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Technical Transformation after Covid

The Covid pandemic has upended even the best-laid plans of the automotive industry around the world, further highlighting the importance of focusing on the right technology. Personal mobility will not lose its relevance, but what technologies will we be using to get around in the future? What innovations will be worth developing? The pandemic has not fundamentally changed the underlying trends, but it has dramatically tightened the industry's finances, making these questions more pertinent than ever. Sound judgement and a balanced development portfolio are therefore critical to success in the "new normal."

There is still an unabated commitment to achieving the climate targets, but the macroeconomic effects of the pandemic have made it harder to reconcile the dictates of air quality and climate protection with the need to find a workable electric mobility changeover scenario. It is therefore all the more important to pursue a balanced powertrain development scenario. Aiming to have 30 % of all newly registered vehicles electric, 40 % hybrid and 30 % with combustion engine by 2030 is a workable scenario because it drives rapid expansion of e-mobility while at the same time exhausting the existing potential of combustion engine technology.

Even so, in the long run, tank-to-wheel improvements on their own would not be enough to get the world to where it needs to be climate-wise. Sustainable mobility cannot be

achieved without a strong link with the energy sector. Global "Current Policy" settings in this regard fall well short of what is required to achieve a "Sustainable Development Scenario." Meeting these requirements calls for alternative energy carriers, with hydrogen and other alternative fuels playing a central role. Green hydrogen offers enormous potential for all mobility sectors, from passenger cars and commercial vehicles to rail and shipping applications, right through to intra-logistics solutions.

The pandemic has raised a few question marks around the second big trend – automated driving. But despite all the talk of a possible delay in the market realization, there have been some positive signs, particularly on the regulatory front. In 2020, the UN Economic Commission for Europe (UNECE) adopted an internationally harmonized regulation for the type approval of SAE level 3 automated driving functions. Moreover, in certain sectors, such as the heavy-duty area, level 3 or 4 automated driving offers even greater economic benefits and is therefore being pursued at pace. That is why automated driving will maintain its relevance in the post-Covid world. While some players may put their plans on hold, others will seize this as an opportunity to grow their competitive edge, and the market possibilities for key technologies like drive-by-wire will continue to grow. Innovation does not stop being innovative just because there is a pandemic.