



**PyroGenesis Announces Q1 2020 Results:
Revenues of \$736K, Gross Margin of 37%, Current Backlog \$30MM,
Provides Q2 2020 and Year End Guidance**

MONTREAL, QUEBEC (GlobeNewswire – July 14th, 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 first quarter ended March 31st, 2020.

“Percent complete revenue recognition in our major projects, which is the revenue recognition method we are mandated to follow by GAAP, is such that it is not linear, but exponential, and as such Q1 2020 may not have reflected the results one might have expected given recent announcements. However, using this same revenue recognition method we can safely provide the following guidance for Q2 2020, and for the year ending December 31st, 2020 as follows: We expect that Q2 2020 and the six months ending June 30, 2020 will be profitable as will year end results. As such, management has modified several notes in the financials, for the first time since inception, to reflect this outlook,” said P. Peter Pascali, CEO and President of PyroGenesis. “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 \$3MM. 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. All in all, 2020 can now be described as the year that we have been expecting for some time.”

Q1 2020 results reflect the following highlights:

- Revenues of \$718,908, a decrease from \$736,443 posted in Q1 2019,
- Gross margin of 37% an increase of 25% over the same period in Q1 2019,
- Cash on hand on March 31, 2020 was \$1,139,416 (December 31, 2019: \$34,431),
- Backlog of signed contracts as of the date of this writing is \$30MM.

Management Guidance for Q2 2020

- Revenues of \$2-2.25MM are expected in Q2 2020,
- Management expects that Q2 2020 and the six months ending June 30, 2020 will be profitable,

Management Guidance for the remainder of 2020:

- Overall, Management expects significant revenue growth in 2020,
- Management expects that the year ending December 31st, 2020 will also be profitable.

OUTLOOK

Percent complete revenue recognition in our major projects, which is the revenue recognition method we are mandated to follow by GAAP, is such that it is not linear, but exponential, and as such Q1 may not have reflected the results one might have expected given recent announcements. However, using this same revenue recognition method we can safely provide guidance for Q2 2020, and for the year ending December 31st, 2020: We expect that Q2 and the six months ending June 30, 2020 will be profitable as will year end results. As such, management has modified several notes in the financials, for the first time since inception, to reflect this outlook.

Any discussion regarding the OUTLOOK of the company would be remiss if it did not address the continued 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 many of the impediments to moving quickly have been removed and have taken steps to do so.

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 \$22MM 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 \$3MM.

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:

- a) continue to build on the recent successes with the Company's DROSRITE™ offering
- b) Leverage off of the recent successes with the Company's torch offerings to (i) the iron ore pelletization industry, and (ii) a tunneling client.
- c) 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™ family of processes which we are developing for HPQ, namely:

- The PUREVAP™ “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 PUREVAP™ Nano Silicon Reactor (NSiR), a new proprietary process that

use PUREVAP™ QRR silicon (Si) as feedstock, to make spherical silicon nanopowders and nanowires;

As at April 1st, 2020, the Company has 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 can now be described as the year that we have been expecting for some time.

Financial Summary

Revenues

PyroGenesis recorded revenue of \$718,908 in the first quarter of 2020 (“Q1, 2020”), representing a decrease of 2% compared with \$736,443 recorded in the first quarter of 2019 (“Q1, 2019”).

Revenues recorded in the first quarter of 2020 were generated primarily from:

- (i) DROSRITE™ related sales of \$474,432 (2019 Q1 - \$58,559)
- (ii) PUREVAP™ related sales of \$17,965 (2019 Q1 - \$94,077)
- (iii) torch related sales of \$87,944 (2019 Q1 - \$139,813)
- (iv) support services related to PAWDS-Marine systems supplied to the US Navy \$23,896 (2019 Q1 - \$210,667)

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was \$444,681 in Q1 2020, representing a decrease of 30% compared with \$639,506 in Q1 2019, primarily due to lower employee compensation and direct materials in Q1 2020.

In Q1 2020, employee compensation, subcontracting, direct materials and manufacturing overhead decreased to \$391,305 (Q1 2019 - \$662,379). The gross margin for Q1 2020 was \$267,414 or 37.2% of revenue compared to a gross margin of \$92,158 or 12.5% of revenue for Q1 2019. As a result of the type of contracts being executed, the nature of the project activity, as well as the composition of the cost of sales and services, as the mix between labor, materials and subcontracts may be significantly different. Of note, the Company received an amount of \$127,842 from Revenue Canada under the CWES program. From this amount, \$26,388 was applied to employee compensation under cost of sales and services.

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 decreased to \$20,630 in Q1 2020, compared with \$36,071 in Q1 2019. This represents a decrease of 43% year-over-year. In total, the Company earned refundable investment tax credits of \$70,313 in Q1 2020. The Company continues to make investments in research and development projects involving strategic partners and government bodies.

The amortization of intangible assets of \$6,813 in Q1 2020 and \$4,779 for Q1 2019 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 Q1 2020 excluding the costs associated with share-based compensation (a non-cash item in which options vest principally over a four-year period), were \$1,205,726 representing a decrease of 7% compared with \$1,295,521 reported for Q1 2019.

The increase in SG&A expenses in Q1 2020 over the same period in 2019 is mainly attributable to the net effect of:

- an increase of 11% in employee compensation due primarily to additional head count, off set by the government aid received from Revenue Canada under the CEWS program,
- a decrease of 67% for professional fees, primarily due to a decrease in accounting fees,
- an increase of 23% in office and general expenses, is due to an increase in insurance and computer software expenses,
- travel costs decreased by 45%, due to a decrease in travel abroad,
- depreciation on property and equipment decreased by 79% due to lower amounts of property and equipment being depreciated,
- depreciation on right of use assets decreased by 19% due to lower amounts of right of use assets being depreciated,
- Investment tax credits increased by 1% due to an increase in qualifying projects,
- government grants decreased by 43% due to lower levels of activities supported by such grants,
- other expenses decreased by 7%, primarily due to a decrease in cost of freight and shipping.

Separately, share based payments increased by 106% in Q1 2020 over the same period in 2019 as a result of the vesting structure of the stock option plan including the stock options granted on January

2nd, 2020.

Research and Development (“R&D”) Costs

The Company incurred \$23,088 of R&D costs, net of government grants, on internal projects in Q1 2020, a decrease of 76% as compared with \$95,774 in Q1 2019. The decrease in Q1 2020 is primarily related to an increase in 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 Q1 2020 totaled \$232,736 as compared with \$251,498 for Q1 2019, representing a decrease of 7% year-over-year. The decrease in finance costs in Q1 2020, is primarily attributable to interest on lower amounts of debt.

Strategic Investments

	Three months ended Mar 31,		% Change
	2020	2019	2020vs2019
Changes to the fair value of strategic investments	\$ 492,024	\$ (706,196)	170%

The adjustment to the fair market value of strategic investments for Q1 2020 resulted in a loss of \$492,024 compared to a gain in the amount of \$706,196 in Q1 2019.

Net Comprehensive Loss

The net comprehensive loss for Q1 2020 of \$1,757,027 compared to a loss of \$878,923, in Q1 2019, represents an increase of 100% year-over-year. The increased loss of \$878,104 in the comprehensive loss in Q1 2020 is primarily attributable to the factors described above, which have been summarized as follows:

- (i) a decrease in product and service-related revenue of \$17,535 arising in Q1 2020,
- (ii) a decrease in cost of sales and services totaling \$192,791, primarily due to a decrease in employee compensation, subcontracting, direct materials, manufacturing overhead & other,

- and an increase in foreign exchange, investment tax credits, and amortization of intangible assets,
- (iii) a decrease in SG&A expenses of \$53,412 arising in Q1 2020 primarily due to a decrease in professional fees, in travel, in depreciation on property and equipment, in depreciation ROU assets, and in other expenses and an increase in employee compensation, in office and general, in government grants and in share based payments,
 - (iv) a decrease in R&D expenses of \$72,685 primarily due to an increase in government grants,
 - (v) a decrease in net finance costs of \$18,762 in Q1 2020 primarily due to interest on lower amounts of debt,
 - (vi) a decrease in fair value adjustment of strategic investments of \$1,198,220 in Q1 2020.

EBITDA

The EBITDA loss in Q1 2020 was \$1,418,057 compared with an EBITDA loss of \$464,825 for Q1 2019, representing an increase of 205% year-over-year. The \$953,232 increase in the EBITDA loss in Q1 2020 compared with Q1 2019 is due to the increase in comprehensive loss of \$878,104, offset by a decrease in depreciation on property and equipment of \$38,093, a decrease in depreciation of right of use assets of \$20,307, an increase in amortization of intangible assets of \$2,034 and a decrease in finance charges of \$18,762.

Adjusted EBITDA loss in Q1 2020 was \$1,347,190 compared with an Adjusted EBITDA loss of \$430,341 for Q1 2019. The increase of \$916,849 in the Adjusted EBITDA loss in Q1 2020 is attributable to an increase in EBITDA loss of \$953,232, offset by an increase of \$36,383 in share-based payments.

The Modified EBITDA loss in Q1 2020 was \$855,166 compared with a Modified EBITDA loss of \$1,136,537 for Q1 2019, representing a decrease of 25%. The decrease in the Modified EBITDA loss in Q1 2020 is attributable to the increase as mentioned above in the Adjusted EBITDA of \$916,849 and a decrease in the change of fair value of strategic investments of \$1,198,222.

Liquidity

The Company has incurred, in the last several years, operating losses and negative cash flows from operations, resulting in an accumulated deficit of \$61,994,683 and a negative working capital of \$11,157,110 as at Q1 2020, (December 31, 2019 - \$60,237,656 and \$10,492,102 respectively). Furthermore, as at Q1 2020, the Company's current liabilities and expected level of expenses for the next twelve months exceed cash on hand of \$1,139,416 (December 31, 2019 - \$34,431). 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 today that Me Sara-Catherine Tolszczuk has joined the Company as Legal Counsel and Corporate Secretary of the Board of Directors effective July 2nd, 2020. Before joining PyroGenesis, Me Tolszczuk was part of the corporate law group of the leading independent law firm in the province of Québec. Her work was focused on developing strategies for the protection, commercialization and enforcement of intellectual property assets. She also acquired experience in litigation files and participated in the due diligence phase of mergers and acquisitions. She holds a Bachelor's Degree in Law and a Master's Degree in Biology. The Company also announces the departure, effective July 2nd, 2020, of Me Ilario Gualtieri. We thank Me Gualtieri for his contributions and wish him well in his future endeavors.

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/>