



PyroGenesis Signs Initial Energy Transition Contract with One of the Largest Multinational Steel Manufacturers

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Goal is to consider plasma use in steel production process

MONTREAL, Nov. 19, 2024 (GLOBE NEWSWIRE) -- PyroGenesis Inc. ("PyroGenesis") (<http://pyrogenesis.com>) (TSX: PYR) (OTCQX: PYRGF) (FRA: 8PY), a high-tech company that designs, develops, manufactures and commercializes advanced plasma processes and sustainable solutions which are geared to reduce greenhouse gases (GHG) and address environmental pollutants, announces that it has signed a contract with one of the three largest steelmakers in the world to assess the applicability of PyroGenesis' fully electric plasma torches for use in part of the customer's electric arc furnace (EAF) steelmaking and casting process. The client has previously been referred to as Client C and is one of the world's largest companies in both steelmaking and iron ore pelletization. The client's name shall remain anonymous for competitive and confidentiality reasons.

As outlined in its recent third quarter financial results, PyroGenesis has been working with Client C over the past few years on various initiatives related to using plasma in decarbonization. Recently, PyroGenesis was awarded official supplier status to Client C, as part of an impending initiative which is announced today.

The project agreement outlines the steps for analyzing plasma torches in support of the client's energy-transition goals, with a duration of approximately 60-90 days, commencing in Q4 2024.

"Client C has taken a methodical approach to its decarbonization initiatives, and we are very pleased our work with them over the past few years has led to official supplier status for PyroGenesis, and resulted in this initial engagement," said P. Peter Pascali, President and CEO of PyroGenesis. "Steelmaking is an industry where we continue to make inroads and which we believe offers enormous global potential for plasma use."

The client's goal is to determine how plasma can be used following the EAF process which turns scrap metal, and direct reduced iron (DRI), into molten steel. By using electricity in EAFs, the process offers the steelmaking industry a significantly lower carbon footprint with at least 75% less CO₂ emissions vs the traditional blast furnace method that burns coking coal or "coke".ⁱ Direct emissions from EAF are negligible, particularly if the electricity is sourced from renewable energy. As of 2021, steelmaking using EAF accounted for 30% of global steel production.ⁱⁱ Planned steelmaking capacity based on EAF is now 43%.ⁱⁱⁱ

PyroGenesis' development of plasma torches for use in high temperature applications are part of its [three-tiered solution ecosystem](#) that aligns with economic drivers that are key to global heavy industry. Plasma torches for furnace burners are part of its **Energy Transition & Emissions Reduction** vertical, where fuel switching to its electric-powered plasma torches helps heavy industry reduce fossil fuel use and greenhouse gas emissions.

About PyroGenesis

PyroGenesis, a high-tech company, is a proud 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. PyroGenesis' shares are publicly traded on the TSX in Canada (TSX: PYR), the OTCQX in the US (OTCQX: PYRGF), and the Frankfurt Stock Exchange in Germany (FRA: 8PY). 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.

Forward-looking statements are necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by PyroGenesis 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 PyroGenesis' latest annual information form, and in other periodic filings that it has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under PyroGenesis' profile on SEDAR+ at www.sedarplus.ca. These factors are not intended to represent a complete list of the factors that could affect PyroGenesis. 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. PyroGenesis undertakes no obligation to publicly update or revise any forward-looking statement, except as required by applicable securities laws.

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ⁱ <https://steelnet.org/sustainability/#:~:text=Significantly%20more%20energy%20efficient%20than,process%20isn't%20anything%20new>

ⁱⁱ <https://worldsteel.org/wp-content/uploads/Fact-sheet-raw-materials-2023.pdf>

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