
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES
EXCHANGE ACT OF 1934**

For the month of August 2023

Commission File Number: **001-39989**

PYROGENESIS CANADA INC.
(Translation of registrant's name into English)

**1744, William St. Suite 200
Montreal, QC, H3J1R4
Canada**
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F [] Form 40-F [X]

On August 1, 2023, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

EXHIBIT INDEX

Exhibit Number **Description**

[99.1](#) [Press Release dated August 1, 2023](#)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PYROGENESIS CANADA INC.

(Registrant)

Date: August 1, 2023

/s/ P. Peter Pascali

P. Peter Pascali
Chief Executive Officer

PyroGenesis Signs \$4.1 Million Contract for 4.5MW Plasma Torch System with Aeronautics and Defense Client as Demand for Clean Energy Expands Across Heavy Industry

MONTREAL, Aug. 01, 2023 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY), a TSX30 and a Deloitte Canada Clean Technology Fast 50™ company (the “Company” or “PyroGenesis”) that designs, develops, manufactures and commercializes advanced plasma processes and sustainable solutions which are geared to reduce greenhouse gases (GHG), is pleased to announce the receipt of a contract valued at approximately \$4.13 million (US\$3.13 million) (the “Contract”) from a U.S. corporation (the “Client”). The name of the Client will remain anonymous for confidentiality reasons. The Client has extensive experience as an innovation hub, providing technology and test services to solve critical defense, military, and aeronautics challenges. The Client is home to some of the most renowned scientists in the world, who collectively have contributed to a variety of landmark achievements in US history, especially in aeronautics. Separately, the Client’s facilities house unique full-scale test conditions considered essential to U.S. national security.

The Client regularly serves as a prime contractor for the U.S. government as well as for public and private customers in the aeronautics and related industries. The contract is for a 4.5 MW plasma torch system and includes a 20% upfront payment plus an additional 15% payment once the initial technical drawings are delivered, which is expected to be completed in approximately one month. Due to confidentiality requirements, the specific purpose and application of PyroGenesis’ proprietary plasma torch system delivered under this agreement cannot be disclosed.

“The Company’s development of plasma torches for use in high temperature applications is part of the Company’s three-tiered solution ecosystem that aligns with economic drivers that are key to global heavy industry. Plasma torches as a high and ultra-high temperature application are part of the Company’s **Energy Transition & Emissions Reduction** tier, where fuel switching to the Company’s electric-powered plasma torches helps heavy industry reduce fossil fuel use and greenhouse gas emissions,” said Mr. P. Peter Pascali, CEO and President of PyroGenesis.

According to the U.S. Department of Energy, heating is the process responsible for the largest energy demand and greenhouse gas emissions in the manufacturing sector. In 2018, process heating accounted for 51% of the energy used onsite and 31% of the energy-and process-related GHG emissions sector-wide.¹ Since about one-third of the energy consumed in process heating is ultimately lost as waste heat, innovative heating methods have the potential to improve overall energy efficiency.

“This specific contract for a PyroGenesis’ developed 4.5 MW plasma torch system reflects the potential suitability of PyroGenesis’ technology as a solution for significantly more challenging high, and ultra-high, temperature process-heating needs, specifically within aerospace, defense, and certain heavy industries,” continued Mr. Pascali. “As a result, this contract positions us well to expand our capabilities into other industries requiring high temperature technology but at an appreciably higher power level, such as glass, cement, petrochemical, metal heating and melting industries – a requirement that is becoming more common as global energy transition measures, and the demand for unique high power heat applications, accelerate. The critical nature and the advanced science involved in this Client’s application underscores the regard that clients have for PyroGenesis’ scientific and engineering capabilities.”

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., 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 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. 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 the Company 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 the Company’s latest annual information form, and in other periodic filings that the Company has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under the Company’s profile on SEDAR at www.sedar.com, or at www.sec.gov. These factors are not intended to represent a complete list of the factors that could affect the Company. 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. The Company undertakes no obligation to publicly update or revise any forward-looking statement, except as required by applicable securities laws.

Neither the Toronto Stock Exchange, its Regulation Services Provider (as that term is defined in the policies of the Toronto Stock Exchange) nor the NASDAQ Stock Market, LLC accepts responsibility for the adequacy or accuracy of this press release.

For further information please contact:

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RELATED LINK: <http://www.pyrogenesis.com/>

¹ <https://www.energy.gov/eere/iedo/decarbonizing-process-heat>