

PyroGenesis Contracts with Global Mining Supply Company to Examine Novel Use of Plasma in Decarbonization Process

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MONTREAL, April 17, 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) and address environmental pollutants, is pleased to announce that it has entered into an agreement with a global leader in mining parts manufacturing (the "Client") to assess the applicability of PyroGenesis' fully electric plasma torches in the Client's metal cast houses. As the Company announced in its recent year-end earnings report, the Company had been in advanced discussions with the Client. The Client's name shall remain anonymous for competitive and confidentiality reasons.

The Client, a billion-dollar entity with facilities on five continents, is one of the world's largest manufacturers of products that serve the mining and defense industries, amongst others.

This agreement outlines the steps necessary to generate relevant data from a PyroGenesis plasma torch test, in anticipation of having it possibly replacing burners in the Client's legacy system that emits significant CO₂. The Client, a significant carbon emitter, hopes this initiative will support its energy-transition/decarbonization goals and address an emissions problem facing the industry as a whole. PyroGenesis' engineering team are confident that they will be able to propose a solution to this problem.

The test contemplated by this initial engagement should be completed within the next 10 weeks. Should the test prove successful, it is expected that the Client will move to step 2, which envisions producing a complete plasma torch-based system on-site to replace an existing fossil fuel burner. Such a system would include a PyroGenesis plasma torch as well as the accompanying manipulation/handling components. Step 2 would take approximately 6 months depending on the delivery time of a specific long lead item (the power supply) and generate approximately US\$500,000-\$1,000,000 in revenues to PyroGenesis. It is estimated that the industry has thousands of such burners in operation world-wide.

"This agreement, in addition to being yet another example of the fast-growing shift taking place across heavy industries who are all being challenged to decarbonize, has a unique use aspect," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "Although initially small in value, this contract has the potential to have our plasma torch offering being considered as a solution to a particular carbon emitting process that seems to be plaguing the industry as a whole. The fact that our engineering team is confident that they will substantiate the first step is also very encouraging. Separately, we are in receipt of a number of such requests asking us to consider plasma as a way to decarbonize legacy processes. Although we do not expect to be the solution to every request, we take comfort from the fact that our reputation and expertise has provided us a position at the table."

The Company's development of plasma torches is part of the Company's three-tiered solution ecosystem that aligns with economic drivers that are key to global heavy industry. The use of plasma torches within manufacturing facilities is part of the Energy Transition & Emission Reduction tier, where fuel switching to 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 proud leader in the design, development, manufacture and commercialization of advanced plasma processes and sustainable solutions which reduce 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 3,800m² and 2,940m² 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.

Cautionary and Forward-Looking Statements

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.

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