have never had such a strong product offering.

### Why is Volvo determined to change the vehicle ownership model?

We have traditionally sold cars to customers but we believe they would like to have mobility in other ways. And it shouldn't be overly complicated. They want the freedom to move. To get this in the past I had to go to the dealership with a lot of money because I bought a car in cash. Then I could get a loan. Then I could lease it. What will be very attractive in the future is paying a flat subscription rate for the product. You still get the freedom to move because this car is at your disposal. After three years if you like it you keep it for three or four more years. If you want a bigger one you change to a bigger one. If you don't want it anymore you cancel the contract. That's what you get with Care by Volvo.

### Will this business ever be profitable?

There is absolutely no reason why this should not be as profitable as leasing. A capital investment of 50,000 euros is a lot more than committing 500 euros a month. This makes Care by Volvo especially attractive to younger people. Our Care by Volvo customers are 10 years younger than our typical customers. They normally have good jobs and a decent cash flow but they don't have 50,000 euros to invest in a car.

### Has sustainability risen to the same level of importance as safety at Volvo?

Yes. It is really important that we treat sustainability the same way we treat safety because that's a very concrete way of expressing what we're trying to

achieve. Safety is part of the mindset at Volvo. We don't need to have task forces or special projects around safety. People just know this is part of our business.

### What other parallels do you see between safety and sustainability?

A combination of market forces, technology and international regulations have really driven car safety to improve in the last 50 years. Why shouldn't that also work for sustainability?

### How will Volvo cover the cost of the investments needed to cut the company's carbon footprint?

One thing we will do is carve out our combustion engine business and put it together with Geely to fully focus on future powertrains. That's one way that we can afford the investments we are making to become climate neutral, by prioritizing. We have to keep the investment into R&D at around 5 percent or 6 percent of revenue.

### When will Volvo's U.S. plant start producing a battery-electric vehicle?

In 2022.

### The market for EVs in Europe and the U.S. still seems a bit sketchy. Do you have real confidence in EV sales?

Yes we do. This is part of the beauty of Volvo. We will not stop making conventional cars. We will have both in parallel. Of course, it would be a bigger bet if you would stop production of conventional cars and rely on a big uptake for EVs. On the other hand, every EV we will sell is an additional car to our overall volume. We are quite confident that EVs will contribute to our growth.

ANE



The move toward electrification will help us do an even better job localizing production.





# Making Mobility Smart

Automotive Transformation is well underway, as advancing technologies, economic factors and lifestyle trends foster a new era of mobility.

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