

PyroGenesis Announces Participation in Decarbonization "Fuel-Switching" Project with Major International Aluminum Company

November 3, 2022

Project to Investigate PyroGenesis' Plasma Torch Adoption in Aluminum Cast House Furnaces

MONTREAL, Nov. 03, 2022 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY), a high-tech company (hereinafter referred to as 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 press release dated April 20th, 2022 which provided an update on its Aluminum Business offerings, the Company has been engaged by a major international aluminum company to help in their decarbonization efforts, with a specific goal to investigate the feasibility of applying PyroGenesis' plasma torches as a heating source in their cast house furnaces (the "Client"). At the request of the Client, and for competitive reasons, the Client's name will remain confidential. The Client is one of the largest aluminum companies worldwide, active across multiple continents.

Figure 1



Picture Sourced from Shutterstock - Blast Furnace with Molten Aluminum

PyroGenesis and the Client have already signed a contract (the "Agreement") to perform a computational fluid dynamics (CFD) study to gather data and evaluate plasma for use in a production scale furnace to be installed at one of the Client's sites. This study is well underway.

"This Agreement is a major step as it is the first with this Client whose standing within the global aluminum industry is almost unparalleled," said Mr. P. Peter Pascali, CEO and Chair of PyroGenesis. "Few companies within the sector have such a positive and progressive reputation for driving the industry forward with new and better approaches. We are proud to be under consideration as part of their global strategy to help with their decarbonization efforts. This is one of many companies that we are working with, who have publicly acknowledged a need to reduce emissions and are constantly working to develop aluminum alloys with a low carbon footprint."

"PyroGenesis' plasma torches, which are powered entirely with electricity, is one of the options they are evaluating as a potential replacement for carbon-emitting natural gas burners in their furnaces," added Mr. Pascali. "All this to say that PyroGenesis' torch offerings are being considered by more and more sophisticated players, as a fuel-switching solution to their environmental issues, and this we can be very proud of."

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 certain forward-looking statements, including, without limitation, statements containing the words "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "in the process" and other similar expressions which constitute "forward-looking information" within the meaning of applicable securities laws. Forward-looking statements reflect the Company's current expectation and assumptions and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These forward-looking statements involve risks and uncertainties including, but not limited to, our expectations regarding the acceptance of our products by the market, our strategy to develop new products and enhance the capabilities of existing products, our strategy with respect to research and development, the impact of competitive products and pricing, new product development, and uncertainties related to the regulatory approval process. Such statements reflect the current views of the Company with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Company's ongoing filings with the securities regulatory authorities, which filings can be found at www.sedar.com, or at www.sec.gov. Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Company undertakes no obligation to publicly update or revise any forward-looking statements either as a result of new information, future events or otherwise, except as required by applicable securities laws. Neither the Toronto Stock Exchange, its Regulation Services Provider (as that term is defined in the policies of the Toronto Stock Exchange) nor the NASDAQ Stock Market, LLC accepts responsibility for the adequacy or accuracy of this press release.

For further information please contact: Rodayna Kafal, Vice President, IR/Comms. and Strategic BD Phone: (514) 937-0002, E-mail: ir@pyrogenesis.com

RELATED LINK: http://www.pyrogenesis.com/

A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/f9233789-ffb1-4230-be6f-c9cd87c2fa0b