PyroGenesis' Plasma-Based SPARC™ System Officially Unveiled at Launch of New Zealand's National Refrigerant Destruction Facility

March23, 2026

First of its type in the Southern Hemisphere

MONTREAL, March 23, 2026 (GLOBE NEWSWIRE) -- PyroGenesis Inc. ("PyroGenesis" or "the Company") (TSX: PYR) (OTCQX: PYRGF) (FRA: 8PY1), a leader in ultra-high temperature processes and engineering innovation, and a plasma-based technology provider to heavy industry & defense, announces that its plasma-based SPARC™ system was unveiled during the official launch of New Zealand's National Refrigerant Destruction Facility, on Friday March 20, 2026. The facility is the first of its type in the Southern Hemisphere and will use PyroGenesis' patented all-electric steam plasma arc ("SPARC") system to safely destroy up to 100,000 kg/yr of hazardous end-of-life synthetic refrigerants, such as CFCs, HFCs, and HCFCs. These gases have a combined Global Warming Potential of 220 million kilograms of carbon dioxide equivalent (CO_2e). Their destruction ends the potential for harm.

Image 1:

PyroGenesis' steam plasma arc (SPARC™) hazardous refrigerant destruction system, shown at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media

Image 2:

Local and national officials, along with client representatives from Cool-Safe New Zealand, and PyroGenesis' Lead Process Engineer Jean-René Gagnon (left), help cut the ribbon to announce the official opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

Image 3:

Chair of the Trust for the Destruction of Synthetic Refrigerants, Richard Lauder, speaks at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

Image 4:

PyroGenesis' engineering team José Urbina, Jean-René Gagnon, and Aidan Moir, stand in front of PyroGenesis' all-electric plasma-based SPARC™ system, at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media

Image 5:

Jean-René Gagnon, PyroGenesis' Lead Process Engineer, speaks at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

Image 1: PyroGenesis' steam plasma arc (SPARC™) hazardous refrigerant destruction system, shown at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

PyroGenesis was awarded the contract, valued at approximately $6 million, to design and build the SPARC™ system for New Zealand. This was part of a national initiative to address the climate impact of harmful refrigerant gases locally, rather than continuing the existing practice of collecting, storing, then transporting the gases to Australia for incineration.

Synthetic refrigerants are found in heat pumps, commercial refrigeration, and residential & commercial air conditioning systems. When those products are disposed of, the refrigerants contained within can leak into the environment and, as such, must be captured for treatment. With the opening of this new facility, New Zealand's end-of-life refrigerants will no longer need to be stockpiled and shipped offshore. Instead, they will be permanently and safely destroyed in New Zealand, using PyroGenesis' patented all-electric technology. Additionally, the facility is adjacent to geothermal plants, enabling the use of renewable energy to help power the operations and support an environmentally sustainable closed-loop system.

Image 2: Local and national officials, along with client representatives from Cool-Safe New Zealand, and PyroGenesis' Lead Process Engineer Jean-René Gagnon (left), help cut the ribbon to announce the official opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

Speaking at the facility opening in the town of Kawerau, Chair of the Trust for the Destruction of Synthetic Refrigerants, Richard Lauder, said: "This plant represents the beginning of a new chapter in advanced environmental stewardship and action on dealing with end-of-life refrigerants in Aotearoa New Zealand". Mr. Lauder discussed how refrigerants touch every corner of New Zealand, and reliance on them is growing exponentially – from home and commercial air-conditioning, healthcare, supermarkets and foodservice to logistics and temperature controlled "cold" supply chains. "Ultimately, to fully address the climate impact, these gases must be safely and permanently destroyed when they reach end-of-life. And now, that solution exists here in New Zealand." [1]

Image 3: Chair of the Trust for the Destruction of Synthetic Refrigerants, Richard Lauder, speaks at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

PyroGenesis' patented all-electric SPARC™ system uses inexpensive steam as the plasma-forming gas to generate a hydrolysis reaction which safely destroys ozone-depleting refrigerants, such as CFCs, HCFCs, HFCs, Halons, and PFCs. SPARC™ provides significantly reduced operating costs and carbon footprint, with cleaner operations and no incineration, when compared to processing or incineration which typically use more expensive gases and fossil fuels. The system is based on the technology platform originally developed by PyroGenesis for both the U.S. Navy and Air Force.

Image 4: PyroGenesis' engineering team José Urbina, Jean-René Gagnon, and Aidan Moir, stand in front of PyroGenesis' all-electric plasma-based SPARC™ system, at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

"Projects of this kind, that advance a cleaner, more sustainable environment, while streamlining logistics by reducing the storage and transport of hazardous materials, demonstrate how all-electric, plasma-based technology can deliver both environmental benefits and meaningful gains in operational efficiency," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "Refrigerants are crucial for cooling but have a global warning potential thousands of times that of CO_2. In fact, one kilogram of a common HFC refrigerant such as R-410A has approximately the same greenhouse effect as 2 tonnes (2,000 kg) of CO_2. With the opening of the National Refrigerant Destruction Facility, our SPARC™ system will be instrumental to the national initiative for the safe destruction of hazardous refrigerants in New Zealand and to the reduction of GHGs across the Southern Hemisphere."

Image 5: Jean-René Gagnon, PyroGenesis' Lead Process Engineer, speaks at the opening of New Zealand's National Refrigerant Destruction Facility. Photo Credit: Jamie Troughton/Dscribe Media.

About PyroGenesis Inc.

PyroGenesis leverages 35 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://coolsafe.org.nz/news/world-leading-plasma-torch-takes-aim-at-nzs-most-potent-greenhouse-gases

Photos accompanying this announcement are available at:

https://www.globenewswire.com/NewsRoom/AttachmentNg/5201d49c-d5de-4adf-bc08-5b4d5af523bf

https://www.globenewswire.com/NewsRoom/AttachmentNg/4c977ed4-d31d-4d56-a661-58fdd7ed5966

https://www.globenewswire.com/NewsRoom/AttachmentNg/69e3c3fb-654e-410b-bf64-dd4e28b4882b

https://www.globenewswire.com/NewsRoom/AttachmentNg/d81fd545-dcd9-472a-abc2-d3ebe2289bbd

https://www.globenewswire.com/NewsRoom/AttachmentNg/c6ea5e16-6b5e-489c-9e0d-43ce5bdae865