

PyroGenesis Announces Q1 2017 Results: Cash Flow Positive on EBITDA (Adj.) Basis; Revenues Increase 67%; Gross Margins Increase to 52%; Current Backlog \$9.4MM.

MONTREAL, QUEBEC--(Marketwired – May 30, 2017) - PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX-V: PYR) (OTCQB: PYRNF), a high-tech company (the "Company" or "PyroGenesis") that designs, develops, manufactures and commercializes plasma waste-to-energy systems and plasma torch products, is pleased to announce today its financial and operational results for the first quarter ended March 31, 2017.

Q1 2017 results reflected the following highlights:

- Revenues increased 67% to \$1.7MM in Q1 2017 from \$1.0 MM posted in Q1 2016;
- Gross profit *after* amortization of intangible assets increased to 52% in Q1 2017, from 5.5% over the same period in 2016. (Gross profit *before* amortization of intangible assets increased to 52% in Q1 2017 from 29% over the same period in 2016);
- Most importantly, Q1 2017 was profitable on an EBITDA (adjusted) basis. Q1 2017 posted an EBITDA (adj.) of \$22.6K versus a EBITA (adj.) loss of \$649.5K;
- Over \$13.5MM in contracts were signed, and work begun on, since June 30, 2016 which, taken in context of historic revenues (2016: \$5.2MM; 2015: \$6.2MM; 2014: \$5.8MM) is quite significant. Backlog of signed contracts as of the date of this writing is \$9.4MM;
- Cash on hand at March 31st 2017 was \$1.3 MM (December 31st 2016: \$385K).

At year end 2016, we described the preceding twelve months as being a pivotal year for PyroGenesis as the Company shifted its focus away from being a fabricator of plasma-based systems that produced unique titanium powders, in favour of becoming a producer of metal powders for the Additive Manufacturing Industry (the "Industry"). Given their unique properties (pure, small, spherical, and uniform; which make them flow like water), these powders are greatly sought after in the Industry, particularly 3D printing. Given this strategic shift, together with the backlog of signed contracts from our non-additive manufacturing business ("Core/Traditional Lines of Business") of over \$13MM since June 30, 2016, we projected that 2017 was shaping up to be a break out year for PyroGenesis, and Q1 2017 has not disappointed.

The Company will be issuing an in depth update on the progress of its Powder Production business line within the next two weeks where a review will take place on all aspects of that

sector. Suffice it to say at this point that there have been no disappointments and we are very happy with the progress and developments to date.

What is key to note is that these results reflect revenues from what we call our Core/Traditional Lines of Business (ie no revenues from powder sales at all), however expenses reflect certain costs of building our first powder production system which came on stream in Q1 2017 and is, as previously announced, currently ramping up to full production.

We are more convinced than ever before that 2017 is the breakout year we have been positioning the Company for, for a number of reasons:

- The healthy gross margins established in 2016 (before consideration of the 2016 writeoffs), have improved, and are expected to continue to improve once powder production is in full swing;
- Established backlog of signed contracts, the majority of which are expected to be completed in 2017;
- Our Core/Traditional Lines of Business are poised to contribute significantly to the bottom line and be both profitable and significant in their own right.

The following is a non-exhaustive review of PyroGenesis' main commercial activities:

- A) <u>Powder Production</u>: The Company has met every milestone announced on the road to making metal powders for the Industry. It was recently announced that the assembly of the first powder production system was completed and that the first powder run exceeded expectations. The ramp up is under way and is expected to take place linearly over the ensuing months. As announced in recent press releases interest has far exceeded Managements' expectations and an initial contract was signed for a sample amount of powder. Also recently announced was the fact that the Company has signed a number of agreements with significant and potential players in the Industry reflecting various discussions regarding the possibility of concluding certain business relationships or transactions geared to the production of powders. The current system is the first of many PyroGenesis expects to make to address an increasing need for metal powders in the Industry¹.
- B) <u>DROSRITE™</u>: The DROSRITE™ Furnace System was proven out at a North American customer's Mexican facility during the first half of 2016. Soon thereafter, a successful demonstration of the DROSRITE™ System in the Middle East took place, following which an unsolicited request to exclusively market the process in the region was received and is currently being discussed. Management's belief that the supply and installation of the first commercial sale in North America would enable the Company to leverage this success to generate a continued flow of orders for additional DROSRITE™ systems is being borne out.

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¹ Wohlers Report 2016 (ISBN 978-0-9913332-2-6)

This recent flurry of activity and interest for the DROSRITE™ system bodes well for 2017 where we now expect to have at least 3 orders placed. We continue to expect the first follow on contracts to be signed in the 2nd half of 2017. The market potential for PyroGenesis' DROSRITE™ system, from Aluminium dross alone, exceeds \$400MM.

- C) <u>HPQ</u>: On August 2, 2016 PyroGenesis announced that it had signed contracts totalling CDN \$8,260,000 with HPQ Silicon Resources Inc., formally Uragold Bay Resources Inc. for the sale of IP and to provide a 200 metric tonne (MT) per year PUREVAPTM pilot system to produce silicon metal directly from quartz. This system will for the most part be constructed in 2017, with advancement of the contract accelerating in the second half of the year. According to percent completion accounting standards for revenue recognition the majority of these revenues will be recognized in the 2nd half of 2017. Of note, if successful, PyroGenesis benefits from a 10% royalty on all revenues derived from the use of this system by HPQ, subject to annual minimums.
- D) <u>Chemical Warfare Destruction System</u>: The Company recently announced that PyroGenesis has, in coordination with the US-based Southwest Research Institute (SwRI), successfully completed long-duration performance tests using the Company's tactical Plasma Arc Chemical Warfare Agents Destruction System ("PACWADS") using surrogate chemical warfare agent material. These tests supported the Defense Advanced Research Projects Agency (DARPA) Agnostic Compact Demilitarization of Chemical Agents (ACDC) program and far exceeded minimum requirements with over 99.9999% destruction efficiency. The PACWADS has, as of this writing, been delivered to the testing site and is currently going through final testing using real chemical warfare agents. These tests should be completed by the end of Q3 2017 (this timeline however is out of the Company's control). Again this bodes well for 2017 as we would expect additional contracts resulting from a successful completion of the final testing. However, no indication has been given as to the size, if any, such procurement would entail.
- E) Other Contracts: There are other contracts being discussed (such as a third order for a PAWDS for a New US Aircraft Carrier which is expected to be ordered sometime towards the end of 2017/beginning of 2018 with an estimated value of approximately \$6MM; SPARC system sales, amongst others) which give us confidence that 2017 will be the break out year.

Given the above, we expect a strong performance in the coming year, and based on existing contracts, the Company expects to be profitable in 2017 (excluding any contribution from powder sales) as noted above. Our projections for 2017 are only heightened by the reception we have received so far and how our entrance as a powder producer has been so well received by the Additive Manufacturing community.

Management remains focused on reducing PyroGenesis' dependency on long-cycle projects by developing a strategic portfolio of volume driven, high margin/low risk products that resolve

specific problems within niche markets, and doing so by introducing these plasma-based technologies to industries that have yet to consider such solutions.

Management is also actively targeting recurring revenue opportunities that will generate a growing, and profitable, regular cash flow to the Company.

PyroGenesis has one of the largest concentrations of plasma expertise in the world, with over 250 years of accumulated technical experience and 59 patents, combined with unique relationships with major Universities performing cutting edge plasma research and development, which positions the Company well to execute upon its various strategies.

Financial Summary

Revenues

The Company posted revenues of \$1,696,138 in the first quarter of 2017 ("Q1, 2017"), representing an increase of 67% compared with \$1,016,853 recorded in the first quarter of 2016 ("Q1, 2016"). Revenue recorded in Fiscal 2016 was generated primarily from (i) the sale of intellectual property and development of a vacuum arc reducing process to convert Silica into high purity Silicon metal, (ii) manufacture and further field testing of Tactical PACWADS, the first mobile plasma system for destruction of chemical warfare agents under contract with an international military consortium, (iii) the demonstration of the viability of PyroGenesis' existing plasma chemical warfare agent destruction platform with locally available materials, for the complete eradication of chemical warfare agents without creating hazardous by-products, and (iv) support services related to PAWDS-Marine systems supplied to the US Navy.

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was \$820,864 in Q1, 2017, representing an increase of 13% compared with \$723,256 in Q1, 2016. Total costs of sales and services, was \$820,264 representing a decrease of 24% compared with \$1,072,524 in Q1, 2016.

Various factors, including, but not limited to, the mix of long and short-term manufacturing projects, project complexity and scale, and project R&D content, may significantly impact both the composition and overall level of cost of sales and services reported in a given period, as the mix of labor, materials and subcontracts may be significantly different.

The costs incurred in Q1, 2017 are primarily attributable to the work completed under PyroGenesis' project to develop a vacuum arc reducing process to convert Silica into high purity Silicon metal, work completed on the tactical mobile plasma system for destruction of chemical warfare agents under contract with an international military consortium, and support services related to PAWDS Marine systems supplied to the US Navy.

Investment tax credits recorded against cost of sales are primarily related to client funded projects that qualify for tax credits from the provincial government of Quebec. Qualifying tax

credits increased to \$132,246 in Q1, 2017, compared with \$108,815 in Q1, 2016. This represents an increase of 22% quarter-over-quarter. The Company continues to make investments in research and development projects incorporating the involvement of strategic partners and government bodies.

In Q1, 2017, the gross margin before amortization of intangible assets was \$875,874, which represents 51.6% of revenue. This compares with a gross margin before amortization of intangible assets of \$293,597 (28.9% of revenue) for Q1, 2016.

The amortization of intangible assets of Nil in Q1, 2017 (\$349,268 in Q1, 2016) relates to the licenses and know-how purchased in 2011 from a company under common control. This expense is a non-cash item and the underlying asset was fully amortized by December 31, 2016.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SG&A") for Q1, 2017 were \$1,148,916, representing an increase of 10% compared with \$1,048,915 reported for Q1, 2016. Excluding the costs associated with share-based compensation (a non-cash item in which options vest over a four year period), SG&A expenses increased by 3% in Q1, 2017 compared with Q1, 2016.

The increase in SG&A expenses is attributable to the net effect of (i) a decrease of 2% in employee compensation, (ii) an increase of 10% for professional fees, primarily due to increase in investor relations, (iii) a decrease of 1% in office and general expenses, due to a decrease in courses and seminars, (iv) travel costs increased by 6%, due to an increase in travel abroad, (v) depreciation on property and equipment decreased by 22%, (vi) government grants decreased by 100% due to lower level of activities supported by such grants, (vii) other expenses increased by 1%, primarily due to the reduced cost of freight and shipping, and (viii) an increase in share base payments of 12% primarily due to the vesting structure of the stock option plan and the stock options offered on September 25, 2016.

Total Comprehensive Loss

The comprehensive loss for Q1, 2017 was \$298,610 compared to a loss of \$1,248,661 in Q1, 2016, representing a decrease of 76% quarter-over-quarter.

The decrease of \$950,051 in the comprehensive loss in Q1, 2017 is primarily attributable to: (i) an increase in product and service related revenue of \$679,285, (ii) an increase in cost of sales and services totaling \$97,009 as explained above, (iii) an increase in SG&A expenses of \$100,002 as explained above, (iv) an increase in R&D expenses of \$25,187 primarily due to the fact that many of the Company's engineering and R&D resources were concentrated on activities within projects under construction for clients, with such costs being recorded within cost of sales, (v) an increase in net finance costs of \$6,647 due to an increase in accretion costs on convertible debentures, (vi) an increase in finance income of \$150,343 due to the adjustment of the fair market value of other investments.

EBITDA

The EBITDA loss in Q1, 2017 was \$115,565 compared with an EBITDA loss of \$715,937 for Q1, 2016, representing a decrease of 84%.

Adjusted EBITDA gain in Q1, 2017 was \$22,586 compared with an Adjusted EBITDA loss of \$649,506 for Q1, 2016. The increase of \$672,092 in the Adjusted EBITDA in Q1, 2017 is mainly attributable to the decreased comprehensive loss of \$950,051, a decrease in depreciation on property and equipment of \$7,058, a decrease of \$349,268 in amortization of intangible assets, offset by an increase in finance charges of 6,647 and an increase in share-based payments of \$71,720.

Liquidity

As at March 31, 2017, the Company had cash on hand of \$1,278,447 and negative working capital of \$6,004,376 compared with a cash balance of \$385,257 and negative working capital of \$2,079,353 as at December 31, 2016.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc. is the world leader in the design, development, manufacture and commercialization of advanced plasma processes. PyroGenesis provides engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, additive manufacturing (3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working out of our Montreal office and our 3,800 m2 manufacturing facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Its core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Its operations are ISO 9001:2008 certified, and have been ISO certified since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace (Ticker Symbol: PYRNF). 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 Company'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 Company with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Company's ongoing filings with the securities regulatory authorities, which filings can be found at www.sedar.com, or at www.otcmarkets.com. Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Company undertakes no obligation to publicly update or revise any forward-looking statements either as a result of new information, future events or otherwise, except as required by applicable securities laws.

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For further information, please contact Mr. P. Peter Pascali, President and CEO of PyroGenesis, Phone: (514) 937-0002, E-mail: ppascali@pyrogenesis.com