

# Media Information

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## HYRAZE League – The Racing Series for the MOTORSPORT OF THE FUTURE

- **Sustainable racing series, thanks to the consistent use of future-oriented technology**
- **Innovative linking of actual racing and Esports**
- **Development boost and technology transfer for series production**

HYRAZE League – this is the name of a totally new motorsport competition with hydrogen race cars, which will be launched in 2023. Renowned partners have come together to present their joint concept for the series. The HYRAZE League features an innovative concept, introducing relevant future-oriented technology to the world of motorsport. As well as zero-emission race cars and a revolutionary braking system, steer-by-wire also makes the high-performance race cars development drivers for future production vehicles. The HYRAZE League is also breaking new ground with regard to its race format: the series combines virtual and actual motorsport, bringing racing drivers and sim racers together.

When the HYRAZE League is launched in 2023, it will be the world's first automobile racing series to use environmentally-produced hydrogen as its energy source. It marks the birth of a virtually zero-emission, safe and sustainable form of motorsport, offering state-of-the-art entertainment. The use of cutting-edge technology means there is no need for there to be any conflict between action-packed motorsport, the conservation of resources and safety in the HYRAZE League. The races will be held with 800-hp hydrogen cars. The energy for the zero-emission drivetrain is provided by green hydrogen, which is converted into electricity in the car's two fuel cells, before being transported to the four electric motors. ADAC e.V., DEKRA SE, DMSB e.V., HWA AG, Schaeffler AG and WESA joined forces today to present a future-oriented concept for sustainable motorsport at a project presentation in Stuttgart.

The HYRAZE League is breaking new ground, and not only in terms of the drivetrain concept. The braking system in the four-wheel drive cars will also be the only one of its type in international motor racing. Any brake dust produced does not simply make its way unchecked into the environment, but is captured in the car and disposed of in an environmentally neutral manner afterwards. Special tyres developed from renewable raw materials also reduce tyre wear. Together with a strictly limited number of tyres, this significantly reduces the amount of fine dust pollution.

The new technology also has a major advantage for the racing drivers: the energy concept, which is optimised for sprint races, allows them to use the car's maximum performance for the full race distance without any limitations. The ability to rapidly fill both tanks during a race – a fundamental advantage of hydrogen technology over electric-battery driven cars – means the races can be extended to endurance distances at any time.

The chassis parts are manufactured from a natural fibre composite and can be designed freely by the teams as they see appropriate. This ensures that each team can present its own design language and body shape, independently of any production reference. Clear aerodynamics regulations ensure that

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no costly aerodynamics competition arises, despite the freedom when it comes to chassis design. Under the outer skin, the technology of the first generation of cars is based largely on standard parts, developed by the technology partners involved in the project. The holistic approach ensures that the HYRAZE League is a sustainable, environmentally friendly and technology-driven form of motorsport, which guarantees virtually equal opportunity for amateurs and professionals.

The HYRAZE League is also breaking new ground with an innovative linking of Esports and actual motorsport. This allows it to address and inspire not only the fans at the circuit, but also a young, digitally-conscious target group. The teams have two drivers for each car – one for the actual races and one who takes part in the Esports events, which also count towards the championship. The results of both races count towards the championship standings in equal measures, so that one team will eventually be crowned the overall winner of both disciplines – an absolute novelty in motorsport. As series partner, the World eSports Association (WESA) is significantly involved in developing the general conditions in a virtual environment, in order to ensure the HYRAZE League sim competitions are of the highest standard. Regulations, arbitration and the fair incorporation of teams and gamers are WESA's core areas of expertise in the world of electronic games.

Several strong partners are taking on the challenge of developing this revolutionary project together, in order to realign areas of automobile racing in keeping with the spirit of the age.

With the DMSB (Deutscher Motor Sport Bund) and Europe's largest mobility association, ADAC e. V., two experienced partners will be ensuring from the word go that the HYRAZE League offers motorsport of the highest standard. There will be a clear regulatory system within a professionally organised championship. Given the outstanding international status of both partners, attempts are to be made to establish the ground-breaking racing series around the world.

The overall concept and key components of the car are being developed by the engineering experts at HWA AG. Part of this overall concept is a conscious decision to forego downforce: to the delight of fans, this will make overtaking easier and guarantee action out on the track. The lack of downforce means longer braking distances, which primarily benefits optimised energy recovery through regeneration, as well as the sporting side of things. The energy gathered during braking is saved in compact, high-performance battery cells. This means maximum efficiency whilst at the same time conserving resources.

Together with the motorsport safety experts at DEKRA and DMSB, a safety concept for the race cars has also been developed, which sets new benchmarks for its type. The focus was primarily on protecting hydrogen components, drivers and spectators. Flexible elements dissipate energy in case of a T-bone crash, while an extremely rigid carbon structure effectively protects the carbon-fibre hydrogen tank against any conceivable loads in case of a crash. Appropriate, independent tests are being performed on prototype parts by DEKRA in its test lab. The goal is to develop a set of FIA-approved regulations.

The world's leading automotive supplier, Schaeffler, is prominently involved in the project as innovation and technology partner for components such as electric motors and steering. The steer-by-wire system implemented in the car manages the steering through electronic impulses. This allows the mechanical linking of the steering column to be done away with completely – a big advantage, especially for autonomous cars. Vehicle dynamics functions, such as torque vectoring, can be connected via intelligent control systems.

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Future-oriented drive forms, resource-efficient automobile production, and extreme safety – the HYRAZE League applies the latest technology in all areas to set important impetus for technology transfer, thus making it the ideal development platform for the mobility of the future.

### Information for journalists:

We are happy to provide you with a teaser, footage, quotes for the project and a broadcast newscut. Please contact us at [presse@hyraze-league.com](mailto:presse@hyraze-league.com) and we will provide you with the material immediately.

### ADAC

Over 21 million people put their faith in the expertise of the ADAC – whether for road safety, travel, technology, legal issues, new developments in mobility, or motorsport. Together with its local and regional clubs, the ADAC organises more than 2500 motorsport events each year, making it one of the biggest organisers of motorsport events in Europe. The ADAC Rally Germany and the German motorcycle Grand Prix at the Sachsenring are two of the biggest sporting events in Germany, while the ADAC GT Masters is one of the world's top GT racing series.

### Hermann Tomczyk, ADAC Sports President:

“The ADAC aspires to actively shape the future of mobility for its members, and also takes on this role with regard to the future of motorsport. With an innovative concept, the HYRAZE League combines future-oriented technology with sim racing, which is rapidly gaining in significance. We were immediately impressed by the visionary concept of the HYRAZE League. The combination of actual motor racing with multifaceted new technologies and Esports will achieve a new relevance for motorsport. The HYRAZE League is a genuine pioneering step in the world of motorsport and will allow a broad target group to experience fascinating, future-oriented technology. As one of the biggest organisers of motorsport events in Europe, we support innovative new formats and are happy to take on the challenge of shaping the motorsport of the future with the HYRAZE League.”

### DEKRA

Formed in 1925 in Berlin as the “Deutschen Kraftfahrzeug-Überwachungs-Verein e.V.”, DEKRA has become one of the world's leading expert organisations. Almost 44,000 staff are employed in roughly 60 countries on all five continents. With qualified and independent experts, DEKRA works to make the world safer – on the roads, at work and at home. The portfolio ranges from vehicle inspections and reports on claims settlements, industry and building inspections, security consulting, and the testing and certification of products and systems, to training and temporary employment.

### Clemens Klinke, Member of the Management Board at DEKRA:

“Our involvement in the HYRAZE League is an extension of the commitment to motorsport, which has been entrenched at DEKRA for decades. Motorsport remains an ideal platform for technological progress. For this reason, we must arrest the loss of significance, with which we are threatened: through innovation, attractiveness and the consistent alignment towards future-oriented technology. The overall concept of the HYRAZE League has really impressed us in this regard. The project offers us the unique opportunity to promote the development of expertise in the field of safety technology – an area that is becoming increasingly complex. The focus on sustainability and the transfer of technology towards series production makes the HYRAZE League an ideal addition to our existing commitments.”

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## DMSB

Sporting competition needs rules and referees to ensure those rules are adhered to. In German motorsport, that role is taken on by the Deutscher Motor Sport Bund (DMSB): it grants racing driver and circuit licences, trains officials, defines regulations, and thus establishes the parameters for safe and exciting motorsport. The DMSB also looks after the interests of German motorsport athletes at all public and sporting levels. As the national umbrella organisation, the DMSB is a member of both the FIA (Fédération Internationale de l'Automobile) and the FIM (Fédération Internationale de Motocyclisme), as well as the DOSB (German Olympic Sports Confederation).

### **Dr. Gerd Ennser, Member of the DMSB's Executive Committee for automobile sport:**

"The HYRAZE League sees the launch of a project that is pioneering in two senses for the development of German and international motorsport: on the one hand, cutting-edge hydrogen technology will be used at the racetrack in extremely safe cars. On the other hand, actual motorsport will be perfectly combined with virtual racing. We at the Deutscher Motor Sport Bund have supported the project from the outset, because we are confident that the elements of this new racing series will grow dramatically in importance over the coming years. We want to be heavily involved in this exciting process with our extensive know-how."

## HWA AG

HWA AG is an independent, 360° engineering specialist in the fields of automobile racing and high-performance cars. Formed in 1998 by Hans Werner Aufrecht, the company's objective is to develop the best possible high-quality solutions, in order to get its partners and customers to their destination quicker. The portfolio of services ranges from designing all vehicle components to assembling complete cars, together with the relevant logistics, after-sales and support services.

### **Ulrich Fritz, CEO HWA AG**

"In order to achieve widespread acceptance in society, motorsport must become lower in emissions, more sustainable, and more economical. We want to use our experience as a vehicle developer and racing team to launch an innovative racing series that meets precisely these prerequisites, in the form of the HYRAZE League. We are delighted to have acquired experienced partners at this early stage in the project, who will support us in its implementation. HYRAZE will provide excellent entertainment and, through the integration of Esports, will allow motorsport to inspire younger target groups again. For us and our partners, it is also particularly important that there is a transfer of technology towards series production. Motorsport can once again take on a pioneering role in the development of road-going cars, with regard to hydrogen technology and zero emissions."

## Schaeffler

The Schaeffler Group is a leading global automotive and industrial supplier. The portfolio includes drivetrain and chassis components and systems, as well as rolling and plain bearing solutions for a host of industrial applications. With innovative and sustainable technology in the fields of electromobility, digitalisation and industry 4.0, Schaeffler is already making a vital contribution to "mobility for tomorrow". With roughly 84,200 employees, Schaeffler is one of the world's largest family companies and, with roughly 170 locations in over 50 countries, has a global network of production sites, research and development facilities, and distribution companies. With just short of

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2,400 patent applications in 2019, Schaeffler is second in the DPMA (German Patent and Trade Mark Office) list of the most innovative companies in Germany.

### Dr. Jochen Schröder, Head of E-Mobility at Schaeffler

"The involvement in this new series is the perfect fit for Schaeffler. For a long time, we have been focussing very successfully on innovative electric drive systems, which meet the extremely high demands on performance and efficiency in motorsport and series applications. We are also using our traditional core areas of expertise to develop key components for fuel cells. Electrified motor racing with hydrogen technology is ambitious but absolutely realistic, and could herald a new era of motorsport. The opportunity to be actively involved in developing this car concept from the word go, and to contribute with our innovative technologies, is too good to miss."

### WESA

The World eSports Association is an association initiated by professional Esports teams and major Esports organisers. Like associations in classic sports, the WESA works together with its members on regulations, team and player representation, and fair revenue distribution, in order to ensure a sustainable growth of Esports.

### Dr. Pietro Graf Fringuelli, Executive Chairman and Commissioner WESA

"Esports have become a booming global phenomenon in recent years. Whether on PC, console or mobile, the young generation is playing all types of games as a means of recreation, but also in professionally organised Esports leagues and events. Combining this digital community with the real world of sustainable motorsport the HYRAZE League creates a platform, on which people can experience the latest mega-trends via sport. The WESA has been supporting the HYRAZE League from the outset, in order to ensure that the basic rules of both sporting worlds are ideally aligned and to lay the foundations for fair and captivating sport."

### About the HYRAZE LEAGUE

Let's make the world a better race – it is under this motto that the partners have bundled their expertise, in order to launch the concept of the racing series and prototype of the hydrogen race car in 2023. Together, they are taking the next steps in implementing the project, in order to make this sustainable technology platform a reality.

\*\*\* For data protection reasons, it is possible that you have received this email from several partners of the project \*\*\*

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[adac.de/motorsport](http://adac.de/motorsport)