

How EVs will shape new car design...and other trends

 By [Greg Maruszewski](#)

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The automotive landscape is in the midst of a fundamental step change. The industry is fast transforming away from internal combustion engines, towards electrified and fully electric powertrains, a process that will in itself shape the trends impacting worldwide and local markets in 2023 and beyond.



Greg Maruszewski, Volvo Car South Africa's managing director | image supplied

However, the automotive space is still recovering from various lingering challenges and uncertainties – component supply and logistics chief among them – presented by the Covid-19 pandemic. Though the crystal ball remains a little cloudy, I still see some fascinating automotive trends emerging in the short to medium term.

Electrified vehicles in South Africa

While Volvo Cars long ago committed to becoming a completely electric brand by 2030, a number of other automakers have since followed suit, setting similar deadlines to conclude their respective shifts to full electrification. Electric vehicles (EVs) will thus continue to grow their market share in the short term, rapidly in key European countries and more gradually in emerging nations such as South Africa.

Considering the EV transformation is still in its infancy locally, I see plug-in hybrid electric vehicles (PHEVs) gaining increased market acceptance in South Africa over the next year or two. As local customer perceptions evolve, the PHEV will function as a stepping-stone for many buyers. However, premium brands will be in a position to be more aggressive with their EV rollouts.

The shape of the automobile will change

The rise of the EV will also see a marked change to vehicle design. As more battery-powered cars are built on dedicated flat-floor platforms (rather than architecture designed to accommodate internal combustion and hybrid powertrains, too), the

overall shapes and proportions will begin to change.

This fresh design paradigm will be driven largely by aerodynamics and an effort to maximise single-charge range. Design will thus become increasingly geared towards the lowering of drag coefficients, resulting in flowing roof profiles and generally sleeker bodywork.

The high seating position associated with the traditional SUV shape will most certainly remain, though exterior designs will be less boxy than before and ride heights are likely to reduce (again, to boost aero efficiency). The broader packaging benefits of EVs – including the potential for shorter overhangs and thus improved cabin space – will continue to be explored.

Another step closer to autonomous driving

While we won't see fully autonomous cars on the road in the next couple of years, we will move yet another step closer. Indeed, the individual components involved in autonomy will become more and more advanced as automakers strive for increased safety levels.

The processing of data collected from real-life driving scenarios and the lessons subsequently learnt will allow vehicles to become smarter and safer, moving them ever closer to autonomy. With so much of the hardware already built in, increasingly connected vehicles will be designed to become even more capable over time via over-the-air software updates.

An uptick in online vehicle sales

I also see more vehicles being purchased online, particularly as supply constraints begin to ease and more stock filters into the market. It's important to view the digital channel as another avenue for vehicle shopping rather than a direct replacement of traditional dealerships.

Indeed, dealers will remain entirely relevant, providing prospective customers with the opportunity to view and test-drive vehicles. Once a purchase is made online, the nearest dealer will step in to take care of delivery, aftersales and service requirements.

As an aside, it will be interesting to monitor just how quickly vehicle leasing – in which a customer effectively pays for use of a car over an agreed-upon period rather than buying it outright – will regain traction lost owing to a multitude of Covid-related issues.

An eventual return to supply normality

Since large parts of Asia (chiefly China) are still experiencing fairly frequent, swiftly implemented lockdowns in response to fresh Covid-19 outbreaks, the industry continues to grapple with unpredictable supply-chain interruptions, production stoppages and ultimately new-vehicle shortages. Issues with shipping lines and even road transport continue to compound

the problem.

However, there is certainly light at the end of the tunnel. For instance, by the second half of 2023, we should see a significant improvement in the semiconductor crisis, as alternative plans made by various manufacturers take hold. Indeed, a complete resolution by the start of the following year seems increasingly likely.

As the various pandemic-related challenges begin to ease, 2023 is shaping up to be a pivotal year for the automotive field as the transition towards electric mobility gathers yet more pace. And it's this megatrend that will drive meaningful change throughout the industry, this year and beyond.

ABOUT GREG MARUSZEWSKI

Over the past 20 years at Volvo, Maruszewski challenged conventions and managed to pave a journey for Volvo to show case its innovation. He is a man of vision who is always looking for ways to move with times and that fits well with what Volvo stands for.

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