

PyroGenesis Signs Contracts Totaling \$2.5 Million to Deliver Greenhouse Gas-Reducing System for Major North American Biofuel Project

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System to be Part of the \$1 Billion Varennes Carbon Recycling Plant

MONTREAL, June 11, 2024 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX:PYR) (OTCQX:PYRGF) (FRA:8PY), a high-tech company (the "Company" or "PyroGenesis") that designs, develops, manufactures and commercializes advanced plasma processes and sustainable solutions which are geared to reduce greenhouse gases (GHG), is pleased to announce that its subsidiary, Pyro Green-Gas Inc. ("Pyro Green-Gas"), has signed contracts totaling \$2.5 million (US1.8 million) for engineering, design, and fabrication of a thermal swing adsorption ("TSA") system for the dehydration of pure oxygen produced from electrolyzers at the Varennes Carbon Recycling ("VCR") plant – a large biofuel production project currently under construction in Varennes, Quebec.

The \$1 billion VCR project is being led by a consortium of major corporate partners, including Shell, Suncor, Proman, and Enerkem, and has the financial backing of the Quebec and Canadian governments. The consortium is constructing Canada's largest biorefinery with a capacity to convert up to 200,000 tonnes of non-recyclable waste and residual biomass material into 125 million liters of commonly used chemicals and value-added biofuels, such as methanol. The plant will be powered by clean electricity and will leverage renewable green hydrogen and oxygen produced onsite by one of the world's largest electrolyzers. ⁱ

"This announcement highlights our continued commitment to providing sustainable technology solutions that improve the environment by controlling and eliminating hazardous air pollutants and greenhouse gases," noted P. Peter Pascali, President and CEO of PyroGenesis. "Pyro Green-Gas' technologies such as thermal swing adsorption and pressure swing adsorption are employed to safely capture and recover CO₂ and other greenhouse gas emissions. This is crucial to projects like the VCR project, which itself has a stated goalⁱⁱ of cutting more than 170,000 tonnes of greenhouse gas emissions annually and 4.25 million tonnes over the project's 25-year lifespan. This is equivalent to taking 50,000 passenger vehicles off the road, and we look forward to potentially increasing our role as the project evolves."

Pyro Green-Gas expects to complete delivery in Q4 2024.

Pyro Green-Gas' development of various technologies such as thermal swing adsorption and gas separation system technologies are part of the Company's three-tiered solution ecosystem that aligns with economic drivers that are key to global heavy industry. Flaring technologies are part of the Company's Energy Transition & Emissions Reduction tier, where gas purification, separation and conversion technologies, and fuel switching utilizing the Company's electric-powered plasma torches, helps heavy industry reduce greenhouse gas emissions and fossil fuel use.

About Pyro Green-Gas Inc. (formerly known as AirScience Technologies Inc.)

Pyro Green-Gas offers technologies, equipment, and expertise in the area of biogas upgrading, as well as air pollution controls. Pyro Green-Gas designs and builds: (i) gas upgrading systems to convert biogas to renewable natural gas (RNG); (ii) pyrolysis-gas purification; (iii) biogas & landfill-gas flares and thermal oxidizers; and (iv) purification of coke-oven gas (COG) (a by-product in the primary steel industry arising from the conversion of coal into coke) into high purity hydrogen, which is in high demand across the industry. Pyro Green-Gas is also known for its line of Digester and landfill gas flares which reduce greenhouse gas (GHG) emissions specifically from Digesters and landfills.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is a leader in the design, development, manufacture and commercialization of advanced plasma processes and sustainable solutions which reduce greenhouse gases (GHG) and are economically attractive alternatives to conventional "dirty" processes. PyroGenesis has created proprietary, patented and advanced plasma technologies that are being vetted and adopted by multiple multibillion dollar industry leaders in four massive markets: iron ore pelletization, aluminum, waste management, and additive manufacturing. With a team of experienced engineers, scientists and technicians working out of its Montreal office, and its 3,800 m² and 2,940 m² manufacturing facilities, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. The operations are ISO 9001:2015 and AS9100D certified, having been ISO certified since 1997. For more information, please visit: www.pyrogenesis.com.

This press release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of applicable securities laws. In some cases, but not necessarily in all cases, forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking statements. Forward-looking statements are not historical facts, nor guarantees or assurances of future performance but instead represent management's current beliefs, expectations, estimates and projections regarding future events and operating performance.

Forward-looking statements are necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by the Company as of the date of this release, are subject to inherent uncertainties, risks and changes in circumstances that may differ materially from those contemplated by the forward-looking statements. Important factors that could cause actual results to differ, possibly materially, from those indicated by the forward-looking statements include, but are not limited to, the risk factors identified under "Risk Factors" in the Company's latest annual information form, and in other periodic filings that the Company has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under the Company's profile on SEDAR+ at www.sedarplus.ca. These factors are not intended to represent a complete list of the factors that could affect the Company. However, such risk factors should be considered carefully. There can be no assurance that

such estimates and assumptions will prove to be correct. You should not place undue reliance on forward-looking statements, which speak only as of the date of this release. The Company undertakes no obligation to publicly update or revise any forward-looking statement, except as required by applicable securities laws.

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