

Alstom's Coradia iLint, the world's first hydrogen-powered passenger train, will demonstrate green traction in Quebec

- Coradia iLint will carry passengers in a commercial service demonstration on Quebec's Reseau Charlevoix network, at the heart of a UNESCO-listed biosphere reserve, during 2023
- In partnership with the Government of Quebec, Chemin de fer Charlevoix, Harnois Énergies and HTEC, the project will test a first-ever green hydrogen ecosystem dedicated to rail transportation in America
- Alstom's innovation centre in the Americas is dedicated to the development of rail mobility solutions with low or zero emissions for the North American market

2 February 2023 – Alstom, global leader in smart and sustainable mobility, in partnership with the Government of Quebec, Chemin de fer Charlevoix, Train de Charlevoix, Harnois Énergies and HTEC, has announced a passenger service demonstration project for its Coradia iLint hydrogen-powered train. During summer 2023, the Coradia iLint will carry passengers on the Réseau Charlevoix rail network, along the St. Lawrence River, between Parc de la Chute-Montmorency and Baie-St-Paul. The train will be powered by green hydrogen produced by Harnois Énergies at its Quebec City site.

The province of Quebec will be the first jurisdiction in the Americas to run a train with zero direct emissions powered by green hydrogen, demonstrating its leadership in the transition to a low-carbon economy and the set-up of ecosystems dedicated to hydrogen. The operation of this train with passengers on board will allow Alstom and its partners to better assess the subsequent steps for the development of hydrogen propulsion technology and its penetration into the North American market.

The Coradia iLint first entered commercial service in Germany in 2018 and has travelled more than 220,000 kilometres in eight European countries. The train is powered by a hydrogen fuel cell that emits only water vapour during operation, while ensuring a quieter environment for passengers and those close to tracks. On September 15, 2022, the Coradia iLint travelled the record distance of 1,175 kilometres without refuelling. Coradia iLint has a top speed of 140 km/h and acceleration and a braking performance comparable to a standard regional diesel train – but without the noise and the emissions. Coradia iLint stands out for its combination of innovative features: clean energy conversion, flexible energy storage in batteries, smart traction and energy management. Designed especially for non-electrified lines, it allows for safe, clean and sustainable operations. To date, 41 trainsets have been ordered by clients in Europe.

"As early as 2018, Alstom was the first to put a hydrogen train into service in Europe and we aim to be the first in the Americas as well," explains Michael Keroullé, President Alstom Americas. "With only 1% of the networks electrified in our region, this technology will provide an alternative to diesel. This project will demonstrate our capabilities to provide more sustainable mobility solutions to customers, agencies and operators, as well as to passengers. It will also provide an extraordinary showcase for Quebec's developing green hydrogen ecosystem."



"Quebec is positioning itself as a centre of expertise in sustainable transportation on the continent," says François Legault, Premier of Quebec. "Promising innovations such as Alstom's will not only help us achieve our ambitious climate change targets, but they will also be able to be exported elsewhere in the world. I am convinced that our nation has everything it takes to become one of the international leaders in the green economy!"

"We are pleased to leverage our infrastructure for this exciting project. This initiative is not only a perfect fit with our corporate social responsibility plan, which includes a sustainable mobility component, but it also generates significant reach for the Charlevoix region, which is at the heart of our organizational vision", mentions Claude Choquette, President of Groupe Le Massif and of Chemin de fer de Charlevoix.

"Harnois Energies is very proud to be the green hydrogen supplier for this green transition project," said Luc Harnois, Executive Vice President and shareholder of Harnois Énergies. "Our participation in this project in a logical continuation of our decision to invest in the construction of a hydrogen station in 2018. Harnois Énergies is more than ever actively participating in the coexistence of energy and vehicle types to meet the needs of consumers."

Commercial service of the Coradia iLint in Quebec is the first mandate of Alstom's new innovation centre in the Americas, which is dedicated to sustainable mobility solutions. This is the first milestone in the development of an ecosystem around Alstom's rail solutions with zero direct emissions. The primary mission of this centre, located in Saint-Bruno-de-Montarville, Quebec, is the development of future platforms with hybrid, battery or green hydrogen propulsion specifically adapted to the North American market, leveraging the proximity to the more than 700 Alstom engineers currently working in the city to help accelerate the decarbonisation of the rail sector. For the Coradia iLint demonstration project, the centre's engineers will work closely with key players in Quebec's research and innovation sector, as well as with industrial partners in the Quebec battery and hydrogen industries.

Alstom is the world leader in innovation for sustainable mobility. The company employs 1,800 people in Quebec and its Americas headquarters is in Saint-Bruno-de-Montarville, Quebec. Alstom provides rolling stock, signalling solutions, services, infrastructure and turnkey systems, notably in Montreal for the Réseau express métropolitain project, the Société de transport de Montréal and EXO, as well as in Canada's largest cities and major rail networks. Alstom is a proud Canadian player and has been certified "Top Employer 2023" in Canada, for the third year in a row, by the Top Employers Institute.

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