

PyroGenesis Announces 2019 Results: Revenues of \$4.8MM; Gross Margin of 27%; Current Backlog \$30.27MM

MONTREAL, QUEBEC (GlobeNewswire – June 15th, 2020) - 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 systems, is pleased to announce today its financial and operational results for the fourth quarter and the fiscal year ended December 31, 2019.

"The irony of issuing these 2019 financials knowing full well what has transpired since December 31st, 2019 has not been lost on the writer, as I hope it will not be lost on the reader as well. These statements definitely do not represent the current state of affairs at the Company, specifics of which can be gleamed from press releases issued by the Company in 2020." said P. Peter Pascali, CEO of PyroGenesis Canada Inc. "To date, in 2020 we have not only received significant payments under existing contracts, but have retired the \$3MM convertible debenture in full, bought back approximately 1.2 million shares, increased our investment in HPQ, and further benefited from early conversions of warrants maturing in 2021 of over \$2MM. Of note, as of December 31st, 2019 we have approximately \$10MM of in-the-money warrants and options expiring in 2020 and 2021 alone. The Company also has over \$50MM in tax loss carryforwards (roughly evenly distributed between federal and provincial tax regimes) which is not reflected as an asset on the balance sheet. Given recent events, and the structuring that took place in 2019, the Company is undeniably well positioned to execute on, and build upon, the backlog of signed contracts which currently stands in excess of \$30MM. With the eagerly anticipated US Navy contract in hand backlog of signed contracts will be in excess of \$40MM. 2020 has the potential to be a barn burner by almost any yardstick."

2019 was a year in which PyroGenesis posted:

- Backlog of signed contracts as of the date of this writing is \$30.27MM;
- Revenues of \$4,813,978, a decrease of 4% from \$5,030,116 year over year;
- Gross margin of 27% an increase of 5% from 22.1% year over year;
- Increase of \$197,157 in capitalized patents;
- An Adjusted EBITDA loss of \$4.5MM compared to an adjusted EBITDA loss of \$6.2MM year over year;
- Cash on hand on December 31, 2019 was \$34K (December 31, 2018: \$645K);

Financial Summary

Revenues

PyroGenesis recorded revenues of \$4,813,978 for the year ended December 31, 2019, representing a decrease of 4% compared to \$5,030,116 recorded in 2018.

Revenues recorded in fiscal 2019 were generated primarily from:

- (i) PUREVAPTM related sales of \$525,556 (2018 \$1,781,009)
- (ii) DROSRITETM related sales of \$560,916 (2018 \$1,237,740)
- (iii) support services related to systems supplied to the US Military \$637,841 (2018 \$1,451,998)
- (iv) torch related sales of \$2,323,351 (2018 \$Nil)
- (v) other sales and services \$766,314 (2018 \$559,369)

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was \$3,459,753 in 2019, representing a decrease of 9% compared to \$3,860,493 in 2018, primarily due to a decrease in employee compensation, a decrease in subcontracting expenses and a decrease in manufacturing overhead and other.

In 2019, employee compensation, subcontracting, manufacturing overhead and other decreased to \$2,397,743 (2018 - \$2,829,198) while direct materials increased to \$1,303,844 (2018- \$1,125,645). The gross margin for 2019 was \$1,298,092 or 27% of revenue compared to a gross margin of \$1,109,297 or 22.1% of revenue for 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 labor, materials and subcontracts may be significantly different. The cost of sales and services for 2019 and 2018 are in line with management's expectations

Investment tax credits recorded against cost of sales are related to projects that qualify for tax credits from the provincial government of Quebec. Qualifying tax credits increased to \$179,670 in 2019, compared to \$158,948 in 2018. This represents an increase of 13% year-over-year. The Company continues to make investments in research and development projects involving strategic partners and government bodies. In total, the Company earned investment tax credits of \$354,241 in 2019.

The amortization of intangible assets of \$20,133 in 2019 and \$60,326 for 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 2019 excluding the costs associated with share-based compensation (a non-cash item in which options vest principally over a four-year period), were \$6,017,091, representing an increase of 3% compared to \$5,864,528 reported for 2018.

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

- (i) a decrease of 0.1% in employee compensation due to changes in staffing,
- (ii) a decrease of 10% for professional fees, primarily due to a decrease in consulting fees, legal fees and investor relation expenses,
- (iii) a decrease of 42% in office and general expenses, is primarily due to the adoption of IFRS 16 using the modified retrospective method on January 1, 2019. In 2019 rent included in office and general expenses was \$Nil compared to \$278,458 in 2018,
- (iv) travel costs increased by 12%, due to an increase in travel abroad,
- (v) depreciation on property and equipment decreased by 21% due to lower amounts of property and equipment being depreciated. In 2019, depreciation was not taken on the Plasma atomization system (previously asset under development) as it was written off,
- (vi) investment tax credits decreased by 3%, due to a decrease in qualifying projects,
- (vii) government grants increased by 23%, due to a non-refundable government grant contribution for a maximum amount of \$350,000 for the period 2018-2020,
- (viii) other expenses decreased by 25%, primarily due to a decrease in subcontracting and advertising expenses,
- (ix) tax assessment represents the amount due from a taxation audit for the period of 2008 to 2011. The Company paid royalties for the use of intangible property prior to the purchase of the asset. The royalties were subject to a 25% withholding tax that was not deducted or withheld by the Company at that time.

Separately, share based payments decreased by 74% in 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 2019.

Research and Development ("R&D") Costs

The Company incurred \$851,512 of R&D costs, net of government grants, on internal projects in 2019, a decrease of 5% compared to \$892,045 in 2018. The decrease in 2019 is primarily related to an increase in investment tax credits and government grants recognized.

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 Finance Costs

Finance costs for 2019 totaled \$1,061,267 as compared with \$1,525,275 for 2018, representing a decrease of 30% year-over-year. The decrease in finance costs in 2019, is primarily attributable to the adjustment in fair value of investments resulting in a gain of \$176,237 compared to a loss in the amount of \$919,463 in 2018, offset by an amount of \$275,183 in 2019 for the interest and penalty amount due related to the tax assessment from a taxation audit for the period of 2008 to 2011 and further to the adoption of IFRS 16, as mentioned above, the finance costs increased by \$258,288 related to the interest calculated on the lease liabilities during the year 2019.

Impairment and Write Offs

In 2019 the Company commenced construction on a new and improved Plasma Powder Production equipment with advanced technological improvements with regards to production output and operating costs. As a result, the existing powder production, Plasma atomization system, was no longer deemed to have any future benefit and was written down by \$1,981,410, to the net recoverable amount of nil. The powders and raw materials inventory related to the old Plasma atomization system were no longer deemed to have any future value and were written down by \$386,121 to their net recoverable amounts of nil.

Net Comprehensive Loss

The net comprehensive loss for 2019 of \$9,171,116 compared to a loss of \$7,845,800, in 2018, represents an increase of 17% year-over-year. The increase of \$1,325,316 in the comprehensive loss in 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 \$216,138 arising in 2019,
- (ii) a decrease in cost of sales and services totaling \$18,811, primarily due to lower subcontract costs, and lower manufacturing overhead as a result of lower revenues in 2019,
- (iii) a decrease in SG&A expenses of \$348,879 arising in 2019 primarily due a decrease in share-based payments over the same period in 2018 as a result of the vesting structure of the stock option plan including the stock options granted in 2019,
- (iv) a decrease in R&D expenses of \$40,533 primarily related to an increase in investment tax credits and government grants recognized,
- (v) a decrease in net finance costs of \$464,008 in 2019 primarily attributable to the adjustment in fair value of investments,
- (vi) an increase of \$1,981,410 in 2019 due to impairment of a Plasma Atomization 2019. The Company commenced construction on a new and improved Plasma Powder Production equipment,
- (vii) an increase of \$386,121 in 2019 due to the write off, of powders and raw materials inventory.

EBITDA

The adoption of IFRS 16 had a favorable impact of \$618,071 on the calculation of EBITDA, Adjusted EBITDA and Modified in EBITDA in 2019 compared 2018. The reconciliation above includes addbacks for depreciation of the right-of-use asset of \$359,783 and finance charges of interest on lease liabilities of \$258,288 in 2019, compared to nil for 2018 as a result of the use of the modified retrospective method used at date of transition.

The EBITDA loss in 2019 was \$7,384,862 compared to an EBITDA loss of \$6,864,461 for 2018, representing an increase of 8% year-over-year. The increase in the EBITDA loss in 2019 compared to 2018 is due to the increase in comprehensive loss of \$1,325,316, offset by a decrease in depreciation on property and equipment of \$43,787, an increase in depreciation on right-of-use assets of \$359,783, a decrease in amortization of intangible assets of \$40,193, and an increase in finance charges of \$529,112.

Adjusted EBITDA loss in 2019 was \$4,567,724 compared to an Adjusted EBITDA loss of \$6,191,212 for 2018. The decrease of \$1,623,488 in the Adjusted EBITDA loss in 2019 is attributable to an increase in EBITDA loss of \$520,401, a decrease of \$501,442 in share-based payments, an increase in tax assessment of \$277,800, an increase in inventory write-off of \$386,121, and an increase in equipment write-off of \$1,981,410.

The Modified EBITDA loss in 2019 was \$4,743,961 compared to a Modified EBITDA loss of \$5,271,749 for 2018, representing a decrease of 10%. The decrease in the Modified EBITDA loss in 2019 is attributable to the decrease as mentioned above in the Adjusted EBITDA of \$1,623,490 and a decrease in change of fair value of investments of \$1,095,700.

Liquidity

The Company has incurred, in the last several years, operating losses and negative cash flows from operations, resulting in an accumulated deficit of \$60,237,656 and a negative working capital of \$10,492,102 as at December 31, 2019 (December 31, 2018 - \$51,066,540 and \$4,101,428 respectively). Furthermore, as at December 31, 2019, the Company's current liabilities and expected level of expenses for the next twelve months exceed cash on hand of \$34,431 (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.

OUTLOOK

Any discussion regarding the OUTLOOK of the company would be remiss if it did not address the recent increase in the Company's market capitalization and the implications that has for the future.

Without a doubt the Company's market capitalization suffered, as did many other companies, in the general Covid-19 market meltdown at the end of March 2020. However, PyroGenesis soon broke

from the pack with the issuance of a material press release on March 24th, 2020.

Management believes that its breaking from the ranks caught the attention of investors, fund managers, and money managers who all now had the time during the Covid-19 lockdown to fully analyze the complicated story that is PyroGenesis. Management does not see any reason why this interest would abate anytime soon. To the contrary, Management has reason to believe that interest in the Company will only increase over the foreseeable future. As such, Management has decided that several strategies that have been articulated in the past (up listings, spinoffs) can now be accelerated as some of the impediments to moving quickly have been removed or may be very shortly.

Having a larger market capitalization has also helped in discussions with potential customers who take comfort from the possibility that a higher market capitalization may translate into easier access to capital. For the record, there is no intention at this time to raise capital for working capital purposes.

If 2018 was the year in which PyroGenesis successfully positioned each of its commercial business lines by strategically partnering with multi-billion-dollar entities, and 2019 was the year that saw the appropriate personnel and infrastructure being put in place while building upon the success of 2018, then 2020 is without a doubt the year that the long awaited breakout, which began in the second half of 2019, takes place; it is in fact already upon us:

To date during 2020 PyroGenesis has:

- 1) received significant payments under the multi-million dollar contract with DROSRITE™ International thereby validating announcements made during 2019,
- 2) established a relationship with a US based tunneling company (contracts and payments ongoing),
- 3) Established itself in the iron ore pelletization industry as a potential supplier of torches geared to replacing existing burners and thereby reducing GHGs. Interest is also spilling over into other industries with GHG reduction targets,
- 4) Established a relationship with an OEM in North America with the intent to eventually supply powders for their 3D printing needs. This augments our relationship with Aubert & Duval, while at the same time de-risking our dependence on them,
- 5) retired the \$3MM convertible debenture in full,
- 6) bought back approximately 1.2 Million shares under the existing Normal Course Issuer Bid,
- 7) increased Company's investment in HPQ, who has subsequently also experienced a significant increase in market capitalization,
- 8) further benefited from early conversions of warrants maturing in 2021 of over \$2MM.

The Company has booked a significant backlog of signed contracts (in excess of \$30MM; 2019 Revenues approx. \$5MM) which, when taking the eagerly awaited US Navy contract into account, will increase to over \$40MM. This provides a solid cornerstone upon which PyroGenesis can:

i. continue to build on the recent successes with the Company's DROSRITETM offering

- ii. leverage off of the recent successes with the Company's torch offerings to (i) the iron ore pelletization industry, and (ii) a tunneling client.
- iii. accelerate activities with Aubert & Duval in the Additive Manufacturing sector as well as HPQ in the Mining and Metallurgical sector, both of which did not progress as fast as management would have liked in 2019. Significant attention will be placed on both these activities in 2020.

Specifically, with Aubert & Duval the goal will be to complete the integration of the cutting-edge advances PyroGenesis has made to the powder production process.

With respect to HPQ, the goal would be to accelerate the game changing $PUREVAP^{TM}$ family of processes which we are developing for HPQ, namely:

- The *PUREVAP*TM "*Quartz Reduction Reactors*" (*QRR*), an innovative process (patent pending), which will permit the one step transformation of quartz (SiO₂) into high purity silicon (Si) at reduced costs, energy input, and carbon footprint that will propagate its considerable renewable energy potential; *and*
- The *PUREVAPTM Nano Silicon Reactor (NSiR)*, a new proprietary process that use *PUREVAPTM QRR* silicon (Si) as feedstock, to make spherical silicon nano powders and nanowires;

Looking forward, the Company has, as of December 31st, 2019, approximately \$10MM of in-the-money warrants and options expiring in 2020 and 2021. The Company also has over \$50MM in tax loss carryforwards (roughly evenly distributed between federal and provincial obligations) which is not reflected as an asset on the balance sheet.

All in all, 2020 is shaping up to be the year that we have been expecting for some time.

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, and have 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.

SOURCE PyroGenesis Canada Inc.

For further information please contact:

Rodayna Kafal, Vice President Investors Relations and Strategic Business Development

Phone: (514) 937-0002, E-mail: ir@pyrogenesis.com RELATED LINK: http://www.pyrogenesis.com/