



**PyroGenesis Announces 2018 Results:
Revenues of \$5.03MM; Gross Margin of 22%;
Current Backlog \$7.7MM**

MONTREAL, QUEBEC (GlobeNewswire – April 30th, 2019) - PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX-V: PYR) (OTCQB: PYRNF), 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, today announced its financial and operational results for the fourth quarter and the fiscal year ended December 31, 2018.

“2018 was significantly affected by management’s decision 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 in excess of that,” said Mr. P. Peter Pascali, President and CEO of PyroGenesis. “Therefore if 2018 was the year in which the Company successfully positioned itself with unique and strategic partnerships, geared to effectively accelerate commercialization, then 2019 is the year that bears the fruit of that strategy. We strongly recommend that these financials be viewed in this context.”

2018 was a year in which PyroGenesis posted:

- Revenues of \$5,030,116, a decrease of 30% from \$7,192,861 year over year;
- Gross margin of 22.1% a decrease of 21.4% year over year;
- R&D costs of \$892K, an increase of 208% from \$290K year over year, the increase is related to torch development and plasma atomization related expenses;
- Leasehold improvements of \$821K were spent to build a clean room for Plasma atomization system;
- A Modified EBITDA loss of \$5.3MM compared to a Modified EBITDA loss of \$1.45MM year over year;
- Backlog of signed contracts as of the date of this writing is \$7.7MM;
- Cash on hand on December 31, 2018 was \$645K (December 31, 2017: \$623K).

Outlook

2018 was a year in which PyroGenesis 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.

If 2018 was the year in which the Company successfully positioned itself with unique and strategic partnerships, geared to effectively accelerate commercialization, then 2019 is the year that bears the fruit of that strategy.

To date, PyroGenesis has announced that it should be awarded a two-ship build for its PAWDS unit shortly, for approximately \$12.5MM. Add to this the recently announced potential contract with 1st year revenues of \$20MM (\$30-\$50MM in subsequent years revenues) and the impact of this strategy is apparent: over \$30 MM in revenues over the next 18 months. Approximately 6x 2018 revenues.

With these two contracts in hand alone, 2019 will be a profitable year.

2019 should also be the year in which 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. Management has decided that, given all it knows, that a spin off at this time should unlock additional value for investors as it would:

- (i) Attract an investor base best suited to the Company’s AM value proposition, particular business operations, and financial characteristics. There are large pools of money interested in investing in the AM space, but have no desire to have their funds comingled with unrelated business lines. A spin-off would assure them that such funds would be used for AM alone.
- (ii) Maximize shareholder value by placing the spin-off in a better position to generate revenues and develop strategic relationships than had it remained part of the PyroGenesis stable of technologies
- (iii) Simplify the offering making it easier for analysts to understand and value it properly. As it stands now PyroGenesis Additive is part of PyroGenesis Canada Inc’s offerings which include Drosrite™, US Military, and Purevap™, just to name a few, and as such makes it complicated to analyze. Last but not least, a spin-off creates a well understood entity with which interested parties could joint venture or acquire.

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.

There are other steps, outside the ordinary course of business, that the Company is considering to increase shareholder value and these will each be announced in due course.

2019 is positioned to be the first year, of many, that will bear the fruit of strategic decisions made in the recent past.

Financial Summary

Revenue

PyroGenesis recorded revenue of \$5,030,116 in the year of 2018, representing a decrease of 30% compared with \$7,192,861 recorded in the year of 2017.

Revenues recorded in fiscal 2018 were generated primarily from:

- (i) PUREVAP™ related sales of \$1,781,009 (2017 - \$2,330,691);
- (ii) DROSRITE™ related sales of \$1,237,740 (2017 - \$98,391);
- (iii) Support services related to PAWDS-Marine Systems supplied to the US Navy \$1,451,998 (2017 - \$4,337,681).
- (iv) Other sales and services \$559,369 (2017 - \$426,098)

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was \$3,860,493 in 2018, representing a decrease of 5% compared with \$4,065,894 in 2017.

In 2018, employee compensation, direct materials and manufacturing overhead decreased to \$3,590,381 (2017 - \$4,338,252) while subcontracting increased to \$364,463 (2017- \$98,256). The gross margin for 2018 was \$1,109,297 or 22.1% of revenue compared to a gross margin of \$3,126,967 or 43.5% of revenue for 2017.

The gross margin for 2018, was \$1,109,297, or 22.1% of revenue. This compares with a gross margin of \$3,126,961 (43.5% of revenue) for 2017.

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 cost of sales and services for 2018 and 2017 are in line with management's expectations.

The amortization of intangible assets of \$60,326 in 2018 and \$Nil for 2017 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 2018 excluding the costs associated with share-based compensation (a non-cash item in which options vest principally over a four-year period), were \$5,864,528, representing an increase of 33% compared with \$4,394,837 reported for 2017.

The increase in SG&A expenses in 2018 over the same period in 2017 is mainly attributable to the net effect of:

- an increase of 32% in employee compensation due primarily to additional headcount,
- an increase of 55% for professional fees, primarily due to an increase in consulting fees, legal fees and patent expenses,
- an increase of 6% in office and general expenses, due to an increase in telephone & internet expenses and stationary & office expenses,
- travel costs increased by 21%, due to an increase in travel abroad,
- depreciation on property and equipment increased by 90% due to higher amounts of property and equipment being depreciated. In 2018, depreciation was taken on the Plasma atomization system (previously asset under development). In 2017 there was no depreciation on asset under development,
- government grants increased by 100% due to a government grant contribution for a maximum amount of \$350,000 for the period 2018-2020,
- other expenses increased by 35%, primarily due to an increase in marketing expenses, and in sub-contracting expenses.

Separately, share based payments decreased by 11% in 2018 over the same period in 2017 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 \$892,045 of R&D costs, net of government grants, on internal projects in 2018, an increase of 208% as compared with \$289,851 in 2017. The increase in 2018 is related to torch development and plasma atomization related expenses.

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.

Inventory

The Company's inventory as at December 31, 2018 was \$382,832 which includes powders, raw material and spare parts compared with \$123,735 for the same period in 2017.

Net Comprehensive Loss

The net comprehensive loss for 2018 of \$7,845,800 compared to a loss of \$6,174,303, in 2017, represents an increase of 27% year-over-year.

The increase of \$1,671,497 in net comprehensive loss in 2018 is primarily attributable to the factors described above, which have been summarized as follows:

- (i) a decrease in product and service-related revenue of \$2,162,745 arising in 2018,
- (ii) a decrease in cost of sales and services totaling \$145,075, primarily due to an increase in an increase in subcontracting, a decrease in investment tax credits, and an increase in amortization of intangible assets.
- (iii) an increase in SG&A expenses of \$1,383,927 arising in 2018 primarily due to an increase in employee compensation, professional fees, travel, depreciation on property & equipment, and other expenses,
- (iv) an increase in R&D expenses of \$602,194 primarily due to the increase in employee compensation, subcontracting, materials & equipment and other expenses,
- (v) a decrease due to the settlement of the claim related to the IP debt balance of \$3,215,643, an increase in net finance costs of \$883,349 in 2018.

EBITDA

The EBITDA loss in 2018 was \$6,864,461 compared with an EBITDA loss of \$5,558,640 for 2017, representing an increase of 23% year-over-year. The increase in the EBITDA loss in 2018 compared with 2017 is due to the increase in comprehensive loss of \$1,671,497, offset by an increase depreciation on property and equipment of \$100,685, an increase amortization of intangible assets of \$60,326 and an increase in finance charges of \$204,665.

Adjusted EBITDA loss in 2018 was \$6,191,212 compared with an Adjusted EBITDA loss of \$1,583,985 for 2017. The increase of \$4,607,227 in the Adjusted EBITDA loss in 2018 is attributable to an increase in EBITDA loss of \$1,305,821, offset by a decrease of \$85,764 in share-based payments and a decrease in the settlement of a claim related the long-term debt of \$3,215,643.

The Modified EBITDA loss in 2018 was \$5,271,749 compared with a Modified EBITDA loss of \$1,445,785 for 2017, representing an increase of 265%. The increase in the Modified EBITDA loss in 2018 is attributable to the increase as mentioned above in the Adjusted EBITDA of \$4,607,227 and a decrease in change of fair value of investments of \$781,263.

Liquidity

The Company has incurred, in the last several years, operating losses and negative cash flows from operations, resulting in an accumulated deficit of \$51,066,540 and a negative working capital of \$4,101,429 as at December 31, 2018 (December 31, 2017 - \$43,200,708 and \$9,527,105 respectively). Furthermore, as at December 31, 2018, the Company's current liabilities and expected level of expenses for the next twelve months exceed cash on hand of \$644,981 (December 31, 2017 - \$622,846). 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.

Separately, PyroGenesis is pleased to announce that Mr. Lelio Lato has joined the Company as V.P. Finance. As a CPA and CFA with over 20 years of experience, he has worked in various senior management roles across small cap technology companies with extensive capital markets knowledge.

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

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