

PyroGenesis Successfully Completes all Torch Tests for RISE Energy Technology Center AB

MONTREAL, QUEBEC (GlobeNewswire – March 4th, 2020) - PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX-V: PYR) (OTCQB: PYRNF) (FRA: 8PY), a high-tech company, (the "Company", the "Corporation" or "PyroGenesis") that designs, develops, manufactures and commercializes plasma atomized metal powder, plasma waste-to-energy systems and plasma torch products, announced today that, further to its previous press release dated November 4th, 2019, the Company has completed all torch tests successfully, and has received final payment from RISE Energy Technology Center AB (the "Client")

This contract, originally announced in January of last year, is for a 900-kW plasma torch system which was won in a competitive bid process.

PyroGenesis' 900-kW plasma torch is used to replace fossil fuel burners in the iron ore induration (pelletization) process. Pelletization is the process in which iron ore is concentrated before shipment, thus significantly reducing the cost of transportation. In conventional technology, the process heat is provided by fuel oil or natural gas burners. The combustion, in the burners, of fossil fuels results in the production of greenhouse gases, mainly CO₂. Plasma torches, by the fact that they can convert renewable electricity to heat offer an environmentally attractive alternative to fossil fuel burners

Following the success of the SAT (Site Acceptance Test) of the high-power plasma torch at the Client's facility in Sweden, a series of additional torch tests were performed at the client's site. As announced, these tests have concluded successfully, and discussions are now taking place for follow on work and additional torch orders.

According to management, a typical pellet plant producing 10 million metric tonnes of pellets annually emits approximately one million metric tonnes of CO_2^1 . The total world pellet production of 400 million metric tonnes of pellets represents a potential market for torch sales in excess of \$10B worldwide. The world pellet industry generates about 40 million metric tonnes of CO_2 every year. The use of plasma torches running off a clean electrical grid would reduce these emissions significantly. For reference, 40 million tonnes of CO_2 represent the combined yearly emissions of 8.7 million US passenger vehicles².

As a result of this success, PyroGenesis has received numerous requests for proposals from potential clients in the field, and recently signed a small order from a multi-billion-dollar international producer of iron pellets. This order is to model and evaluate the performance of PyroGenesis' torch in an existing industrial furnace. If successful, this would potentially lead to a multi-torch order aimed at replacing burners in their

¹ M. Huerta, J. Bolen, M. Okrutny, I. Cameron and K. O'Leary, "Guidelines for Selecting Pellet Plant Technology", Iron Ore Conference 2015 Proceedings, Perth, WA, July 13-15, 2015

² <u>https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle</u>

industrial pelletizing plant. An iron pelletizing furnace typically uses dozens of high-power burners (typically between 1-5 MW).

"Our success with RISE has demonstrated to the industrial manufacturing sector that our Plasma Torches represent an opportunity to significantly cut GHG emissions through a simple bolt-on replacement of their current fossil fuel burners," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "Given how compelling our torch offering is, particularly in light of the environmental pressure the industry is under (only recently a new trend has emerged where financial institutions are tying credit facilities and debt issuances to carbon reduction targets for multi-national industrial and mining conglomerates) we expect the demand for our torches to grow exponentially."

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is the world leader in the design, development, manufacture and commercialization of advanced plasma processes and products. We provide engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working out of our Montreal office and our 3,800 m2 manufacturing facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Our core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Our operations are ISO 9001:2015 and AS9100D certified, and have been since 1997. PyroGenesis is a publicly-traded Canadian Corporation on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace. For more information, please visit <u>www.pyrogenesis.com</u>.

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 Corporation'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 Corporation with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Corporation's ongoing filings with the securities regulatory authorities, which filings can be found at www.sedar.com, or at www.otcmarkets.com. Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Corporation 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 TSX Venture Exchange, its Regulation Services

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For further information please contact:

Rodayna Kafal, Vice President Investors Relations and Strategic Business Development Phone: (514) 937-0002, E-mail: ir@pyrogenesis.com

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