



## **PyroGenesis Successfully Completes First Phase of Torch Modelling Geared to Reducing Greenhouse Gases for Major Iron Ore Pelletization Client**

**MONTREAL, Quebec (GlobeNewswire – April 30, 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 systems, is pleased to announce today that, further to its press release dated March 4<sup>th</sup>, 2020, it has successfully completed the first phase (the "First Phase") of a multi-phase modeling contract aimed at evaluating the performance of PyroGenesis' proprietary torches in an existing iron ore industrial furnace with the goal of replacing all existing fossil fuel burners with PyroGenesis' plasma torches. All phases will be completed by the end of Q2 2020. The client is a multi-billion-dollar international producer of iron ore pellets (the "Client"), one of the largest in the industry, whose name will remain confidential for competitive reasons. The Client has over 10 plants each requiring approx. 50 plasma torches.

This all important First Phase demonstrated that replacing fossil fuel burners with PyroGenesis' proprietary plasma torch (i) has absolutely no ancillary detrimental effects anywhere in the process or with the furnaces, (ii) results in significant greenhouse gas reduction while at the same time, (iii) projecting significant cost savings.

This contract consists of evaluating the performance of PyroGenesis' proprietary torches in the Client's industrial furnace. The First Phase results confirm that replacing fossil fuel burners with PyroGenesis' proprietary plasma torches will not have any detrimental effects on the Client's process or their furnaces and, more importantly, will result in a CO<sub>2</sub> reduction in excess of 350,000 tons per year per plant (which is equivalent to removing 76,000 cars<sup>1</sup> from the road), while at the same time projecting significant cost savings. The Client has over 10 plants, each requiring approx. 50 torches. Each torch will generate up to \$3M of revenue to PyroGenesis. The subsequent modelling phases will further quantify the benefits of transitioning to plasma. All phases will be completed by the end of Q2, 2020.

"This is a very significant development with a very significant player in the industry," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "We have effectively demonstrated that by using our proprietary plasma torch to replace the environmental damaging fossil fuel burners, not only will there be a significant reduction in greenhouse gases but there will also be significant cost savings (avoiding future carbon taxes alone is noteworthy), and all without any detrimental effect anywhere in the process. How many process changes can boast of that trifecta?"

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<sup>1</sup> The USEPA estimates that the average passenger vehicle emits 4.6 tons per year of CO<sub>2</sub>.

Pelletization is the process in which iron ore is concentrated before shipment, thus significantly reducing the cost of transportation. In conventional technologies, the process heat is provided by fuel oil or natural gas burners (both environmentally damaging). The combustion, in the burners, of fossil fuels results in the production of greenhouse gases, mainly CO<sub>2</sub>. Plasma torches, by contrast, utilize renewable electricity and as such offer an environmentally attractive alternative to fossil fuel burners.

“Since our success with RISE, noted in our press release dated March 4<sup>th</sup>, 2020, most major iron ore pelletization producers have reached out to us, as have several producers from the metallurgical industry,” said Mr. Pascali. “This has resulted in several modelling proposal requests, however, what I find most exciting is that in recent weeks the interest in our torch capabilities has also come to include significant steel producers, and these discussions have been moving forward at a rapid pace as well. All this interest is from producers that use natural gas and heavy fuel oil burners and want alternatives to help them meet greenhouse gas reduction targets/policies. We find that the proposition to reduce greenhouse gases emissions, and avoid carbon taxes, with a simple bolt-on replacement of their current environmentally damaging fossil fuel burners, is too compelling to resist. That, combined with the environmental pressure these industries are currently 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), has generated a wave of interest and proposals.”

### **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<sup>2</sup> 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](http://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*

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