PyroGenesis Signs 2-Stage Contract for a Land-Based Plasma Waste-to-Energy System

July29, 2024

$2 million preliminary design stage to be completed by Q3 2025

MONTREAL, July 29, 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, further to its news release dated July 2, 2024, it has signed a 2-stage contract to complete a land-based Plasma Waste-to-Energy System for a European entity. The first stage consists of a conceptual and preliminary design phase for approximately $2 million (€1.3 million) which commences in Q3 2024 and is scheduled to last no more than one year. The purpose of the design phase is to confirm, and more precisely determine, the order of magnitude cost estimate of the system's construction, which shall range between $120-160 million (€80-105 million) depending on the system's capacity and the selected by-product. In addition, during this phase, the Company will further establish the initial framework for the project through feasibility assessments, scope definition, and risk identification. Should this first stage prove successful, then the parties are committed, subject to (a) final financing allocation and (b) terms and conditions of the second stage agreement (which is dependent on the results of the design phase), to move forward with the project. The design of the Plasma Waste-to-Energy System is based on the Company's Plasma Resource Recovery System (PRRS), a waste-to-energy technology that eliminates toxic compounds while transforming waste into reusable products such as syngas and chemicals such as methanol. The client is a European consortium that shall remain anonymous for competitive and confidentiality reasons.

PyroGenesis' PRRS system is designed to process municipal solid waste (MSW), industrial waste, and hazardous waste (liquid, solid, and sludge), transforming such into commercially valuable products, which include gaseous fuel for electricity and heat generation, slag, aggregates suitable for construction, and recoverable metals for recycling. Based on technology originally developed by the Company for the US Department of Defense, the PRRS harnesses the power of plasma to provide industry, municipalities and the defense sector with a comprehensive, all-encompassing solution to waste management, while producing much-needed clean energy to meet that growing need. The flexible, versatile PRRS platform can process virtually any form of waste and generate clean energy and marketable construction materials, eliminating the need for landfills. The PRRS is available in capacities ranging from 1 to 100 metric tonnes per day of processing. The client intends to use the Plasma Waste-to-Energy System to transform MSW into both energy and chemical products.

"As European legislation concerning high carbon footprint/emission technologies, such as incineration, continues to become more restrictive, we are seeing a parallel uptick in interest in our PRRS and similar systems. This was not the first request for proposal we had received for similar sized systems from Europe," says P. Peter Pascali, President and CEO of PyroGenesis. "We are extremely confident that we will be able to meet the requirement set out in the design phase, and moreover we look forward to successfully completing this project and replicating the result wherever carbon emissions and landfills are under pressure."

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 m^2 and 2,940 m^2 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.

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