

# PyroGenesis Canada Inc.

(TSXV:PYR | OTCQB:PYRNF | FRA:8PY)

## Drawing Up the Layers for the 3D Printing Boom

### Company Description

PyroGenesis Canada Inc. (“PyroGenesis”) provides plasma-based solutions to the US Military, metallurgical, mining, 3D printing and environmental industries. The Company’s waste destruction system is currently in the design of the new US air craft carrier (two systems have delivered, a third order expected in 2018). PyroGenesis developed a tactical chemical warfare destruction unit which is currently being tested at a cost of ~\$100M to the client. Recently, PyroGenesis re-entered the market to produce metal powders that are highly sought after for use in metal 3D printers. As a result, the Company’s patented process (Plasma Atomization) has become the gold standard for producing these Titanium powders.

### Investment Highlights

- **Equity play to capture the growing 3D printing market.** PyroGenesis produces small spherical and uniform metal powders used by metal 3D printers. A recent report by Research and Markets estimates that metal powder demand is expected to grow by a CAGR of 37% up to 2020. With the initial barriers behind the Company, a compelling opportunity is ripe for the taking, as PyroGenesis enters the market with the right product and expertise at the right time.
- **Existing businesses provide a cushion for ramp up of its 3D vertical.** The Company generates revenues from: 1) DROSRITE: is a system (\$1.2M each with < 1 year payback) that recovers metal from dross (a waste generated in the metallurgical industry). On November 16, the Company announced a \$1M re-order of a DROSRITE system from an existing client. Additional orders are in negotiations in the Middle East, the Company’s demonstration unit is on its way to India, and the Company has just hired a dedicated business development professional for this business line. 2) PUREVAP™: PyroGenesis is under contract with HPQ Silicon Resources (\$8.3M) to convert high-grade quartz into solar-grade silicon metal for use in solar panels. If successful, it could be game changing for the solar panel industry and the Company would receive a 10% royalty on revenues. 3) Military: The Company has a long-standing relationship with the US Military, which has invested over \$50M in developing PyroGenesis’ technologies, and has deployed it on its various platforms.
- **The ramp-up of plasma-atomization begins!** On October 23, the Company announced the completion of the 6 month ramp up, which also saw the Company signing six Non-Disclosure Agreements (“NDA”) with distributors & 3D manufacturers. Additionally, PyroGenesis recently announced another 2 NDAs with global engine manufacturers. According to management, General Electric’s acquisition of its competitor, AP&C in 2016 (who was the dominant supplier of titanium powder to the industry), has disrupted the supply chain and increased interest for PyroGenesis’ powders

### Financial Analysis

PyroGenesis core business lines (ie. Non-Additive Manufacturing) are starting to cash flow as ramp-up of its 3D metal powder production was completed in October 2017. The Company has posted positive Adj. EBIDTA in four of the past five quarters (Q3-2017 generated \$92K of Adj. EBITDA). The Company is on pace to generate ~\$8M in revenues this year. Gross margins to-date have been 52%. Revenues for the nine months were up 58% year over year and back log of signed contracts is \$7.41M or 143% of 2016 revenues. Nine months results include the costs associated with the ramp up of its powder production system. Adjusted working capital at September 30, 2017 was (\$88K).

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### Price Performance



### Market Data (TSXV:PYR)

Price (December 13 close, 2017)	\$0.67
52 Week Range	\$0.17 - \$0.98
Market Cap (M)	\$73.9
Current Shares Outstanding (basic, M)	110.3
Current Shares Outstanding (fully diluted, M)	123.9
Free Float	42%
Average Daily Volume (3 months)	181K
Total Debt (M)	\$4.1
Current Cash (M)	\$0.3
Total Assets (M)	\$4.6

### Headquarters

Montreal, QC, Canada

### Website

<http://pyrogenesis.com/>

### Top Shareholders

P. Peter Pascali	57%
AGF Investments Inc.	1%

### Management

Alan Curleigh	Chairman
P. Peter Pascali	President & CEO
Pierre Carabin	CTO
Mtre Ilario Antonio Gualtieri	Senior Legal Counsel/ Corporate Secretary
Massimo Dattilo	VP, Sales
Rodayna Kafal	VP, Investor Relations
Robert Radin	Director
Chris Twigge-Molecey	Director
Angelos Vlasopoulos	Director

All figures in CAD unless otherwise stated.  
Source: Company Reports, Thomson Reuters

Figure 1: Montreal Manufacturing Plant



Source: Company Presentation

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