



PyroGenesis Signs Plasma-Based Contract With Leading Battery Recycler

December 11, 2025

Project will test the use of plasma in the recovery of critical minerals from end-of-life batteries

MONTREAL, Dec. 11, 2025 (GLOBE NEWSWIRE) -- PyroGenesis Inc. ("PyroGenesis") (TSX: PYR) (OTCQX: PYRGF) (FRA: 8PY1), the leader in ultra-high temperature processes and engineering innovation, and a plasma-based technology provider to heavy industry & defense, announces today the recent signing of a contract with a company engaged in large-scale battery recycling, for the testing of high-temperature plasma during the material recovery and new battery production process. The client is one of the largest of its kind in the world. The client's name and the total value of the project are being withheld for competitive and confidentiality reasons.

PROJECT HIGHLIGHTS

Purpose: using plasma to replace fossil fuel heating during lithium-ion battery recycling.

Scope: testing of PyroGenesis' plasma technology for superheating materials as part of the process to recover certain cathode or anode materials from end-of-life batteries.

Timeline: Q4 2025 to Q1 2026.

Strategic Impact: supports end customer goals to achieve all-electric operations for a cleaner, more sustainable supply chain for reusable battery material, reducing the reliance on new mining activities, and providing a second life for EV batteries which, when retired, can have years of usable capacity left or be disassembled for material recovery. With the demand for lithium-ion batteries, especially for EVs, rapidly increasing, the volume of end-of-life lithium-ion batteries has the potential to reach 20,500 kilotons by 2040 from 900 kilotons in 2025, growing at an annual rate of 25%. This emphasizes the need for effective recycling and repurposing strategies.¹

As previously reported in the Outlook section of PyroGenesis' 2nd quarter earnings report, PyroGenesis had been in negotiations with a North American battery material recycler. The contract announced today is for a testing program to examine how plasma can be used in the recovery of cathode and anode materials from end-of-life lithium batteries.

The client is among the world's largest recyclers of batteries. Extensive research and development by the client has proven the recovery potential of key minerals from batteries such as nickel, cobalt, copper, and various oxides such as lithium.

"As the use of lithium-ion batteries increases, and as the previous generation of electric vehicle batteries begin to reach their end of life, it is imperative that closed-loop remediation systems, that can recover viable minerals to produce new battery material, become more widely utilized," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "Companies like our client, who are using advanced technology while placing emphasis on all-electric processes – including those that may benefit from PyroGenesis' plasma – will help battery and vehicle manufacturers shield themselves against volatile raw material pricing and critical mineral access while reducing carbon footprint and improving efficiency. We are excited by the possibility of PyroGenesis playing a role in the future of battery and critical mineral recycling."

About PyroGenesis Inc.

PyroGenesis leverages 34 years of plasma technology leadership to deliver advanced engineering solutions to energy, propulsion, destruction, process heating, emissions, and materials development challenges across heavy industry and defense. Its customers include global leaders in aluminum, aerospace, steel, iron ore, utilities, environmental services, military, and government. From its Montreal headquarters and local manufacturing facilities, PyroGenesis' engineers, scientists, and technicians drive innovation and commercialization of energy transition and ultra-high temperature technology. PyroGenesis' operations are ISO 9001:2015 and AS9100D certified, with ISO certification maintained since 1997. PyroGenesis' shares trade on the TSX (PYR), OTCQX (PYRGF), and Frankfurt (8PY1) stock exchanges.

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 PyroGenesis 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 PyroGenesis' latest annual information form, and in other periodic filings that it has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under PyroGenesis' profile on SEDAR+ at www.sedarplus.ca. These factors are not intended to represent a complete list of the factors that could affect PyroGenesis. 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. PyroGenesis 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 OTCQX Best Market accepts responsibility for the adequacy or accuracy of this press release.

For further information contact ir@pyrogenesis.com or visit <http://www.pyrogenesis.com>

¹ <https://www.undp.org/sites/g/files/zskgke326/files/2025-01/analysis-of-ev-battery-end-of-life.pdf>