



48V Systems

May | 2020

BULLETIN

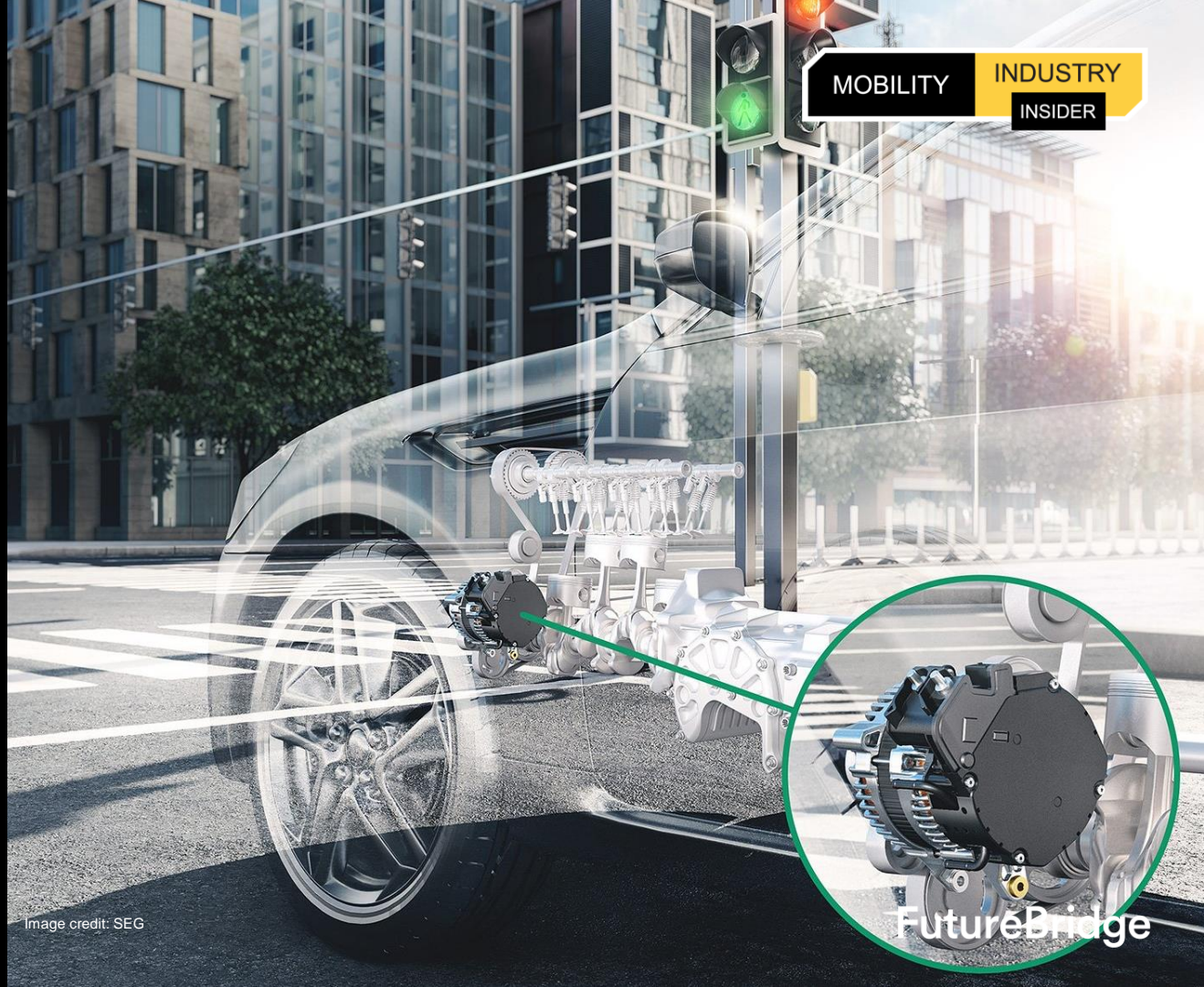


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MOBILITY

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WHAT'S INSIDE!

Due to COVID pandemic technology developments in the 48V mild-hybrid systems market was considerably low. However, we have witnessed OEMs moving forward with the launch of their planned mild-hybrid models.

- **BMW** plans to expand its range of mild-hybrids
- **Kia** to launch its new mild-hybrid Rio and Sportage
- New **Mercedes** C class to feature MHEV and PHEV models

Spotlight:- **BMW** Electrification Strategy and COVID impact on their Business ➤➤

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The fourth-generation **Kia** Rio features mild-hybrid petrol powertrain

06



BMW expands its mild-hybrid portfolio with new 5-series

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Vicor introduces a 750W regulated 48V-to-12V converter

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Geely Philippines conducted the digital launch of the new Geely Azkarra

04



New **Kia** Sportage with Diesel mild-hybrid tech

05



5th gen **Mercedes** C-Class to be available with MHEV and PHEV variants



Expert says:

"The European market is currently the growth driver for worldwide electric vehicle sales. We will therefore be introducing many of the new Kia Stromers here. In the past five years, we have been able to steadily increase our sales of electric vehicles. The next generation models will further accelerate this trend."

- Emilio Herrera
from Kia Motors Europe

Source >>

28 May 2020 Kia Rio facelift with 48V mild-hybrid system revealed



Kia Motors unveils mid-cycle facelift for the fourth-generation Kia Rio with mild-hybrid petrol

- This is the first time the Korean manufacturer is bringing in a 48V mild-hybrid engine paired with a 'clutch-by-wire' manual transmission
- The new 'EcoDynamics+' powertrain for Kia Rio features a new 'Smartstream' 1.0-litre T-GDi engine and a 48V MHEV system (P0-ISG)
- Pablo Martinez Masip, who heads product planning and pricing at Kia Motors Europe commented that the company plans to offer all customers the best possible price-performance ratio

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21 May 2020 Vicor introduces a 750W regulated 48V-to-12V converter



Vicor Corporation, a manufacturer of modular power components, introduces 750W, 48 V to 12V Regulated Converter DCM3717

- The DCM3717 operates from a 40 – 60V SELV input is non-isolated and provides a regulated output with a range of 10.0 – 13.5V, a continuous power rating of 750W and a peak efficiency of 97% in a 37 x 17 x 7.4mm Surface-Mount Converter housed in Package (SM-ChiP)
- DCM3717 supports the LV1 48 specification (48 V automotive standard) of pure electric and hybrid vehicles, and the recently released distributed 48 V server backplane architecture

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28 May 2020 Geely unveils all-new subcompact via online streaming



Geely Philippines conducted the digital launch of the all-new Geely Azkarra compact SUV.

- The range-topping Azkarra features a mild hybrid system collectively called the 48V Electric Motor Synergy (EMS), model
- Mild-hybrid system offers a boost for a total output of 190 hp and 300 Nm of torque and features energy recuperation while braking
- The vehicle also offers EV only mode at below 15kmph

Digital launches are expected to continue to define the new, contactless, "gathering-less" normal

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Mercedes-Benz

Expert says:

"We will proceed with our planned launches and there will be no cancellations in our plans. Due to the current situation, there may be some delays. We will try to minimise the impact on our customers. Mercedes-Benz has one of the most diverse portfolios in the entire automotive segment comprising of more than 20 model offerings across body shapes and across segments. We are confident our product offerings will address the consumer demand adequately. We are now going to also enter the EV segment in India with the launch of the EQC."

-Martin Schwenk,

Managing Director, and CEO, Mercedes-Benz India

Source >>>

06 May 2020

New Kia Sportage to feature 48V diesel mild-hybrid powertrain



Kia has updated the Sportage by adding a new mild-hybrid diesel powertrain and new trim level for 2020.

- Sportage will have three powertrains, and the current 1.6 liter diesel engine will be replaced with the 48V mild-hybrid engine
- In front-wheel-drive form, the mild-hybrid diesel emits 141g/km CO₂, which is 17g/km less than the outgoing diesel and claims an economy of 52.3mpg

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07 May 2020

Fifth-gen Mercedes C-class to feature plug-in and mild-hybrid powertrains



Mercedes is revamping its entire sedan line-up and as a part of it, the German carmaker will also introduce the new-generation C-Class.

- Apart from the existing powertrains, Mercedes also plans to introduce plug-in and mild hybrid variants under the EQ brand
- A detuned version of their existing 48V architecture (P0) from the CLS53 AMG is expected to be used in the C53

Mercedes India CEO has stated that they will continue with 10 launches and have further strengthened their online offerings.

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14 May 2020

BMW confirms mild-hybrid technology for 5 series



BMW is expected to unveil the details of the 2021 BMW 5-Series and confirms electrified versions as well with 48-volt mild-hybrid technology.

- BMW has already electrified the 5 series in more ways than one as aside from the current 530e
- The 5 Series LCI is to be showcased in the plug-in hybrid guise with the M Sport package
- BMW has also confirmed that the face-lifted sedan will debut in less than two weeks

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SPOTLIGHT



"What is our priority right now? The best restart possible for your company. This is how my Board of Management team and I are approaching the situation. We are adopting a realistic view. Taking actions that are controlled, but highly consistent. And switching course quickly when circumstances change. This applies to all three phases of dealing with the coronavirus pandemic: lockdown, reopening and a gradual return to normal business. In Phase I, we protected our employees worldwide, while at all times maintaining our operational capabilities. We always kept the BMW Group running. In production, we continued to implement everything that was urgently needed. In non-production areas, many people worked from home. In Phase II, we began, and will continue with, a structured, phased ramp up of our global production network: Starting in mid-February with the joint venture plants in China and our components plants – including here in Germany. In Phase III, we will gradually resume all production and sales activities, under stricter standards, as we continue to protect our employees' health."

- Oliver Zipse, Chairman of the board of management BMW AG

Source >>>

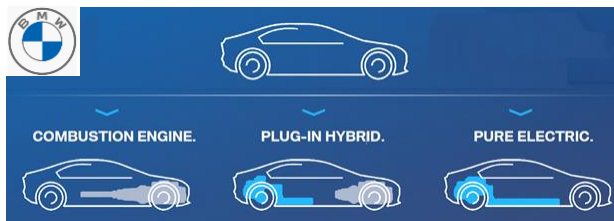
48V Systems BMW Electrification Strategy

BMW GROUP



Rolls-Royce
Motor Cars Limited

BMW conducted its 100th annual general meeting in Munich on 14th May. Oliver Zipse, Chairman of the board of management delivered the keynote speech reflecting on BMW's future endeavors, electrification strategy, and impact of COVID pandemic. Here are some of the highlights of the annual meeting. >>>



• By 2021 BMW plans to have only one platform for its combustion engine, PHEVs and pure EVs.

- BMW plans to expand its second generation mild hybrid electrification technology to 37 new models. Thus, the line-up of models fitted with standard 48-volt starter-generators will extend to 51 models.
- BMW second gen 48-volt mild hybrid technology offers a saving up to nine grams of CO₂ per kilometre
- BMW targets a quarter of the vehicles sold in Europe to have an electric drive train by 2021; a third in 2025 and half in 2030.

Pure EVs



PHEVs and MHEVs

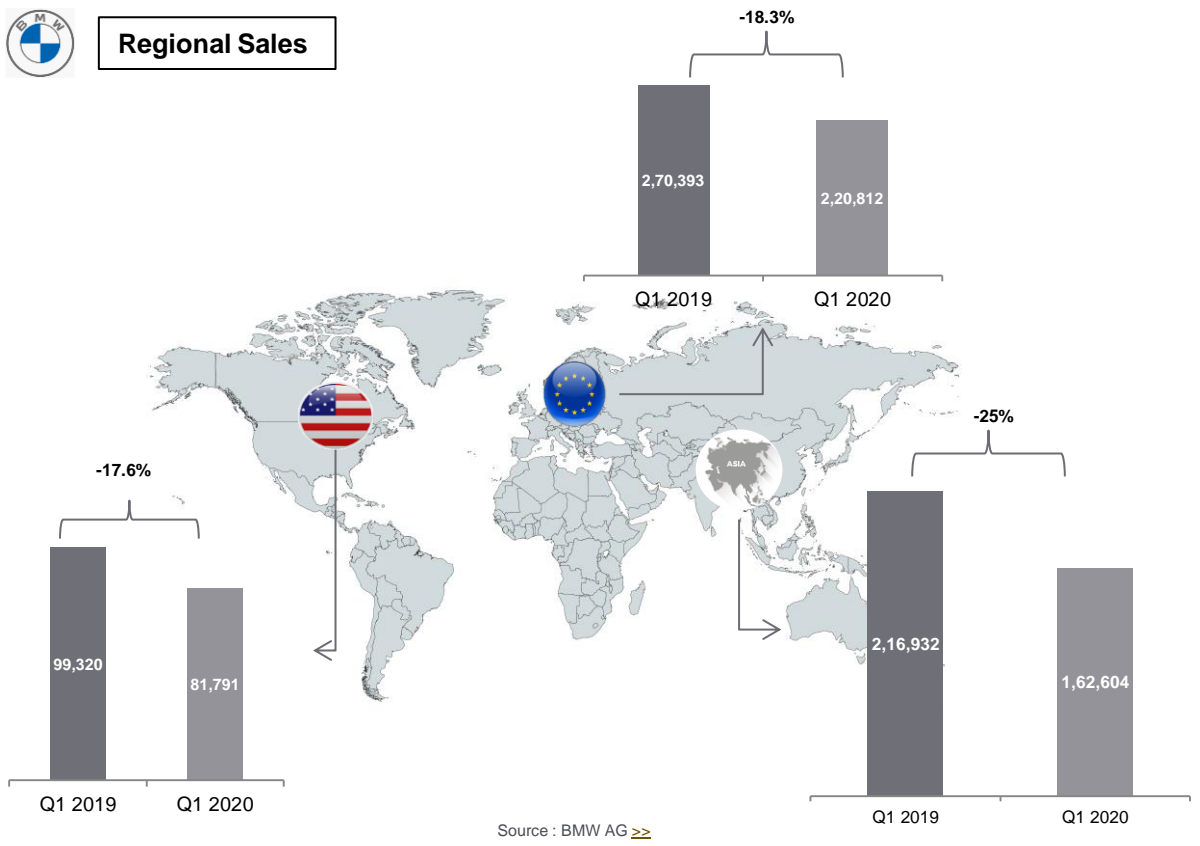


COVID Impact

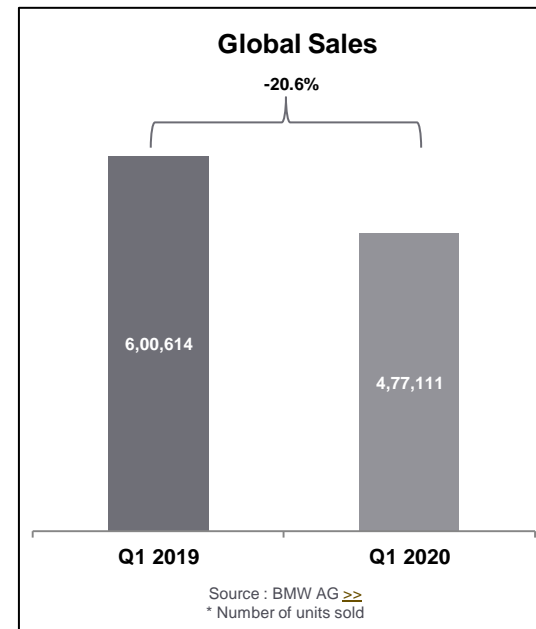
BMW, Rolls-Royce and BMW Motorrad deliveries in Q1 2020 has considerably decreased due to COVID pandemic.



Regional Sales



Global Sales



- BMW plans to bounce back from this situation with, a structured, phased ramp up. Production has restarted for Dingolfing Munich, Regensburg, and Leipzig, as well as Oxford, Rosslyn, and San Luis Potosí plants in a phased manner. BMW is also manufacturing masks and protection equipment for its employees. BMW also plans to invest \$620 Million this year for the construction of its new factory in Shenyang

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