PYROGENESIS

PyroGenesis Announces 2016 Q2 Results - Current Backlog at August 30, 2016: $10.1MM

MONTREAL, QUEBEC--(Marketwired – August 30, 2016) - PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX-V: PYR) (OTCQB: PYRNF), a TSX Venture 50® clean-tech company (the “Company” or “PyroGenesis”) that designs, develops, manufactures and commercializes plasma waste-to-energy systems and plasma torch products, announced today its financial and operational results for the second quarter of fiscal year 2016.

Second Quarter Highlights

In Q2 of Fiscal 2016,

- Revenues decreased 47%; over the same period in 2015;
- Gross margins before amortization of intangible assets decreased to 9%; over the same period in 2015;
- Current backlog at August 30, 2016 of $10.1MM (over 160% of 2015 revenues).

Financial Summary

Operations for the periods under review have been negatively impacted in the short term by the decision to stop working on the previously announced contract to deliver an additional nine (9) Plasma Atomization Systems to an Asian customer for approximately $10MM.

The decision was made when improvements to the system demonstrated that the revenues and profits from selling powders from one system alone, far exceeded, on an annual basis, the one-time profit from selling an additional nine (9) systems, and, as such, the Company announced, on October 26, 2015, the strategy to move into a potentially lucrative market of producing powders for the Additive Manufacturing industry (3D Printing).

As PyroGenesis moved away from its dependency on the cash flow expected from the Asian contract, significant pressure has been placed on revenues and associated margins for the period under review.

Notwithstanding the above, based on current backlog at August 30, 2016 of $10.1MM (over 160% of 2015 revenues), together with the pipeline of prospective new projects, cash flow from operations are expected to become positive in the very near future.

Revenues

PyroGenesis recorded revenue of $818,990 in the second quarter of 2016 ("Q2, 2016"), representing a decrease of 47% compared with $1,533,667 recorded in the second quarter of 2015 ("Q2, 2015"). Revenues for the six first months of fiscal 2016 were $1,835,842, a decrease of 31% over revenues of $2,650,244 reported during the same period in 2015.

Revenues recorded in Q2, 2016 and the six months of fiscal 2016 were generated primarily from (i) the manufacture and further field testing of Tactical PACWADS, the first mobile plasma system for destruction of chemical warfare agents under contract with an international military consortium; (ii) the demonstration of the viability of PyroGenesis' existing plasma chemical warfare agent destruction platform with locally available materials, for the complete eradication of chemical warfare agents without creating hazardous by-products; (iii) the manufacture and supply of PyroGenesis' first DROSRITE™ Furnace System to a North American automobile parts manufacturer; and (iv) the support services related to PAWDS-Marine systems supplied to the US Navy.

Cost of Sales and Services and Gross Margins

Cost of sales and services before amortization of intangible assets was $744,927 in Q2, 2016, representing a decrease of 38% as compared with $1,208,578 in Q2, 2015.

The amortization of intangible assets of $349,269 in Q2, 2016 and Q2, 2015 relates to the licenses and know-how purchased in 2011 from a company under common control. This expense is a non-cash item and the underlying asset will be fully amortized by December 31, 2016.

In Q2, 2016, the gross margin before amortization of intangible assets was $74,063, which represents 9% of revenue. This compares with a gross margin before amortization of intangible assets of $325,089 (21.2% of revenue) for Q2, 2015.

Investment tax credits recorded against cost of sales are primarily related to client funded projects that qualify for tax credits from the provincial government of Quebec. Qualifying tax credits decreased to $26,221 in Q2, 2016, compared with $65,851 in Q2, 2015, primarily as a result of the decreased R&D activities within projects under construction for clients in 2016. This represents a decrease of 10% year-over-year The Company continues to make investments in research and development projects involving of strategic partners and government bodies.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SG&A") incorporate costs associated with corporate administration, business development, project proposals, operations administration, investor relations and employee training.

SG&A expenses for Q2, 2016 were $999,500, representing a decrease of 10% compared with $1,107,602 reported for Q2, 2015. Excluding the costs associated with share-based compensation (a non-cash item in which options vest over a four year period) SG&A expenses decreased by 10% in Q2, 2016 compared with Q2, 2015.

The decrease in SG&A expenses in Q2, 2016 over the same period in 2015 is attributable to the net effect of:

- an increase of 1% in employee compensation, and an increase of 7% in office and general expenses a decrease of 28% for professional fees, primarily due to decreased levels of external investor relations services, business development and accounting services,
- travel costs decreased by 36%,
- depreciation on property and equipment decreased by 22% due to a reduced level of investment in machinery and equipment since 2010, when major acquisitions were made,
- government grants decreased by 66% due to lower level of activities supported by such grants and
- other expenses decreased by 30%, primarily due to the reduced cost of freight and shipping.

Separately, share based payments increased by 6% in Q2, 2016 over the same period in 2015 as a result of the vesting structure of the stock option plan and the re-evaluation of options as at December 31, 2015 which increased the share-based payments expense in 2016. On a year-to-date basis, share-based payments expense decreased by 44% since there was no options granted in 2016 which was not the case in 2015.

Net Loss and Comprehensive loss

The net loss and comprehensive loss for Q2, 2016 was $1,345,000 compared to a loss of $1,296,111, in Q2, 2015, representing an increased loss of 4% year-over-year.

EBITDA

EBITDA (earnings from operations before interest, taxes, depreciation and amortization) loss in Q2, 2016 was $801,894 compared with an EBITDA loss of $768,193 for the same period last year, representing an increase of 4%. The increase of $33,701 in the EBITDA loss in Q2, 2016 compared with Q2, 2015 is primarily attributable to the increase in net loss and comprehensive loss of $48,889, less the increased finance costs of $24,248.

The Adjusted EBITDA loss in Q2, 2016 was $766,029 compared with an Adjusted EBITDA loss of $734,512 for the same period last year, representing an increased loss of 4%. The decrease of $47,736 in the Adjusted EBITDA loss in 2016 is attributable to the decrease in EBITDA loss of $128,572 for the period, as previously described, less decreased cost of other non-cash items, specifically share-based payments of $80,836.

Liquidity

On July 26, 2016, the Company announced the completion of a share for debt transaction whereby the Company settled outstanding debt by the issuance of 2,060,126 common shares of the Company from treasury at a deemed price of $0.20 per common share in the aggregate amount of $412,025. The Company also completed at this time a private placement offering whereby the Company issued and sold an aggregate amount of 6,131,579 units of the Company at a price of $0.19 per unit for gross proceeds of $1,165,000 (see subsequent events section for further details).

As at June 30, 2016, the Company had cash on hand of $58,512 and negative working capital of $1,813,374 compared with a cash balance of $767,368 and positive working capital of $166,095 as at December 31, 2015.

Subsequent events

On July 25, 2016, the Company signed a Military contract for US $950,000. The contract is expected to be completed within six months.

On July 26, 2016, the Company completed a share for debt transaction to settle outstanding debt whereby the Company issued 2,060,126 common shares of the Company from treasury at a deemed price of $0.20 per common share in the aggregate amount of $412,025 (the "Share for Debt Transaction"). The common shares issued are subject to a statutory hold period of four months and one day from the date of issuance. The transaction was approved by TSXV on August 12, 2016.

On July 26, 2016, the Company amended the terms of certain common share purchase warrants (the "Warrants") issued by the Company in connection with a private placement completed on November 26, 2014. In connection with this amendment, the exercise price of the Warrants was reduced from $0.55 to $0.26 and in accordance with the policies of the TSXV, the Warrants are subject to an accelerated expiry provision such that the exercise period of the Warrants will be reduced to thirty days if, for any ten consecutive trading days during the unexpired term of the Warrants (the "Premium Trading Days"), the closing price of the Company's common shares is $0.325 or more, with the 30-days expiry period to begin no more than seven calendar days after the 10th Premium Trading Day. The expiry date of the Warrants remains November 26, 2016. The Warrant amendment was approved by the TSXV on August 8, 2016

On July 26, 2016, the Company completed a private placement offering whereby the Company issued and sold an aggregate amount of 6,131,579 units of the Company (a "Unit") at a price of $0.19 per Unit for gross proceeds to the Company of $1,165,000(the "Private Placement"). Each Unit consists of one common share of the Company and one half of one common share purchase warrant (the "Warrants"). Each Warrant entitles the holder thereof to purchase one common share at a price of $0.35 until January 26, 2018. Each Unit is subject to a statutory hold period of four months and one day from the date of closing. In connection with the Private Placement, the Company paid finder fees in the amount of $15,960.

On August 2, 2016, the Company signed a contract for $8,260,000 with HPQ Silicon Resources Inc., formally Uragold Bay Resources Inc., to provide a 200 metric tonne per year PUREVAP™ pilot system (the "Pilot System") to produce silicon metal directly from quartz (the "Contract"). The Contract is for the design, fabrication, assembly, commissioning and testing of the Pilot System and is expected to be completed in the next eighteen (18) months, with a final testing period expected to last ten (10) months. The Client will acquire the intellectual property rights to the PUREVAP™ process developed by PyroGenesis as it relates exclusively to the production of silicon metal from quartz. PyroGenesis will retain a royalty-free, exclusive, irrevocable, worldwide license to use the System for all other purposes, other than the production of silicon metal from quartz.

On August 30, 2016, the Company announced that as a result of the completion of the Share for Debt Transaction and Private Placement, and the signing of the Contract with HPQ Resources Inc., it has decided to withdraw its previously announced private placement offering of $3MM secured, subordinated convertible debenture.

Outlook

Management remains focused on reducing PyroGenesis' dependency on long-cycle projects by developing a strategic portfolio of volume driven, high margin/low risk, products that resolve specific problems within niche markets, and doing so by introducing these plasma based solutions to industries that have not yet had the opportunity to consider such solutions.

The fact that PyroGenesis has one of the largest concentrations of plasma expertise in the world, with over 250 years of accumulated technical experience and 49 patents, combined with unique relationships with major Universities performing cutting edge plasma research and development, positions the company well to execute this strategy.

At the same time, management is actively targeting recurring revenue opportunities that will generate a growing and profitable, regular cash flow to the Company.

The most significant recurring revenue stream is expected to be from the construction of PyroGenesis' own Plasma Atomization Systems, which will allow the Company to produce specialty powders for the Additive Manufacturing industry, specifically for 3D printing.

As previously noted, recent operations have been negatively impacted by the decision to move away from supplying powder producing equipment for 3D printing (and as such stop working on the previous announced contract to deliver an additional nine (9) plasma Atomization Systems to an Asian customer for approximately $10MM) and move into the lucrative market of producing powders, which strategy was announced by the Company on October 26, 2015. Until this decision was made, PyroGenesis had been a fabricator of plasma-based systems that produced unique titanium powders which are greatly sought after by the Additive Manufacturing industry. These powders are unique in that they are small, spherical, and uniform, allowing them to flow like water; a characteristic that is extremely important in industries such as 3D printing.

The strategic decision to move into powder production was made when improvements to the system demonstrated that the revenues and profits from selling powders from one system alone far exceeded, on an annual basis, the one-time profit from selling an additional nine (9) systems. Management expects to commence supplying titanium metal powders to Additive Manufacturing clients in 2017.

Other examples of recurring revenue streams being pursued by PyroGenesis include royalties generated from the sale of metals refined from ore through utilisation of PyroGenesis' technologies and royalties generated from the recovery of valuable metals from waste streams.

Separately, PyroGenesis recently supplied its first commercial DROSRITE™ Furnace System to a North American automobile parts manufacturer. The system was installed and commissioned at the client's facility during the first quarter of 2016 and is currently undergoing performance testing, which is expected to be completed late 2016. Early yields from operating the system exceed expectations. If confirmed during the official performance testing phase, these increased yields would improve upon the already impressive return on investment previously demonstrated. As a result, the client recently indicated the requirement for a further 3 DROSRITE™ systems. Furthermore, management believes that the supply and installation of this first commercial sale in North America will enable the Company to leverage this reference site to generate a continued flow of orders for additional DROSRITE™ systems from primary and/or secondary aluminum smelters, and large finished goods manufacturers, primarily in the transportation sector. The market potential for PyroGenesis' DROSRITE™ system exceeds $400MM.

Another project, reflecting both the diversification and recurring revenue strategy noted earlier, is the PUREVAP™ process developed by PyroGenesis; a one-step process that uses a plasma arc within a vacuum furnace to produce high purity, metallurgical grade silicon (MG-Si), solar grade silicon (UMG Si) and polysilicon from quartz. As noted above, on August 2, 2016, the Company announced that it had signed a contract for CDN$8,260,000 with HPQ Silicon Resources Inc., formally Uragold Bay Resources Inc., to provide a 200 metric tonne (MT) per year PUREVAP™ pilot system to produce silicon metal directly from quartz.

In conclusion, the Company's focus will continue to be to generate an improved mix of short and longer term projects that will, in turn, facilitate operational and financial planning. Repeat orders for the same, or similar, products will further result in the standardisation of manufacturing processes and, as such, are expected to yield higher gross margins.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a TSX Venture 50® clean-tech company, is the world leader in the design, development, manufacture and commercialization of advanced plasma processes. 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 m^2 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 9001:2008 certified, and have been since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace (Ticker Symbol: PYRNF). 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 Company'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 Company with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Company'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 Company 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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