PyroGenesis Announces Q2 2020 Results:
Net Income $5.2MM; Gross Margin 60%; Earnings per Share $0.04

MONTREAL, QUEBEC (GlobeNewswire – July 29th, 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 second-quarter ended June 30th, 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, Q2 is now starting to reflect the results one might expect given recent announcements. It is interesting to note that using this revenue recognition method, only $1.8MM has been recognized under the $22MM+ DROSRITE™ contract for which we have announced receipt of over $7MM, and which will be completed within the next year. Using this same revenue recognition method, we can provide guidance for Q3 2020, and for the year ending December 31st, 2020: At this point, we expect that Q3 2020, and the nine months ending September 30, 2020, will both be profitable as will year end results. We are projecting Q3 2020 EPS (Basic & Diluted) to be conservatively in excess of 6 cents,” said P. Peter Pascali, CEO and President of PyroGenesis. “We are happy to be reporting these results in record time, and are pleased to note that we did so within the time frame set by more demanding exchanges. As such, we have set a goal to report all future financial results within the more stringent requirements set by the TSX as opposed to the TSXV.”

Q2 2020 results reflect the following highlights:

- Revenues of $2,128,454, an increase of 133% from $913,769 posted in Q2 2019
- Comprehensive income of $5,228,020 an increase of 332% from ($2,253,390) posted in Q2 2020
- Gross margin of 59.5% an increase of 39.2% over the same period in Q2 2019
- Cash on hand on June 30, 2020 was $1,567,777 (December 31, 2019: $34,431)
- Backlog of signed contracts as of the date of this writing is approx. $28MM.

Management Guidance for Q3 2020

- Management expects significant revenue growth
- Management expects that Q3 2020 and the nine months ending September 30, 2020 to be profitable
- Earnings per Share (EPS) > $0.06.
Management Guidance for full year 2020:

- Management expects significant revenue growth in 2020
- Earnings per Share (EPS) > $0.10.

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, Q2 is now starting to reflect the results one might expect given recent announcements. It is interesting to note that using this revenue recognition method, only $1.8MM has been recognized under the $22MM+ DROSRITE™ contract for which we have announced receipt of over $7MM, and which will be completed within the next year.

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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, several strategies (up listings, spinoffs, acquisitions) are now being accelerated/considered.

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 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 $28MM; 2019 Revenues approx. $5MM) which, when taking the eagerly awaited US Navy contract into account, will increase to over $38MM. 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 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.

Financial Summary

Revenues

PyroGenesis recorded revenue of $2,128,454 in the second quarter of 2020, representing an increase of 133% compared with $913,769 recorded in the second quarter of 2019.

Revenues recorded in the three and six months ended June 30, 2020 were generated primarily from:

(i) DROSRITE™ related sales of $1,319,904 (3 months) and $1,794,336 (6 months),
(ii) PUREVAP™ related sales of $25,093 (3 months) and $43,058 (6 months),
(iii) torch related sales of $617,077 (3 months) and $705,022 (6 months),
(iv) support services related to PAWDS-Marine systems supplied to the US Navy $37,143 (3 months) and $61,039 (6 months).

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was $855,049 in Q2 2020, representing an increase of 18% compared with $723,641 in Q2 2019, primarily due to an increase in subcontracting and direct material expenses offset by a reduction in employee compensation in Q2 2020.

In Q2 2020, employee compensation decreased to 103,957 (Q2 2019 - $414,873) and subcontracting, direct materials and manufacturing overhead increased to $813,201 (Q2 2019 - $335,240). The gross margin for Q2 2020 was $1,268,592 or 59.5% of revenue compared to a gross margin of $185,349 or 20.3% of revenue for Q2 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 labour, materials and subcontracts may be significantly different. Of note, the Company in Q2 2020 applied for an amount of $648,125 in wage subsidy from Revenue Canada under the CEWS program. From this amount, $92,028 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 $18,758 in Q2 2020, compared with $29,061 in Q2 2019. This represents a decrease of 35% year-over-year. In total, the Company earned refundable investment tax credits of $17,332 in Q2 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 Q2 2020 and $4,779 for Q2 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 Q2 2020 excluding the costs associated with share-based compensation (a non-cash item in which options vest principally over a four-year period), were $1,641,338 representing an increase of 4% compared with $1,583,779 reported for Q2 2019.

The increase in SG&A expenses in Q2 2020 over the same period in 2019 is mainly attributable to the net effect of:

- an increase of 34% in employee compensation due primarily to an increase in commission expenses offset by amounts claimed from Revenue Canada under the CEWS wage subsidy program,
- an increase of 15% for professional fees, primarily due to an increase in legal fees,
- a decrease of 0.4% in office and general expenses, is due to a decrease in computer and internet expenses,
- travel costs decreased by 82%, 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 328% due to an additional refund of $24,605 from the 2018 tax return filed,
- government grants increased by 228% due to higher levels of activities supported by such grants,
- other expenses decreased by 33%, primarily due to a decrease in cost of freight and shipping.

Separately, share based payments decreased by 14% in Q2 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 2, 2020.

**Research and Development (“R&D”) Costs**

The Company incurred ($3,869) of R&D costs, net of government grants, on internal projects in Q2 2020, a decrease of 102% as compared with $212,645 in Q2 2019. The decrease in Q2 2020 is primarily related to an increase in government grants supporting our R&D activities and an amount
of $129,201 claimed under the wage subsidy from Revenue Canada under the CEWS program.

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 Q2 2020 totaled $276,928 as compared with $275,418 for Q2 2019, were less than 1%, resulting in a virtually unchanged variance.

**Strategic Investments**

The adjustment to the fair market value of strategic investments for Q2 2020 resulted in a gain of $5,899,465 compared to a loss in the amount of $339,313 in Q2 2019, representing an increase of 1839% year-over-year. The increase is primarily attributable to the increased market share value in the HPQ Silicon Resources Inc. and Beauce Gold Fields.

**Net Comprehensive Loss**

The net comprehensive gain for Q2 2020 of $5,228,020 compared to a loss of $2,253,390, in Q2 2019, represents an increase of 332% year-over-year. The increased gain of $7,481,410 in the comprehensive gain in Q2 2020 is primarily attributable to the factors described above, which have been summarized as follows:

(i) an increase in product and service-related revenue of $1,214,685 arising in Q2 2020, an increase in cost of sales and services totaling $133,442, primarily due to an increase in subcontracting, direct materials, manufacturing overhead & other, offset by a decrease in employee compensation,
(ii) an increase in SG&A expenses of $53,613 arising primarily due to an increase in employee compensation, professional fees, offset by a decrease in travel, depreciation on property and equipment, depreciation ROU assets, and other expenses,
(iii) a decrease in R&D expenses of $216,512 primarily due to an increase in government grants and wage subsidy,
(iv) an increase in net finance costs of $1,510 primarily due to interest on higher amounts of debt,
(v) an increase in fair value adjustment of $6,238,778 primarily due to strategic investments.

**EBITDA**

The EBITDA gain in Q2 2020 was $5,610,023 compared with an EBITDA loss of $1,814,832 for Q2 2019, representing an increase of 409% year-over-year. The $7,424,855 increase in the EBITDA gain
in Q2 2020 compared with Q2 2019 is due to the increase in comprehensive income of $7,418,410, a
decrease in depreciation on property and equipment of $38,927, a decrease in depreciation of right of
use assets of $21,171, an increase in amortization of intangible assets of $2,034, and an increase in
finance charges of $1,511.

Adjusted EBITDA gain in Q2 2020 was $5,633,661 compared with an Adjusted EBITDA loss of
$1,787,248 for Q2 2019. The increase of $7,420,909 in the Adjusted EBITDA gain in Q2 2020 is
attributable to an increase in EBITDA gain of $7,424,855, offset by a decrease of $3,946 in share-
based payments.

The Modified EBITDA loss in Q2 2020 was $265,804 compared with a Modified EBITDA loss of
$1,447,935 for Q2 2019, representing a decrease of 82%. The decrease in the Modified EBITDA loss in
Q2 2020 is attributable to the increase as mentioned above in the Adjusted EBITDA of $7,357,909
and an increase in the change of fair value of strategic investments of $6,238,778.

Liquidity

The Company has incurred, in the last several years, operating losses and negative cash flows from
operations, resulting in an accumulated deficit of $57,304,682 and a negative working capital of
$7,463,370 as at Q2 2020, (December 31, 2019 - $60,237,656 and $10,492,102 respectively). Further-
more, as at Q2 2020, the Company’s current liabilities and expected level of expenses for the
next twelve months exceed cash on hand of $1,567,777 (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.

Revenue generated from active projects has begun to produce sufficient positive cash flow to fund
operations. The Company has a strong backlog from signed contracts totaling $28MM, and a pipeline
of prospective new projects resulting in the Company’s business plan becoming less dependent on
raising additional funds to finance operations within and beyond the next 12 months. While the
Company has been successful in securing financing in the past, raising additional funds is dependent
on a number of factors outside the Company’s control, and as such there is no assurance that it will be
able to do so, should it need to, in the future. If the Company is unable to obtain sufficient additional
financing when needed, it may have to curtail operations and development activities, any of which
could harm the business, financial condition and results of operations.

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.

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