



**PyroGenesis Announces 2015 Results:  
Revenues of \$6.2MM; Gross Margin Exceeds 27%; Current Backlog  
\$14.5MM; Shareholder's Equity \$0.6MM**

**MONTREAL, QUEBEC--(Marketwired - April 29, 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 fourth quarter and the fiscal year ended December 31, 2015.

"Despite increased revenues year over year and healthy, albeit weaker, margins over the same period, fiscal 2015 results reflect, in part, the impact of the Company's decision to enter the Additive Manufacturing industry and, as such, may not reflect what may have been expected had the Company decided not to pursue this opportunity," said P. Peter Pascali, President and CEO of PyroGenesis. "As noted below in the Outlook, and as announced in recent press releases, PyroGenesis has positioned itself to start producing, in 2016, titanium powders which are highly sought after in the 3D printing market. We look forward to 2016 and, in particular the coming months, as this strategy takes shape. A summary of the 2015 results are discussed below."

### **Highlights**

Fiscal 2015 was a year in which PyroGenesis posted:

- Increased Revenues by 8% to \$6,242,003 year over year;
- Gross margins (before amortization of intangible assets) decreased to 27.1%. Same margins decrease to 31% for 2014-Q4;
- An EBITDA loss of \$2.6MM;
- An Adjusted EBITDA loss of \$473,401 in Q4, 2015;
- Shareholder's equity at year-end 2015: \$615,571;
- A backlog of \$14.5MM at December 31, 2015.

## **Financial Summary**

### **Revenues**

The Company posted revenues of \$2,228,782 in the fourth quarter of 2015 ("Q4, 2015"), representing an increase of 25% compared with \$1,784,676 recorded in the fourth quarter of 2014 ("Q4, 2014"). Revenue recorded in Fiscal 2015 was generated primarily from (i) work completed under PyroGenesis' project to design, manufacture and supply ten plasma-based powder production systems for 3D printing to an Asian client, (ii) advances made on two R&D projects incorporating novel plasma based technologies in the oil and gas industrial sector, (iii) the manufacture and supply of PyroGenesis' first DROSRITE™ Furnace System to a North American automobile parts manufacturer, (iv) work completed on the second, and final, phase to design, manufacture and deliver a fully automated plasma torch system comprised of eight air plasma torches to be used for waste gasification for a client in Asia, and (v) progress made on various contracts in the defense sector, specifically: (a) the design, manufacture and preliminary field testing of Tactical PACWADS, the first mobile plasma system for destruction of chemical warfare agents under contract with an international military consortium, and (b) support services related to PAWDS-Marine systems supplied to the US Navy, including training sailors in the operation and maintenance of the system.

Revenue in Fiscal 2014 benefitted from a one-time settlement gain of \$753,965 related to the termination of a project due to a client's breach of contract. Excluding this gain, PyroGenesis recorded an adjusted revenue growth of \$1,231,072, or 25%, for Fiscal 2015.

### **Cost of Sales and Services and Gross Margins**

Cost of sales and services before amortization of intangible assets was \$4,551,090 in Fiscal 2015, representing an increase of 69% compared with \$2,691,742 in Fiscal 2014. In the fourth quarter of Fiscal 2015, the cost of sales and services before amortization of intangible assets was \$1,538,827, representing an increase of 136% compared with \$652,041 in Q4, 2014.

Various factors, including, but not limited to, the mix of long and short-term manufacturing projects, project complexity and scale, and project R&D content, may significantly impact both the composition and overall level of cost of sales and services reported in a given period, as the mix of labour, materials and equipment may be significantly different.

The costs incurred in 2015 are primarily attributable to the work completed under PyroGenesis' project to design, manufacture and supply ten plasma-based powder production systems for 3D printing to an Asian client, together with advances made on two R&D projects incorporating novel plasma based technologies in the oil and gas industrial sector, the manufacture and supply of the Company's first DROSRITE™ Furnace System to a North American automobile parts manufacturer, work completed on the second, and final, phase to design, manufacture and deliver a fully automated plasma torch system comprised of eight air plasma torches to be used for waste gasification for a client in Asia, work completed on the tactical mobile plasma system for destruction of chemical warfare agents under contract

with an international military consortium, and support services related to PAWDS Marine systems supplied to the US Navy.

The cost of direct materials increased significantly in Fiscal 2015 compared with Fiscal 2014. The increase is due to a number of factors including: a change in the mix of products being manufactured, resulting in an increased proportion of direct materials required; increased R&D activities within projects under construction for clients, particularly the 3D printing powder production systems for Asia; and the 25% increase in year-on-year revenue generated from product and services (excluding the one-time gain of \$753,965 in Fiscal 2014 that incurred no costs and therefore generated a gross margin of 100%).

Furthermore, almost 40% of the \$2.2 million of direct materials expensed in Fiscal 2015 was denominated and paid for in US\$. The foreign exchange impact of the deterioration in the CAD\$ versus US\$ rate of exchange added approximately \$125 thousand to the cost of direct materials, and accounts for approximately 2% of the reduced gross margin.

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 increased to \$544,676 in Fiscal 2015, compared with \$252,215 in Fiscal 2014, primarily as a result of the increased R&D activities within projects under construction for clients. This represents an increase of 116% year-over-year and is in line with the increased level of qualifying costs on external R&D projects. The Company continues to make investments in research and development projects incorporating the involvement of strategic partners and government bodies.

In Fiscal 2015, the gross margin before amortization of intangible assets was \$1,690,913, which represents 27.1% of revenue. This compares with a gross margin before amortization of intangible assets of \$3,073,154 (53.3% of revenue) for Fiscal 2014. Included in the gross margin of Fiscal 2014 is a one-time gain of \$753,965 that is related to revenue recorded as a result of the termination of a project due to a client's breach of contract. No costs were recorded against this one-time gain, leading to a gross margin of 100% on the full revenue amount of \$753,965 recorded. Excluding this one-time gain, the adjusted gross margin before amortization of intangible assets in Fiscal 2014 was \$2,319,189, or 46.3%.

The amortization of intangible assets of \$1,397,074 in Fiscal 2015 (\$1,397,073 in Fiscal 2014) 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.

#### Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SG&A") for Fiscal 2015 were \$4,648,473, representing an increase of 3% compared with \$4,530,083 reported for Fiscal 2014.

Excluding the costs associated with share-based compensation (a non-cash item in which options vest over a four year period), SG&A expenses increased by 2% in Fiscal 2015 compared with Fiscal 2014.

The increase in SG&A expenses is attributable to the net effect of (i) a decrease of 2% in employee compensation, primarily due to the departure of a senior executive previously employed in an administrative function but partially offset by the continuous commitment in business development activities including additional employees in this area, (ii) an increase of 4% for professional fees, primarily due to increased levels of external investor relations services, business development and accounting services, (iii) an increase of 37% in office and general costs, primarily due to an increase in rent and related taxes, together with increased communication expenses, (iv) travel costs increased by 5%, due to increased business development activities in international markets, as well as travel expenses related to Investor Relations activities, (v) depreciation on property and equipment decreased by 10% due to a reduced level of investments in machinery and equipment since 2010, when major acquisitions were made, (vi) government grants increased by 5% due to improved volume of the Company's projects that are eligible for grants, and (vii) other expenses decreased by 9%, primarily due to the reduced cost of lower insurance premiums.

Of note, management has dedicated the Company's business development resources to resolving problems within high value niche markets, other than those within the US military, for more than 2 years. As a result, the Company has diversified into three additional industries; Additive Manufacturing (3D Printing), Oil & Gas, and Metals & Mining, and today operates in multiple geographical locations. The benefits of this strategic diversification have generated a backlog of signed contracts totalling \$14.5 million as at December 31, 2015. Management expects the majority of the current backlog to be recorded as revenue prior to the end of fiscal 2016. However, depending on the outcome of management's negotiations with the Asian customer for the additional 9 systems, \$9.7 million of current backlog would be at risk.

Separately, share based payments increased by 8% as a result of the vesting structure of the stock option plan and for new options issued in Fiscal 2015.

### **Total Comprehensive Loss**

The net loss and comprehensive loss for Fiscal 2015 was \$4,917,779 compared to a loss of \$3,278,610 in Fiscal 2014, representing an increase of 50% year-over-year.

The increase of \$1,639,169 in the net loss and comprehensive loss in Fiscal 2015 is primarily attributable to: (i) an increase in product and service related revenue of \$1,231,072, after adjusting for the one-time gain arising on a client's breach of contract, (ii) a decrease in non product and service related revenue of \$753,965 arising in Fiscal 2014, (iii) an increase in cost of sales and services totaling \$1,382,241, primarily due to the concentration of engineering and R&D resources on projects under construction for clients, particularly the

3D printing powder production systems for an Asian client, together with the change in the mix of products being manufactured requiring an increased proportion of direct materials, the 25% increase in year-on-year revenue derived from product and services, and the foreign exchange impact arising from the deterioration in the CAD\$ versus US\$ rate of exchange, (iv) an increase in SG&A expenses of \$116,318, primarily related to increased professional fees, increased travel expenses and an increase in office and general costs, partly offset by decreases in employee compensation and higher government grants, (v) a decrease in R&D expenses of \$71,735, primarily due to the fact that many of the Company's engineering and R&D resources were concentrated on activities within projects under construction for clients, with such costs being recorded within cost of sales, and (vi) An increase in finance costs of \$210,272 that is primarily due to interest payable and an accretion expense in respect of the convertible debenture financing of March 2015, partly offset by reduced interest due to the conversion of \$6,000,000 of debt to equity in May 2014.

## **EBITDA**

EBITDA (earnings from operations before interest, taxes, depreciation and amortization) for Q4, 2015 was \$544,863, as compared with an EBITDA loss of \$281,293 for the same period last year, representing an increase of 94%. For Fiscal 2015, the EBITDA loss was \$2,930,637 compared with an EBITDA loss of \$1,484,453 for Fiscal 2014, representing an increase of 97% year-over-year. The increase of \$1,446,184 in the EBITDA loss in Fiscal 2015 compared with Fiscal 2014 is primarily attributable to the increase in loss from operations of \$1,639,169, plus the reduction for the depreciation on property and equipment of \$17,288 and less the increased finance costs of \$210,272.

## **Liquidity**

As at December 31, 2015, the Company had cash on hand of \$767,368 and positive working capital of \$166,095 compared with a cash balance of \$362,183 and positive working capital of \$1,502,802 as at December 31, 2014.

Revenue generated from active projects is not yet producing sufficient positive cash flow to fund operations. However, based on current backlog, together with the pipeline of prospective new projects, cash flows from operations are expected to become positive in the near future.

The conversion of \$6 million of long-term debt to equity in May 2014 strengthened the balance sheet of the Company and resulted in a decrease in interest expense of \$156,000 in Fiscal 2014. This conversion and subsequent reduction of interest expense will continue to benefit the Company for the remaining term of the loan, which is expected to be fully paid by the end of 2016.

On March 30, 2015, the Company completed a financing and raised \$4 million through the issuance of convertible debentures. The convertible debentures mature in 3 years from

the date of issuance and bear interest, paid quarterly, at 7.5% per annum. As part of this offering, an additional \$755,000 of debt was converted to convertible debentures, thereby further strengthening the balance sheet.

## **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 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.

One of the most important developments was the recently announced strategic decision to produce titanium powders for the Additive Manufacturing industry, and to spin out these capabilities to shareholders.

Until recently, 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.

In 2015, the Company announced that it made significant improvements to its existing technology, which improvements resulted in the Company filing for a provisional patent and more recently, resulted in, as mentioned previously, the Company's decision to re-enter the Additive Manufacturing industry and become a supplier of titanium powders.

According to Tech Pro Research, as of June 2014, nearly 60% of enterprises were using, or evaluating the need for 3D printers<sup>1</sup>. Moreover, based on Wohlers Report (2015), it is expected that the global demand for 3D printers will exceed 14,000 machines by 2020, generating a demand for metal powders in excess of 8.6MM kg, representing a market value of over \$3.45 billion at an average price of \$400/kg<sup>2</sup>. The small, spherical, uniform titanium powders, such as those produced by PyroGenesis' patented technology, can immediately address over 30% of this metal powder demand<sup>3</sup>.

The Additive Manufacturing market is currently divided into two principal segments of customers: (i) those that require powders between 15µm and 45µm and (ii) those that require

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<sup>1</sup> Tech Pro Research Wohlers

<sup>2</sup>Report (2015) Wall Street

<sup>3</sup>Research

powders between 45µm and 106µm. The majority of PyroGenesis' powder production is within these two sweet spots which further validates the Company's recent decision to re-enter the Additive Manufacturing market and spin-off these capabilities to its existing shareholders.

As currently structured, and subject to change, PyroGenesis would still fabricate units and supply maintenance contracts for each system sold to, or through, the spin-off company ("3DCo"). PyroGenesis would further benefit from a royalty arrangement with 3DCo with respect to powders sold by 3DCo. As such PyroGenesis has not only preserved its revenue streams but increased them. 3DCo on the other hand benefits by being the exclusive supplier of these powders, as well as having the exclusive worldwide distribution licence for the systems. Both Companies benefit from 3DCo's ability to attract investment targeted specifically for Additive Manufacturing opportunities thereby accelerating PyroGenesis' original strategic plan, all to the benefit of both companies.

To date PyroGenesis has received significant interest from major players to fund 3DCo and PyroGenesis is currently at the early stage of considering spin-off options.

If successful, and at this point, it has all the signs of being successful, this will be the template for the commercialization of other PyroGenesis products. The Drosrite™ product line as well as the Uragold project are two candidates for future spin-off consideration.

### **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<sup>2</sup> 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](http://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*

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