



**PyroGenesis Announces Q2 2019 Results:
Current Backlog \$10.5MM;
Revenues of \$914K; Gross Margin of 20%**

MONTREAL, QUEBEC (GlobeNewswire – August 29th, 2019) - PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX-V: PYR) (OTCQB: PYRNF) (FRA: 8PY), a high-tech company (the "Company", the "Corporation" or "PyroGenesis") that designs, develops, manufactures and commercializes plasma atomized metal powder, plasma waste-to-energy systems and plasma torch products, is pleased to announce today its financial and operational results for the second quarter ended June 30, 2019.

“As we have said in the past, 2018 was the year in which the Company successfully positioned itself with unique and strategic partnerships, geared to effectively accelerate commercialization, and we are in the midst of benefiting from these efforts, and I would like to thank investors for their patience,” said Mr. P. Peter Pascali, President and CEO of PyroGenesis. “Recent results have been significantly affected by management’s decisions in 2018 to pursue strategic partnerships at the expense of revenues. However, as a result, we have press released imminent contracts in excess of \$32MM, with associated future revenues, well in excess of that which, in my opinion, fully justified that strategy. At the risk of repeating myself, let me remind readers of the importance of reading 2019 results to date in the context of these decisions and recent press releases.”

Q2 2019 results reflect the following highlights:

- Revenues of \$913,769, a decrease from \$1,421,352 posted in Q2 2018;
- Gross margin of 20% a decrease of 15% over the same period in Q2 2018;
- Fair value of investments decreased to \$339,313, versus (\$66,000) a decrease of \$405,313;
- Leasehold improvements of \$227K were spent in building a clean room for plasma atomization system;
- A Modified EBITDA loss of \$1.4MM compared to a Modified EBITDA loss of \$1MM over the same period in Q2 2018;
- Backlog of signed contracts as of the date of this writing is \$10.5MM;
- Cash on hand at quarter end: \$1.3MM (December 31, 2018: \$645K).

The following is a summary of PyroGenesis’ main activities.

Outlook

2019 is turning into the year that bears the fruit of 2018 strategies, in which PyroGenesis successfully positioned itself with unique and strategic partnerships, geared to effectively accelerate commercialization in two of its three business segments.

In 2018, the Company successfully positioned each of its commercial business lines for rapid growth by strategically partnering with multi-billion-dollar entities who have identified PyroGenesis' offerings to be unique, in demand, and of such a commercial nature as to warrant such unique relationships.

By the end of 2018 PyroGenesis could boast of a unique relationship with a multi-billion-dollar entity in each of its three commercial offerings:

- 1) The US Navy within the Military/Environmental sector;
- 2) A Japanese trading house within the DROSRITE™ (tolling) offering;
- 3) Aubert & Duval within the Additive Manufacturing/3D printing ("AM") offering.

Most companies would be thankful for one such relationship, but PyroGenesis has successfully developed three.

It became readily apparent to management that partnering with the right entity could significantly accelerate commercialization in each of its new business lines. This, however, would come with a cost in 2018. In order to succeed, PyroGenesis would have to dedicate significant resources to demonstrating the value proposition, and capabilities, to these entities. This meant that assets which should have been dedicated to sales now had to be deployed to developing these relationships. This not only impacted revenues, but it also increased costs of non-paying projects. We have seen this effect continue into Q1 2019 which, as expected, has continued into Q2, 2019.

To date, PyroGenesis has announced that it should be awarded a two-ship build for its PAWDS unit, for approximately \$13.5MM. Add to this the recently announced potential contract with first year revenues of \$20MM (plus significant subsequent years revenues) and the impact of this strategy is apparent: over \$32MM in revenues over the next 18 months. Approximately 6x 2018 revenues.

2019 should also see the Company takes steps, outside of the ordinary course of business, to unlock additional value for investors.

One such step that has been announced is the spin-off of the Company's additive manufacturing capabilities.

Another step, which is likewise outside the ordinary course of business, and is geared to unlocking

shareholder value, is the previously announced up-listing of the Company's stock to a more senior exchange other than the one the Company is currently on. This is projected to commence in earnest once the contacts noted above are successfully signed.

There are other steps, outside the ordinary course of business, that the Company is considering, to further increase shareholder value.

In short, 2019 is playing out to be the first of many years which will bear the fruit of strategic decisions made in the recent past.

Financial Summary

Revenue

PyroGenesis recorded revenue of \$913,769 in the second quarter of 2019 ("Q2, 2019"), representing a decrease of 36% compared with \$1,421,352 recorded in the second quarter of 2018 ("Q2, 2018").

Revenues recorded during the six months ended June 30, 2019 were generated primarily from:

- (i) PUREVAP™ related sales of \$239,836 (2018 Q2 - \$1,538,550);
- (ii) Torch related sales of \$297,235 (2018 Q2 - \$Nil);
- (iii) Support services related to PAWDS-Marine systems supplied to the US Navy \$455,427 (2018 Q2 - \$706,595).

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was \$723,641 in Q2 2019, representing a decrease of 22% compared with \$924,954 in Q2 2018.

In Q2 2019, employee compensation, subcontracting, direct materials and manufacturing overhead decreased to \$750,114 compared to \$955,392 in Q2 2018.

The gross margin for Q2 2019 was \$185,349 or 20.3% of revenue compared to a gross margin of \$496,398 or 34.9% of revenue for Q2 2018.

As a result of the type of contracts being executed, the nature of the project activity had a significant impact on the gross margin and the overall level of cost of sales and services reported in a period, as well as the composition of the cost of sales and services, as the mix between labour, materials and subcontracts may be significantly different.

The amortization of intangible assets of \$4,779 in Q2 2019 and \$Nil for Q2 2018 relates to patents and deferred development costs. Of note, these expenses are non-cash items and will be amortized over the duration of the patent lives.

Selling, General and Administrative Expenses

Included within Selling, General and Administrative expenses (“SG&A”) are costs associated with corporate administration, business development, project proposals, operations administration, investor relations and employee training.

SG&A expenses for Q2 2019 excluding the costs associated with share-based compensation (a non-cash item in which options vest principally over a four-year period), were \$1,583,779, representing an increase of 34% compared with \$1,177,552 reported for Q2 2018.

The increase in SG&A expenses in Q2 2019 over the same period in 2018 is mainly attributable to the net effect of:

- an increase of 16% in employee compensation due primarily to additional headcount,
- an increase of 84% for professional fees, primarily due to an increase in legal fees and employee recruitment expenses,
- a decrease of 18% in office and general expenses, is primarily due to the reclassification of rent expense to depreciation right of use assets,
- travel costs increased by 104%, due to an increase in travel abroad,
- depreciation on property and equipment increased by 21% due to higher amounts of property and equipment being depreciated,
- depreciation on right of use assets increased by 100% due to reclassification of rent expense to depreciation right of use assets,
- investment tax credits increased by 100% due to the investment tax credits being recorded against the respective expenses in cost of goods sold, selling and general expenses and research and development expenses versus all of the investment tax credits of Q2 2018 being recorded against cost of goods sold only,
- government grants increased by 16% due to a government grant contribution for a maximum amount of \$350,000 for the period 2018-2020,
- other expenses decreased by 8%, primarily due to a decrease in advertising expenses and in the reclassification of lease property taxes to depreciation right of use assets.

Separately, share based payments decreased by 91% in Q2 2019 over the same period in 2018 as a result of the vesting structure of the stock option plan including the stock options granted in 2018.

Research and Development (“R&D”) Costs

The Company incurred \$212,645 of R&D costs, net of government grants, on internal projects in Q2 2019, a decrease of 47% as compared with \$404,017 in Q2 2018. The decrease in Q2 2019 is related to a reduction in eligible R&D costs.

In addition to internally funded R&D projects, the Company also incurred R&D expenditures during the execution of client funded projects. These expenses are eligible for Scientific Research and Experimental Development (“SR&ED”) tax credits. SR&ED tax credits on client funded projects are applied against cost of sales and services (see “Cost of Sales” above).

Net Comprehensive Loss

The net comprehensive loss for Q2 2019 of \$2,253,390 compared to a loss of \$1,534,890, in Q2 2018, represents an increase of 47% year-over-year. The increase of \$718,500 in the comprehensive loss in Q2 2019 is primarily attributable to the factors described above, which have been summarized as follows:

- (i) a decrease in product and service-related revenue of \$507,583 arising in Q2 2019,
- (ii) a decrease in cost of sales and services totaling \$196,534, primarily due to a decrease in direct materials, a decrease in manufacturing overhead, and a decrease in investment tax credits.
- (iii) an increase in SG&A expenses of \$138,270 arising in Q2 2019 primarily due to an increase in professional fees, travel, and employee compensation,
- (iv) a decrease in R&D expenses of \$191,372 primarily due to a decrease in eligible employee compensation and materials & equipment costs,
- (v) an increase in net finance costs of \$460,553 in Q2 2019 primarily due to the fair value adjustment of investments.

EBITDA

The EBITDA loss in Q2 2019 was \$1,814,832 compared with an EBITDA loss of \$1,274,183 for Q2 2018, representing an increase of 42% year-over-year. The \$540,649 increase in the EBITDA loss in Q2 2019 compared with Q2 2018 is due to the increase in comprehensive loss of \$718,500, an increase in depreciation on property and equipment of \$8,455, an increase in depreciation of right of use assets of \$109,673, an increase in amortization of intangible assets of \$4,779 and an increase in finance charges of \$55,241.

Adjusted EBITDA loss in Q2 2019 was \$1,787,248 compared with an Adjusted EBITDA loss of \$978,642 for Q2 2018. The increase of \$808,606 in the Adjusted EBITDA loss in Q2 2019 is

attributable to an increase in EBITDA loss of \$540,649, offset by a decrease of \$267,957 in share-based payments.

The Modified EBITDA loss in Q2 2019 was \$1,447,935 compared with a Modified EBITDA loss of \$1,044,642 for Q2 2018, representing an increase of 39%. The increase in the Modified EBITDA loss in Q2 2019 is attributable to the increase as mentioned above in the Adjusted EBITDA loss of \$808,606 and a decrease in the change of fair value of investments of \$405,313.

Liquidity

The Company has incurred, in the last several years, operating losses and negative cash flows from operations, resulting in an accumulated deficit of \$54,198,854 and a negative working capital of \$7,297,972 as at Q2 2019, (December 31, 2018 - \$51,066,540 and \$4,101,428 respectively). Furthermore, as at Q2 2019, the Company's current liabilities and expected level of expenses for the next twelve months exceed cash on hand of \$1,293,173 (December 31, 2018 - \$644,981). The Company has relied upon external financings to fund its operations in the past, primarily through the issuance of equity, debt, and convertible debentures, as well as from investment tax credits.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is the world leader in the design, development, manufacture and commercialization of advanced plasma processes and products. We provide engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 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. Our 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. Our operations are ISO 9001:2015 and AS9100D certified, having been since 1997. PyroGenesis is a publicly-traded Canadian Corporation on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace. 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 Corporation'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 Corporation with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Corporation'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 Corporation 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. Neither the TSX Venture Exchange, its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) nor the OTCQB accepts responsibility for the adequacy or accuracy of this press release.

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