



PyroGenesis and Constellium Sign Letter of Intent for Large-Scale Plasma Remelting Furnaces

April 10, 2024

Agreement to investigate potential replacement of fossil fuel burners in aluminum remelting furnace follows successful results from test furnace trials in 2023.

MONTREAL, April 10, 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 it has signed a collaboration agreement (the "LOI") with Constellium, one of the world's largest aluminum transformation and recycling companies, to develop plasma torches and associated processes as suitable heating sources for aluminum remelting furnaces. This announcement is further to the Company's press releases dated [April 20, 2022](#), and [March 31, 2023](#), which provided updates on its aluminum business offerings, and after the recent successful completion of an initial joint evaluation of plasma technology in aluminum melting test furnaces.

PyroGenesis and Constellium have agreed to implement an industrial scale aluminum remelting furnace, which would serve Constellium's decarbonization strategy. The project would consist of two phases: i) conducting feasibility studies and engineering; and ii) implementing a demonstrator plasma-heated furnace system in one of Constellium's aluminum casthouses.

"PyroGenesis was proud to host and work with the scientific team from Constellium during this important test campaign over the last several quarters. The results from this campaign have led to today's agreement to move forward with a planned scale-up to a full-size furnace at one of Constellium's casthouses," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "PyroGenesis is quickly becoming the go-to plasma solution company for key players in heavy industry as they seek solutions to meet their global decarbonization strategies. Constellium is one of the best examples of a global industry leader who is evaluating PyroGenesis' electric plasma torches as a fuel-switching possibility. We expect that with the energy transition trend only getting started, that others will follow the lead of influential and respected companies like Constellium."

"As part of our decarbonization roadmap, Constellium has been evaluating various solutions to support the decarbonization efforts within our aluminium cast houses," said Mr. Ludovic Piquier, Senior VP Manufacturing Excellence and Chief Technical Officer of Constellium. "We are delighted with the robust research and development collaboration alongside PyroGenesis, which culminated in a successful plasma test campaign at their facility. Our technical experts, hand in hand with their PyroGenesis peers, were able to demonstrate the highly promising potential of plasma torch applications in our cast house furnaces. This fruitful collaboration has paved the way for our next phase of partnership as we transition to a significantly larger furnace and facility."

The Company's development of plasma torches for use in high temperature furnaces is part of the Company's [three-tiered solution ecosystem](#) that aligns with economic drivers that are key to global heavy industry. Plasma torches for aluminum melting furnaces are part of the Company's **Energy Transition & Emissions Reduction** tier, where fuel switching utilizing the Company's electric-powered plasma torches helps heavy industry reduce fossil fuel use and greenhouse gas emissions.

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.

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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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