



PyroGenesis Receives \$700,000 Purchase Order for Three Plasma Torches

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To Be Utilized in Company's Waste Destruction System Currently in Use on US Navy Aircraft Carrier

MONTREAL, March 21, 2023 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY), a high-tech company (hereinafter referred to as 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 that the Company has received an order for three (3) waste-destructing plasma torches from the US Navy's shipbuilder, Newport News Shipbuilding.

The three plasma torches ordered are for the USS Gerald R. Ford aircraft carrier, the largest and most technologically advanced warship ever built¹, valued at approximately \$13 billion. The plasma torches are to be used in PyroGenesis' proprietary Plasma Arc Waste Destruction System ("PAWDS") that the Company [previously built and delivered](#) to the US Navy.

The USS Gerald R. Ford conducted its maiden mission² in fall 2022, during which the ship tested operational systems on board, including the Company's PAWDS. Following the mission's successful completion, Newport News Shipbuilding – the sole designer and builder of US Navy aircraft carriers – ordered the three additional plasma torches as well as ancillary components. The value of these new orders is approximately CA\$700,800 (US\$507,500). Final delivery is scheduled for Q3 2023.

"We are proud that PyroGenesis continues to be a supplier of choice for ultra-high temperature waste destruction solutions on US Navy aircraft carriers," said Mr. P. Peter Pascali, CEO of PyroGenesis.

[As previously reported](#), the Company's PAWDS is now in full operation on the newly launched USS Gerald R. Ford aircraft carrier – the first of four carriers the US Navy have contracted to have the Company's PAWDS system on board. In addition to the contracts for the USS Gerald R. Ford and USS John F. Kennedy, a further two-ship build contract with the US Navy [was awarded to the Company in 2020](#), for \$11.5 million, for the USS Enterprise and USS Doris Miller. The USS Enterprise began construction in 2022 with a launch expected in 2028³; the USS Doris Miller will follow.

The PAWDS is a compact, all-electric waste management system for combustible waste, designed for each of the first four Ford-class aircraft carriers scheduled to be built – the first new generation of carriers designed in 40 years⁴. The PAWDS can eliminate more than 400 pounds of diverse trash material per hour, including the plastic that traditional ship waste systems cannot not destroy. PAWDS reduces ships' trash – plastic, paper, food, and wood – to vapor, a key aspect, as without a waste destruction system of this caliber, ships would be forced to reduce operations, returning to port to off-load trash⁵. Land-based systems based on the PAWDS marine design – known as SPARC – are also offered by PyroGenesis as a land-based solution to waste management problems. The Company recorded its first SPARC sale recently when it announced a [contract awarded](#) by a New Zealand product stewardship organization undertaking the destruction of hazardous synthetic refrigerants.

Separately, PyroGenesis is pleased to announce today that Mark Paterson has joined the Company as General Counsel. Mr. Paterson is a senior business lawyer with comprehensive corporate and commercial experience, including in senior in-house roles as well as private practice. He has an extensive experience in a wide array of areas, including contract negotiations, M&A management, conflict resolution, human resources, and corporate/regulatory compliance. Mr. Paterson is a member of the Quebec bar and holds BCL and LLB degrees from McGill University. He also holds a B.A. from Bishop's University.

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 (GHG), 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.

This press release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of applicable securities laws, including, without limitation, statements regarding anticipated use of the net proceeds of the Private Placement. 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.

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¹ Up Close with the World's Largest Warship, Navy Lookout

<https://www.navylookout.com/up-close-with-the-worlds-largest-warship/>

² US Navy's latest and most advanced aircraft carrier deploys for first time, by Ellie Kaufman and Oren Liebermann, CNN. October 4, 2022

<https://www.cnn.com/2022/10/04/politics/uss-gerald-ford-deploys>

³ [https://en.wikipedia.org/wiki/USS_Enterprise_\(CVN-80\)](https://en.wikipedia.org/wiki/USS_Enterprise_(CVN-80))

⁴ CVN 78 – The Official Web Site of the USS Gerald R. Ford; Commander, Naval Air Force Atlantic (AIRLANT); An official web site of the United States Government.

<https://www.airlant.usff.navy.mil/cvn78/>

⁵ USS Gerald R. Ford's (CVN 78) Lesser-Known, Trash Disposal Technology, Plasma Arc Waste Destruction System, by Lt. Cmdr. Chris Buchanan, March 11, 2021.

<https://scnewsltr.dodlive.mil/Latest-Issue/Article-Display/Article/2612544/uss-gerald-r-fords-cvn-78-lesser-known-trash-disposal-technology-plasma-arc-was/>