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## ALSTOM AND HYNAMICS (EDF) SIGN A PARTNERSHIP AGREEMENT TO OPTIMISE THE FUELING OF HYDROGEN TRAINS

Alstom and Hynamics, the hydrogen subsidiary of the EDF Group, today signed a partnership agreement to optimise the hydrogen refuelling of passenger trains. This collaboration will accelerate the development of hydrogen trains and reduce the time needed to refuel them.

The Alstom and Hynamics teams are already carrying out joint modelling, calculation, and simulation work. This work, which notably mobilises the skills and resources of "EDF Lab", will then be tested from 2022 on the electrolyser test platform at the 'EDF Lab Les Renardières', one of three R&D centres of Électricité de France located in Écouelles (Seine-et-Marne). A hydrogen production station, a compressor up to 450 bars and several storage racks will be mobilised to recreate the filling circuits at real size and to evaluate the behaviour of the equipment under optimal observation conditions.

Ultimately, the aim is to define an international refuelling standard that will make it possible to limit the immobilisation of hydrogen-powered trains during refuelling, which is a major issue for both railway companies and passengers, while complying with the regulations and safety rules in force.

*"This partnership will enable us to optimise the hydrogen distribution infrastructure and the rolling stock made available to operators. This is a project that presents many opportunities for the decarbonisation of transportation and the development of sustainable mobility"*, the two groups emphasise.

### About Alstom

Leading societies to a low carbon future, Alstom develops and markets mobility solutions that provide the sustainable foundations for the future of transportation. Alstom's product portfolio ranges from high-speed trains, metros, monorails, and trams, to integrated systems, customised services, infrastructure, signalling, and digital mobility solutions. Alstom has 150,000 vehicles in commercial service worldwide. With Bombardier Transportation joining Alstom on January 29, 2021, the enlarged Group's combined proforma revenue amounts to €14 billion for the 12-month period ended March 31, 2021. Headquartered in France, Alstom is now present in 70 countries and employs more than 70,000 people.

Its employees in France total approximately 12,500, providing a pool of expertise to serve French and international clients. Approximately 30,000 jobs are created in France amongst its 4,500 French suppliers.

[www.alstom.com](http://www.alstom.com)

### About Hynamics

Hynamics is a subsidiary of the EDF Group which offers a turnkey solution for the production, storage and distribution of low-carbon and renewable hydrogen to the industrial and mobility sectors, by ensuring the investment, operation and maintenance of production and distribution facilities. [www.hynamics.com](http://www.hynamics.com)

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