PyroGenesis Successfully Completes 900-kW Plasma Torch Site Acceptance Test at RISE Energy Technology Center AB's Facility

MONTREAL, Quebec (GlobeNewswire – October 17th, 2019) - 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 previous press releases with respect to the Swedish torch contract (January 7th, January 17th, February 21st , and September 18th, 2019), the Company has successfully performed the Site Acceptance Test ("SAT") at RISE Energy Technology Center AB's (the "Client") facility.

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

Following the success of the Factory Acceptance Test last month, PyroGenesis' team performed the SAT of the high-power plasma torch at the Client's facility in Sweden where the torch has been installed and operated under the Client's parameters. After this successful SAT, the torch has been installed on the Client's reactor, upon which a series of tests will be conducted within two (2) weeks. Furthermore, a milestone payment of approx. $345K is expected to be received within the next two (2) weeks. A final payment is also expected towards the end of month once all tests are completed.

Of note, PyroGenesis' 900-kW plasma torch is to be 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 diesel/fuel burners. The combustion, in the burners, of natural gas, heavy oil and/or pulverized coal results in the production of greenhouse gases such as CO_2. Plasma torches are therefore an environmentally friendly alternative.

According to management a typical pellet plant producing 10 million metric tonnes of pellets annually, emits approximately one million metric tonnes of CO2. The total world pellet production of 400 million metric tonnes of pellets corresponds to the production of about 40 million metric tonnes of CO_2, and represents a potential market for torch sales in excess of $10B worldwide.

"As previously mentionned, the success of this testing paves the way for a significant business opportunity for PyroGenesis in developing zero carbon emission technologies. This torch is being

used to address a particular segment of the Swedish government's commitment to zero carbon emissions; specifically, that within the iron ore pelletization industry. The goal is to replace the traditional diesel burners used in iron ore pelletization with plasma torches," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "Our plasma torch expertise, which we consider to be one of the largest, if not the largest, concentration of plasma expertise under one roof, has enabled us to deliver this high-power plasma torch (~ 1 MW range) in only 9 months, and to very exacting design requirements. This contract is aimed at developing fossil-free energy-mining-iron-steel value chains and thereby provides a basis for governance and industrial strategies for transformative change across all of Sweden. We are proud to be playing a significant, and leadership, role in Sweden's zero carbon emission policy."

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 m^2 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 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 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

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For further information please contact:

Rodayna Kafal, Vice President Investors Relations and Strategic Business Development, or
Clémence Bertrand-Bourlaud, Marketing Manager/Investor Relations,
Phone: (514) 937-0002, E-mail: ir@pyrogenesis.com

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