



PyroGenesis Receives \$194 K Grant to Develop a Waste Recovery Process by Plasma Gasification That Will Significantly Contribute to Landfill and Climate Change Control Efforts

MONTREAL, QUEBEC (GlobeNewswire – March 17th, 2021) -- PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY), a high-tech Company (hereinafter referred to as the “Company” or “PyroGenesis”), a Company that designs, develops, manufactures and commercializes plasma atomized metal powder, environmentally friendly plasma waste-to-energy systems and clean plasma torch products, is pleased to announce that it has received a grant of \$194,090 from the Ministry of the Economy and Innovation, through the [Support for innovation projects component of the Innovation program](#), administered by Investissement Québec.

The goal of this project is to develop a solution to recover the residues of pot lining, which are produced in the primary aluminum industry and which are considered dangerous. PyroGenesis will play an important role in eliminating the landfill of this material and potentially other industrial by-products, in addition to significantly reducing specific greenhouse gas (GHG) emissions. This process may also be applicable to reducing the environmental footprint in other industries. PyroGenesis is working in partnership with the largest aluminum smelter in the Americas, Aluminerie Alouette, a company based in Sept-Îles, Quebec.

Currently, the various solutions for recycling and recovering these hazardous materials on a global scale are limited and expensive. By way of example, chemical treatment processes only achieve a recovery rate of approximately 80%.

PyroGenesis, with a commitment to sustainable development is now working to develop a process that would transform spent pot lining residues into a fuel that is lower in carbon, and as well as into materials that are inert and reusable, thus generating significant benefits for the environment. In addition, the resulting reduction in direct costs, combined with the advantages of the process developed by PyroGenesis, should give users of this new process a significant economic advantage in the marketplace.

“Managing the hazardous residues from spent pot lining residues is a challenging issue facing the aluminum industry,” said Mr. Pierre Carabin, Chief Technology Officer and Chief Strategist at PyroGenesis. “According to the Company’s internal calculations, we estimate the global value of spent pot lining recovery at approx. \$3 billion. If successful, this project will be another PyroGenesis offering aimed at improving the environment through landfill and GHG reduction.”

According to industry figures¹, 15 to 35 kg on average of spent pot linings are generated per ton of aluminum produced. An estimated 1.5 million tons of spent pot linings are produced annually worldwide, and the majority of these residues are landfilled or stored, awaiting a technological solution. If PyroGenesis' proposed process is successful, it could be the answer to a problem plaguing the aluminum industry.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is a leader in the design, development, manufacture and commercialization of advanced plasma processes and products. The Company provides its engineering and manufacturing expertise and its turnkey process equipment packages to customers in the defense, metallurgical, mining, advanced materials (including 3D printing), and environmental industries. With a team of experienced engineers, scientists and technicians working out of its Montreal office and its 3,800 m² manufacturing facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. The Company's core competencies allow PyroGenesis to provide innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. PyroGenesis' operations are ISO 9001:2015 and AS9100D certified. 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 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.sec.gov. 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

¹ <https://primary.world-aluminium.org/aluminium-facts/emissions-waste/>

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