

Cummins Hydrogen Technology Powers the Largest Proton Exchange Membrane (PEM) Electrolyzer in Operation in the World

BÉCANCOUR, Quebec--(BUSINESS WIRE)-- Global technology and power solutions leader Cummins Inc. (NYSE: CMI) has provided a 20-megawatt PEM electrolyzer system to generate green hydrogen, making it the largest in operation in the world. The Cummins electrolyzer system is installed at the Air Liquide hydrogen production facility in Bécancour, Quebec and began commercial operation in late 2020. The Cummins PEM Electrolyzer can produce over 3,000 tons of hydrogen annually using clean hydropower.

"Creating hydrogen technologies at scale is paramount to growing low-carbon solutions," said Amy Davis, Cummins Vice President and President of New Power, the company's alternative power business. "We have successfully developed our technology from 1MW to 5MW, and now have the largest PEM electrolyzer in operation in the world. It will continue to take enterprises, governments, forward-thinking customers and utilities all working together to make alternative power a reality. Here we are seeing how green hydrogen can improve sustainability for industrial manufacturing and how the demand for decarbonized hydrogen solutions will grow."

The HyLYZER® PEM electrolyzer technology is the result of more than 20 years of development by Hydrogenics, a Canadian company that was acquired by Cummins in September of 2019. This installation in Quebec features four compact pressurized electrolyzer skids that were fitted inside an existing building. This is a modular and scalable electrolyzer platform designed to address utility-scale hydrogen production.

Electrolyzers provide a means to address one of the largest dilemmas in the renewable energy industry, which is how to store the energy when it is not in demand. Cummins' PEM electrolyzers enable the storage of excess energy that would typically be sold off to the market at a financial loss, or not harnessed at all, and instead store that energy to sell into a new green hydrogen market. They can also be used to decarbonize multiple sectors including zero emission transportation, industrial processes and the green chemicals sector.

Already a leader in advanced diesel, natural gas and battery technologies, Cummins is

rapidly growing its capabilities to support the overall hydrogen economy. Cummins uses fuel cell technologies to power a variety of applications, including transit buses, semi-trucks, delivery trucks, refuse trucks and passenger trains and has made several recent investments to support the overall fuel cell ecosystem. This includes acquiring Hydrogenics, which provided Cummins with PEM fuel cells and both PEM and alkaline electrolyzers, forming a joint venture with NPROXX to produce hydrogen storage tanks, and investing in the development of solid oxide fuel cells.

For more examples of how <u>Cummins is leading new firsts in the fuel cell and hydrogen industry</u> and for more information about Cummins Fuel Cell and Hydrogen Technologies, visit <u>www.cummins.com/hydrogen</u>.

About Cummins Inc.

Cummins Inc., a global power leader, is a corporation of complementary business segments that design, manufacture, distribute and service a broad portfolio of power solutions. The company's products range from diesel, natural gas, electric and hybrid powertrains and powertrain-related components including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, automated transmissions, electric power generation systems, batteries, electrified power systems, hydrogen generation and fuel cell products. Headquartered in Columbus, Indiana (U.S.), since its founding in 1919, Cummins employs approximately 61,600 people committed to powering a more prosperous world through three global corporate responsibility priorities critical to healthy communities: education, environment and equality of opportunity. Cummins serves its customers online, through a network of company-owned and independent distributor locations, and through thousands of dealer locations worldwide and earned about \$2.3 billion on sales of \$23.6 billion in 2019. See how Cummins is powering a world that's always on by accessing news releases and more information at https://www.cummins.com/always-on.

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