

Press Release

FEV presents climate-neutral mobility solutions at Hyvolution

Media Contact

Ulrich Andree

T +49 241 5689-8880

andree@fev.com

Saint-Quentin-en-Yvelines, France, January 2023 – FEV, an internationally recognized innovation leader across different sectors and industries, showcases its innovative portfolio for the highly demanded decarbonization of industry and transportation at Hyvolution in Paris on February 1st and 2nd. More than 200 major players of the industry will meet at this trade show. With a focus on the company's retrofit solution, FEV presents its latest developments, dedicated to the entire hydrogen value chain at booth D76 in Hall 6.

The solutions as well as the market segments which enable the industrial and transport decarbonization are spanning the industry: the technologies needed for the development of e-mobility are not only addressing the passenger car sector but also those of other on-road vehicles, construction and agricultural vehicles, ships, trains, and even aircraft. FEV's expertise in France in the field of electric and hydrogen-powered mobility, initially focused on the automotive sector, allowed the company to rapidly develop its portfolio in these new markets.

Innovations developed by FEV

On the way to the desired energy transition, hydrogen will play an essential role. FEV currently develops two different technology approaches to use hydrogen as a mobility energy source: Beside the concept of Fuel-Cell Electric Vehicles (FCEV) hydrogen internal combustion engines (H₂ ICE) extend the possible H₂-application fields. For long-distance road applications, like medium and heavy-duty trucks or coaches as well as for railway and maritime transport, hydrogen is a promising alternative, that is already in use for several years.

Retrofitting accelerates the ecological transition: Partnership with NGV Powertrain

Retrofitting involves replacing a traditional powertrain with a more environmentally friendly one. The main advantage of the H₂ ICE is the option to replace a diesel or petrol fired combustion engine at comparably low efforts with a power unit that is in line with climate concerns.

At Hyvolution, FEV and NGV Powertrain, an Italian startup with a focus on the development of alternative propulsion systems will present a jointly developed nine-liter engine, which has been converted to hydrogen operation. Currently, this type of engine is mainly used for road transport, as well as in the construction and maritime sectors. As such, the companies' offer of a retrofit solution will be of great interest to enterprises owning fleets of buses or trucks. For this project, FEV works on design and software aspects at its French location in Saint-Quentin-en-Yvelines. The engine shop, finetuning and testing take place at Saint-Etienne-du-Rouvray.

Advantages of this development:

- Like a fuel cell or a battery solution, the hydrogen engine does not emit CO₂, since hydrogen molecules don't contain carbon
- Reduced NOx emissions
- With retrofitting, it is possible to retain the existing vehicle fleet while making it greener

FEV France is one of eight successful candidates in the automotive sector that have been selected as part of the France Relance Plan initiated by the French government. Since then, FEV has invested in three test benches on its site at Saint-Etienne-du-Rouvray (Seine Maritime): two test benches for hydrogen internal combustion engines and one fuel-cell test bench with a capacity of up to 240 kW.

The new H₂ ICE, one of the exhibits at booth D76 in hall 6, is just one of FEV's multiple technology solutions emphasizing the company's new brand identity: its purpose to drive innovation to help the world evolve is reflected in the new tagline "Feel EVolution". It is a clear commitment to FEV's mission to develop world-class innovations within sustainable mobility, energy, and software to power a better future.

Find more information about the trade show and book your tickets at [Hyvolution website](#).

Footage:



FEV presents sustainable mobility solutions at the Hyvolution Paris trade show.

About FEV

FEV has always pushed the limits.

FEV is a globally leading engineering provider and internationally recognized leader of innovation across different sectors and industries. Professor Franz Pischinger laid the foundations by combining his background in academia and engineering with a great vision for continual progress. The company has supplied solutions and strategy consulting to the world's largest automotive OEMs and has supported customers through the entire transportation and mobility ecosystem.

As the world continues to evolve, so does FEV.

That's why FEV is unleashing its technological and strategic expertise into other areas. It applies its forward thinking to the energy sector. And its software and system know-how will enable the company to lead the way making intelligent solutions available to everyone. FEV brings together the brightest minds from different backgrounds and specialties to find new solutions for both current and future challenges.

But FEV won't stop there.

Looking ahead, FEV continues to push the limits of innovation. With its highly qualified 7,200 employees at more than 40 locations globally, FEV imagines solutions that don't just meet today's needs but tomorrow's. Ultimately, FEV keeps evolving – to a better, cleaner future built on sustainable mobility, energy and software that drives everything. For the companies' partners, its people and the world. [#FeelEVolution](#)