**Could you tell us about the strengths of the regional hydrogen industry?**
Based on operational, pioneering local hydrogen ecosystems and a major port energy hub, the Pays de la Loire Region is supporting an ecosystem with 14 research laboratories, more than 80 companies involved and several clusters. The Region actively supports this network of players working together on the various building blocks of the hydrogen value chain, developing research and innovation projects and industrialising their solutions. These players benefit from a forum for exchange, complementarity and the emergence of new solutions, such as the Ateliers Hydrogène Pays de la Loire, the most recent of which took place on 8 December. This collective dynamic is a source of pride for us, demonstrating our commitment and success in developing a flourishing regional hydrogen industry.



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Hydrogen car race supported by the ACO

**What are the main thrusts of the hydrogen roadmap for the Pays de la Loire?**

The hydrogen roadmap for the Pays de la Loire region, covering the period up to 2030, aims to support the dynamic development of this growing sector. Four key areas have been identified for this purpose. The first focuses on the large-scale production and distribution of green, low-carbon hydrogen. The second axis promotes the expansion of hydrogen uses, favouring mobility and industrial applications, while envisaging mechanisms to encourage scaling up. The third area focuses on research, development and innovation, covering the region's laboratories, technological innovation for businesses, and a systemic approach specific to the port hydrogen hub and the Greater West Basin. Finally, the fourth and last axis orchestrates the running of the "Planète Hydrogène Pays de la Loire" network by the Region, encouraging cooperation and collective progress in this strategic field.

**Could you give us a few examples of hydrogen deployment projects supported by the Pays de la Loire Region?**

Let's start with Lhyfe, the world's first 100% green hydrogen production site. It operates using an electrolyser connected directly to wind turbines. The project has been up and running for over a year now, supplying customers at 4 public stations in France and as many private sites. In addition, the Sealhyfe project is developing hydrogen production at sea where a floating wind turbine is installed. The first prototype has been successfully tested for several months.

Another forerunner, the Navibus, is the first river boat to run on hydrogen. It is part of the Naolib public transport network in the Nantes metropolitan area, and has helped people learn how to use hydrogen. Still on the subject of mobility, prototype hydrogen-powered racing vehicles have already been tested at the last two editions of the 24 Hours of Le Mans, and a "hydrogen" category will even be added to this prestigious competition in 2026. I'd also like to mention the first public uses, with hydrogen-powered buses running in La Roche-sur-Yon, Le Mans and Les Sables d'Olonne.

I'd also like to mention the initiatives to develop off-road vehicles and retrofit thermal heavy goods vehicles into hydrogen-powered trucks: these involve several companies and have already led to a demonstrator proving the effectiveness of the process. Finally, the Airbus site near Nantes is working on the development of liquid

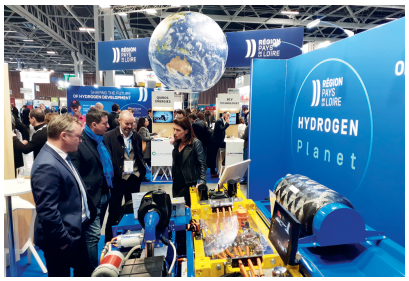
hydrogen tanks to help bring increasingly carbon-neutral aircraft into service.

The Region is also supporting studies into the decarbonisation of the Saint-Nazaire industrial and port zone, the future Hydrogen Hub, which is already home to projects for the mass production of hydrogen for industry. These examples, while representative, only scratch the surface of the richness and diversity of the projects supported by the Region in the field of hydrogen.



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Inauguration of the world’s first hydrogen fuel cell forklift truck




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Hyvolution 2023 Exhibition – Visit to the Fetis Groupe demonstrator

**What partnerships have you developed to make the Pays de la Loire one of the leading regions for the production and use of renewable, low-carbon hydrogen?**
We have, of course, set up close partnerships with the 14 research laboratories in the region specialising in mobility issues, fuel cells, etc. The Region supports more than a dozen academic research projects, as well as around thirty innovative projects run by companies. Last summer, the President of the Region, Christelle

Morançais, inaugurated an event to launch the GOCO2 projects, one of the winning projects of the Low Carbon Industrial Zone (ZIBaC) call for projects aimed at decarbonising the Industrial and Port Zone of Saint-Nazaire and the Loire region. This event marked the start of initiatives to produce e-fuel from green hydrogen and biogenic industrial carbon. In so doing, the Region is supporting the entire hydrogen sector, from fundamental research to industrialisation; from mobility solutions to the mass production of hydrogen to decarbonise maritime, air and land transport. We are fully committed to the mass production of hydrogen solutions, demonstrating our determination to shape the future of energy in a sustainable and innovative way.