

MissionH24 and Bosch Motorsport: a technical partnership for climate-friendly racing

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The collaboration between the ACO and the H24Project for emission-free competitions is significantly strengthened by the latest partnership with Bosch Motorsport, a major player in the motorsport industry. As part of Bosch Engineering GmbH, an engineering partner of the automotive industry for more than 25 years, Bosch Motorsport supports some of the most important racing series in the world as a partner and technology supplier.

Since its launch in 2018, MissionH24 has reached numerous milestones for the use of hydrogen in endurance racing. The H24EVO, an electric hydrogen prototype will store liquid hydrogen on board. Bosch Motorsport is convinced of this pioneering laboratory's potential.

For the project, Bosch Motorsport is developing the Liquid Hydrogen Storage Control Unit (L-HSCU). This unit is specifically designed for the liquid storage of hydrogen in race cars, playing a crucial role in the integration of hydrogen technology in motorsport. The L-HSCU manages the liquid hydrogen storage in real-time to ensure optimal operating conditions. It monitors and controls all the sensors and actuators that continuously provide data on the state of the storage system. The control unit also communicates with both onboard and offboard refueling systems, ensuring an efficient and safe refueling process, crucial for racing operations. The L-HSCU will provide the highest level of safety for operation in the Motorsport environment, in accordance with the applicable FIA regulations.

Rémi Fouret, Head of Bosch Motorsport France

“MissionH24, ACO, and Bosch share the same values of innovation in performance, safety and sustainability. We are convinced that together with these strong partners, we can create a climate neutral endurance racing.”

Bassel Aslan, Technical Director of MissionH24

“We are very excited to have Bosch Engineering with us in this innovative program, such a big name with a long history in mobility solutions, will no doubt

bring significant added value to embedded systems in our future H2 racing car (H24EVO). Bosch participation won't be limited to their classical motorsport components, their experience in electronics and control will be of great help to us in monitoring and management aspects of hydrogen storage technology.”

For MissionH24, Bosch Motorsport will supply additional components, designed thanks to the extensive experience in motorsport. The **PowerBox PBX 190**, a fully programable, intelligent control and distribution unit for the onboard electric grid, simplifies and optimizes the electronic architecture of a race car. The **collision avoidance system CAS-M light**, a radar-based technology, enhances track safety by warning the driver of approaching vehicles, delivering the same performance regardless the weather conditions. The newly developed **wiper motor WDD2-EU**, with direct rotation movement replacing any external gears, allows programming of operating speeds and wiping angles in all its function modes.

In addition, various sensors are used, specifically selected for racing applications due to their performance and reliability. These provide information to optimize the performance of the H24EVO by measuring the accelerator pedal position, vehicle dynamics, brake pressure, speed of each wheel, steering angle, temperature and pressure in several locations of the vehicle.

Press photos are available on the Bosch Media Service at www.bosch-press.com.

Contact persons for press inquiries:

Cornelia Dürr

Phone: +49 71062 911-1986

E-mail: Cornelia.Duerr@de.bosch.com

Noémie Helbert

Phone: + 33 6 34 78 88 22

E-mail: n.helbert@h24project.com

About Bosch Engineering GmbH

Bosch Engineering GmbH is a wholly owned subsidiary of Robert Bosch GmbH and is headquartered in Abstatt, Germany. As a systems development partner to the automotive industry since 1999, the company with its more than 3,200 associates offers development services for powertrains, safety and convenience systems, and electrical and electronic systems – from the original concept to series production. Specialized in electronics and software, it draws on Bosch's proven large-scale series production technology to develop tailored solutions for a wide variety of applications in passenger cars, commercial vehicles, off-highway and recreational vehicles, and in rail applications, ships, and industry. Bosch Engineering GmbH also coordinates all the Bosch Group's motorsports activities. Additional information can be accessed at www.bosch-engineering.com.

Mobility is the largest Bosch Group business sector. According to preliminary figures, it generated sales of 55.9 billion euros in 2024, and thus contributed around 62 percent of total sales. This makes the Bosch Group one of the leading mobility suppliers. Bosch Mobility pursues a vision of mobility that is safe, sustainable, and exciting. For its customers, the outcome is integrated mobility solutions. The business sector's main areas of activity are electrification, software and services, semiconductors and sensors, vehicle computers, advanced driver assistance systems, systems for vehicle dynamics control, repair-shop concepts, as well as technology and services for the automotive aftermarket. Bosch is synonymous with important automotive innovations, such as electronic engine management, the ESP anti-skid system, and common-rail diesel technology.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 417,900 associates worldwide (as of December 31, 2024). According to preliminary figures, the company generated sales of 90.5 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 470 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 86,900 associates in research and development, of which nearly 48,000 are software engineers.

Additional information is available online at www.bosch-press.com, www.bosch-mobility.com, www.bosch.com.