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Weekly Newsletter

DVN
Lighting & ADAS

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Editorial

Faurecia CEO Patrick Koller: A Fruitful Interview

I first thank Patrick Koller who graciously granted an interview with DVN, sharing his thoughts on automotive interior and lighting trends, and describing the product synergies and the significance of FORVIA being a reference automotive supplier.
He defines his strategy for mergers and acquisitions, designed to extend electronic capabilities quickly, and HELLA was one of those M&A targets; their electronics expertise and capacity are helping Faurecia to reach critical mass in automotive electronics.
Don't miss this interview below !

This interview starts the interviews of CEOs we will publish from September. We are working to succeed interviews of CEOs of European Valeo Visibility, Marelli AL, ZKW, PO, American Luxit, Japanese Koito, Chinese Hasco, Mind, and Indian Lumax.

DVN CEO

Faurecia CEO Patrick Koller: Plenty of Synergies with HELLA to build FORVIA

L-R: PHILIPPE AUMONT; FAURECIA CEO PATRICK KOLLER, HECTOR FRATTY

FORVIA—born from the merger of Faurecia and HELLA—is the world's seventh largest automotive supplier, specializing in seating, interiors, electronics, lighting, clean mobility, and lifecycle solutions. Faurecia CEO Patrick Koller led this merger and is now leading the new company forward. This is an auspicious time to talk to him, and he graciously granted an interview with DVN CEO and lighting general editor Hector Fratty and interior general editor Philippe Aumont:

DVN: We're in a time of great change, with climate change driving a push for sustainability; Covid outbreaks and lockdowns in China; Russia's war on Ukraine; semiconductor shortages; inflation, and social tension. In that context, do you confirm your target of €33bn in 2025?

Patrick Koller: Regarding climate change, I am proud that FORVIA is the first company in the automotive industry to have its net-zero emissions target approved by the Science Based Target initiatives' (SBTi) on June 6th. It means that together Faurecia and HELLA will reach net zero emissions by 2045, confirming FORVIA's leadership in our sector. FORVIA is the world's seventh largest automotive technology company.
Based on the 2025 forecast, of 91 million vehicle per year, we confirm our target. As we announced the divestment of €1bn worth of assets (representing €2bn of sales) before end of 2023, the forecast is at €31bn.

DVN: How long did your acquisition target list include HELLA? How did it wind up being the pick?

Patrick Koller: Regarding Faurecia, HELLA has an interesting technology portfolio for battery-powered vehicles and electronics; lighting is a cherry on the cake. Our strategic plan for mergers and acquisitions was designed to extend our electronic capabilities quickly. HELLA was one of those M&A targets; their electronics expertise and capacity are helping Faurecia to reach critical mass in automotive electronics. Combining Faurecia and HELLA is positioning FORVIA strongly on battery and fuel cell electric vehicles. Together, we have a market-leading expertise in solutions for hybrid powertrains to support customers moving from ultra-low to zero-emissions mobility.

INTERIOR LIGHTING FROM HELLA

DVN: Can you tell us about the product synergies you see in lighting and interior?

Patrick Koller: One obvious synergy opportunity is in interior lighting. And beyond pure lighting, it includes any surface within the interior, where the combination of materials, lighting, and sensors will create functional, active surfaces, allowing new opportunities for HMI. HELLA is also deeply involved in seating electronics. They are involved into radomes, where composite capabilities are important, they are very much involved in egress systems including door entry systems. Overall, HELLA is expanding its electronics offer. The additional software expertise brought by HELLA enables us to grow the electronic business from €1 billion to €7 billion by 2025.

DVN: After the competition between Faurecia and Plastic Omnium to acquire HELLA, how do you see the future of HBPO (HELLA Behr Plastic Omnium)?

Patrick Koller: For HBPO, Plastic Omnium have a change-of-control clause whereby they can take over HB shares.

DVN: FORVIA are now a big lighting supplier. What is your feedback on it?

Patrick Koller: Unlike many other kinds of automotive components, lighting is a sophisticated product with high technology content and particular tooling needs. HELLA are one of the leaders and have the technology and the tooling to prove it. Many innovations are arriving in the market and after LED light sources, we have now the precise matrix light.

MATRIX LED HEADLAMPS WITH GLARE-FREE HIGH BEAM IN AN AUDI A7 (HELLA IMAGE)

There is a lot of innovation now to develop communication with light projections, which will improve safety not just for the driver but also for pedestrians and other road users.

DVN: Some are thinking that tier-1s will increasingly have to deliver the entire front end including headlamps and illuminated grilles. What do you think of that, and what will be FORVIA's approach?

Patrick Koller: Now, front ends should be called front (lighting) panels, as they no longer have the structural role front ends had in the past. As electrification is extended, the area in between headlamps can be used differently than cooling air intake in traditional ICE cars. This module includes a radome (structure protecting radar equipment and made from material transparent to radio waves). A front panel, as a module, could exist with or without headlamps. This wide module the width of a car—is using mostly polycarbonate and coating technologies. It unlocks a new commercial approach for headlamps. HELLA already has contracts with premium German automakers. Our plant in Slovenia focuses on the front panels with PC surfaces several times bigger than headlamps, and is now producing panels for Mercedes-Benz and Škoda. The plant is a standard-setter, and is regularly visited by automakers.

HELLA FRONT PANEL FOR EVS (FORVIA IMAGE)

DVN: As we know, it is not always easy between electronic and mechanical engineers. Now the software guys are the third partner with a strong and rising importance. How do you best recruit and integrate them all?

Patrick Koller:

Of course, mechanical and electronic engineers are different. But at the end of the day, engineers are interested in technology. What is important is the content of what they have to develop. They are looking for innovative, state-of-the-art technology—it doesn't matter if it's seating, interiors, or lighting. Engineers respect technology. They want to work at a technology company. These synergies between Faurecia and HELLA will retain the talents, and will help FORVIA to attract new ones. What is also important for attracting talent is location. It's important to be present in key technology hubs, such as Paris and Berlin.

DVN: What kinds of changes do you foresee in the automotive market?

Patrick Koller: Cars will always be a source of freedom of movement, so the passenger car is here to stay. However, the automotive market is going through a paradigm shift. It starts with the powertrain. The main challenge is in cost. The other challenges are around climate protection and CO_2 neutrality, progressive automation of vehicles, and vehicle lifecycle management.

OTA will be enough to update the product along its life. OTA allows ongoing update of the electronics. FORVIA is developing everything in less than 20 months.
Major innovations will center around:
• Road projection, to help the driver and occupants focus on what is important, like a vulnerable road user next to the car.
• Front and rear panels, as discussed earlier.
• Longer lifecycles through OTA—fewer facelifts every 3.5 years to reduce R&D/investment costs.
• Interior lighting which will be more and more important
• The cost of vehicles can't keep going up. I believe in the future of hybrid vehicles, hybrid hydrogen, and battery electric powertrains with 150 km range in electric, and 300 km in hydrogen.

FAURECIA CONCEPT INTERIOR

DVN: How do you handle sustainability and carbon neutrality?

Patrick Koller: Faurecia created a sustainable materials division. Bio-sourced materials are a very effective way to generate carbon-negative contributions to the overall CO_2 equation. The challenge is to develop the right injection processes for these diverse materials, and the material variability most likely inherent to natural materials. It applies mostly for Interiors. CO_2 will probably force us to rethink modules design. We should aim for a product defined around sub-modules (maximum 10) to be clipped/assembled online.

And it would have the benefit to be exchanged all lifecycle long. And even changed for model updates. We are aiming for an average of 30 per cent recycled plastics (polypropylene) by 2025. We must develop and finance the value chain to sustain this target. When it comes to carbon fiber, we have progressed with the "Force" project, to source carbon fibers intended for use in various structural applications, like seat frames, cross-car beams, etc. Hydrogen mobility is also key, and a cornerstone of the energy transition. We produce hydrogen storage systems, and through Symbio, our JV with Michelin, we are present in 70% of the hydrogen value chain.

DVN: What can you say about competition?

Patrick Koller: Beyond the traditional well-known competitors like Yanfeng; Antolin; IAC, and SMR, I have to mention Hasco in China. Hasco produce seating, interior, lighting, and they are in electronics in a JV with Visteon.
Even if costs are getting higher in China, as an example I was recently in Mexico, where total labor (direct + indirect) is lower than China.

DVN: What is key to be the reference interior supplier?

Patrick Koller: For interior parts, we are also experiencing a change of paradigm. Interior suppliers had the impression they were developing products, where their focus was on transforming materials; even airbags or storage features are real products. Nowadays, we must be able to offer design freedom to our customers, therefore we need to have all the technologies to answer any design need. If you look to some premium vehicle interiors, you'll see huge pillar-to-pillar screens. Innovation must be driven by customer needs, not engineering dreams. HMI should go in that direction, with one single large screen, complemented with reliable touch, gesture and vocal technologies.

DVN: Thank you for your time and thoughts, Mr. Koller, we are watching for great things from FORVIA!

Lighting News

Preliminary yearly figures: Hella Outperforms Car Market

LIGHTING NEWS

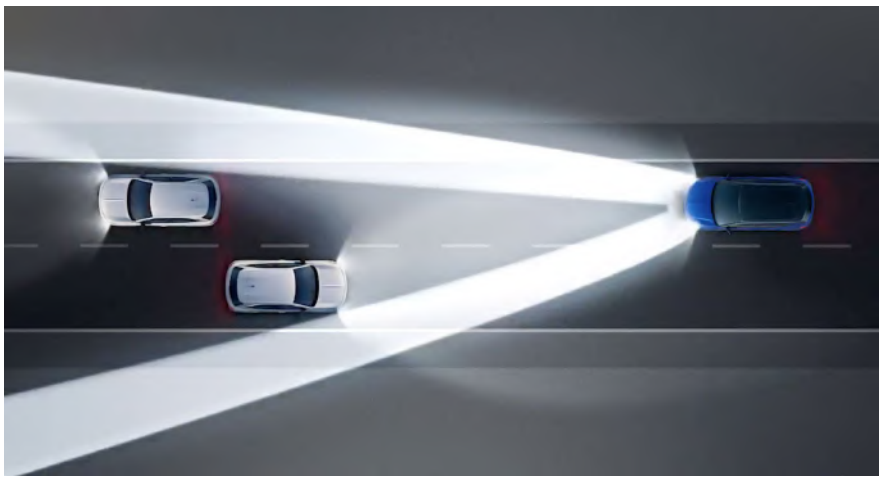
According to preliminary key data for the fiscal year ended this past 31 May, Hella outperformed the global automotive market in a challenging market environment. On a preliminary basis, the company's currency and portfolio-adjusted sales decreased slightly by 2.4 per cent to €6.2bn while global light vehicle production fell by around 9 per cent in the same period. EBIT decreased to around €280m from €510m as a result of increasing cost burdens.

CEO Michel Favre (photo) says "In the past fiscal year, we were facing strong headwinds from the market. On the one hand, vehicle production declined significantly as a result of component shortages and corona lockdowns; on the other hand, cost burdens increased significantly due to supply bottlenecks and noticeable inflation. In view of these diverse challenges, we performed well overall in the past fiscal year and once again significantly outperformed the general market trend. At the same time, we continued to invest heavily in the development of new automotive technologies and we recorded a very high order intake, among other things, for pioneering product innovations such as front panels, high-voltage voltage converters, the Smart Car Access system, and our brake-by-wire technology".

Opel Expand Standard Fitment of High-Tech Lights

LIGHTING NEWS

Every version of Opel's new Grandland comes with a full-LED lighting system from Marelli, and on high-end trim levels an adaptive pixel light system Opel call IntelliLux LED® is available as an option. As described in Opel's **online video**, It provides an 84-pixel matrix per headlamp and offers all adaptive lighting functions including high-end segmented glare-free high beam. The low beam modes include city light; country light, and motorway light. Bending light; curve light, and adverse weather light further match the lighting to the driving conditions.



DVN **previously covered** the Grandland's night vision system.

Marelli Capital Restructuring is Approved

LIGHTING NEWS

Lenders representing more than 90 per cent of Marelli's bank debt have approved the company's revitalisation plan, and the Tokyo District Court has confirmed it. Central to the plan is Marelli's capital restructuring, comprising the investment of new equity capital by shareholder KKR and a reduction of existing bank debt. The overall goal is to give the company financial stability to develop and grow, and the plan will be put into effect after its formalisation by the court early next month.

Marelli CEO David Slump (photo) says "The confirmation of our capital restructuring is an important step forward for Marelli, creating a strong platform for the future. The support of our bank lenders and KKR underscores their confidence in Marelli's future potential. We can now focus on delivering our revitalisation plan, making Marelli fit for the future by simplifying our business and investing to build market leadership, partnering in innovation and development with our customers, and driving efficiency".

Driver Assistance News

Baidu's L4 Robotaxi

DRIVER ASSISTANCE NEWS

During their World 2022 technology conference, Baidu unveiled their sixth-generation fully-autonomous vehicle, the Apollo RT6. It's a production-ready L^4 EV, expected to join the Apollo Go robotaxi fleet next year. The vehicle will have a detachable steering wheel and 38 sensors, including eight lidars and 12 cameras.

Baidu—more or less China's equivalent of Google—have been venturing into robotaxis using their Apollo software. In January 2021, they began partnering with Geely to produce electric vehicles. The two companies launched JIDU in March 2021, an intelligent robot EV startup.

The Apollo Go ride hailing fleet has been delivering autonomous rides for two years now, using EVs retrofitted with Baidu's Apollo technology. This new sixth-generation robotaxi, though, is the first to be purpose-built from scratch.

The Apollo RT6's price is said to have been whittled down to about USD $37,000, making it one of the most affordable serious EVs on the market, yet it carries of some of the most advanced autonomous driving technology. Baidu aim to deploy a large fleet of RT6s into trial operation on the Apollo Go robotaxi network in the second half of next year, then the size of the RT6 fleet is expected to steadily grow from 10,000 units to 100,000 units.

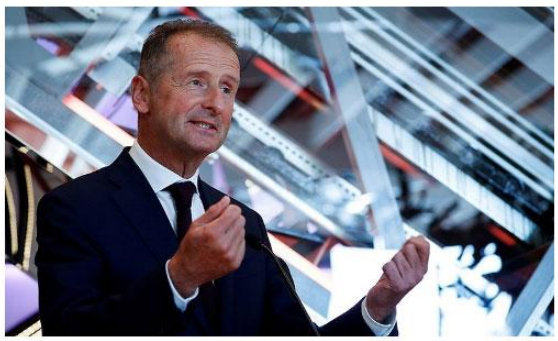
More details can be seen in the RT6 launch **online video**.

General News

VW CEO Diess to Step Down; Porsche's Oliver Blume to Step Up

GENERAL NEWS

BLUME



DIESS

Volkswagen Group CEO Herbert Diess is leaving the company by what they describe as "mutual agreement". Porsche boss Oliver Blume will take over, while also retaining his role as the head of the Porsche brand. VW's current CFO Arno Antlitz will become COO. Diess' departure comes as the company are pushing to beat Tesla to become the world's top EV maker; catch up on software, and carry out a Porsche IPO.

Toyota, Quantum Machines in Development Pact

GENERAL NEWS

Toyota have partnered with Israel's Quantum Machines, through business arm Toyota Tsusho, to develop quantum capabilities and bring Japanese customers access to quantum technologies.

Founded in 2018 by award-winning quantum electronics experts, doctors Itamar Sivan; Yonatan Cohen, and Nissim Ofek, Quantum Machines have built the Quantum Orchestration Platform (QOP), a hardware and software solution for operating quantum systems to facilitate the research and enable future breakthroughs. They also have developed QUA, a standard universal language for quantum computers they say will allow researchers and scientists to write programs for quantum computers with unified code.

When announcing a USD $50m funding round last September, Quantum Machines said they already provide control and orchestration systems for quantum computing to customers in 15 countries—including multinationals; government labs; academic institutions, and quantum development startups.

Sivan told The Times of Israel that the new partnership will allow Toyota Tsusho to offer their customers Quantum Machines' OPX+ solution, a hardware system specifically developed to meet the demanding needs for precision; timing; complexity, and ultra-low latency in quantum control protocols—all to enable control of quantum computing hardware using QUA, a flexible, high-level programming language that enables quantum practitioners to intuitively program even the most complex quantum programs.

"Access to QM's state-of-the-art quantum control system will allow Toyota Tsusho customers to develop quantum computing capabilities in-house. The advantage of QM's solution is that it covers a large part of the stack, including software and hardware. With this highly integrated approach, it will be much easier for organisations with quantum aspirations to develop fully functioning quantum computers", Sivan explained.