



**PYROGENESIS CANADA INC.**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**

For the three and six months ended June 30, 2015

(All figures are expressed in Canadian dollars unless otherwise noted.)

August 28, 2015

This management's discussion and analysis (MD&A) of PyroGenesis Canada Inc. ("PCI", "PyroGenesis", or the "Company") has been prepared by management and should be read in conjunction with the unaudited financial statements and related notes thereto of the Company for the three and six months ended June 30, 2015 which were prepared in accordance with International Financial Reporting Standards ("IFRS"). This MD&A is the responsibility of management and has been reviewed and approved by the Board of Directors of the Company. The Board of Directors is responsible for ensuring that the Company fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the MD&A. The Board of Directors carries out this responsibility principally through its Audit Committee. The Audit Committee is appointed by the Board of Directors and is comprised of independent and financially literate directors.

The MD&A was prepared as of August 28, 2015. Additional information regarding the Company is available on SEDAR ([www.sedar.com](http://www.sedar.com)).

**FORWARD-LOOKING STATEMENTS**

This MD&A contains forward-looking statements. All statements other than statements of historical fact contained in this MD&A are forward-looking statements, including, without limitation, the Company's: statements regarding its products and services; relations with suppliers and customers; future financial position; business strategies; potential acquisitions; potential business partnering; litigation; and plans and objectives. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" and similar words or the negative thereof. Although management of the Company believes that the expectations represented in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct.



In particular, this MD&A contains forward-looking statements that relate, but are not limited, to:

- the business strategies of the Company;
- the capital resources of the Company;
- the ability of the Company to increase sales, including the results of the successful completion of the Company's current projects;
- management's expectation that the Company will achieve sustained annual growth and profitability, and that gross margins will increase as a result of a decrease in cost of sales as a percentage of revenue; and
- the Company's overall financial performance.

By their nature, forward-looking statements require assumptions and are subject to inherent risks and uncertainties including those discussed herein. In particular, forward-looking statements relating to future sales, growth and profitability are based on the assumption that current projects will be completed and the Company will be awarded certain anticipated contracts pursuant to recent negotiations with, and statements made by, third parties. There is significant risk that forecasts and other forward-looking statements will not prove to be accurate. Readers are cautioned to not place undue reliance on forward-looking statements made herein because a number of factors could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed in the forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including, but not limited to, the strength of the Canadian, US and Asian economies; operational, funding, and liquidity risks; unforeseen engineering and environmental problems; delays or inability to obtain required financing and/or anticipated contracts; risks associated with licenses, permits and regulatory approvals; supply interruptions or labor disputes; foreign exchange fluctuations and collection risk; competition from other suppliers or alternate less capital intensive energy solutions; and the risk factors described under the heading "Risk Factors" in the Company's annual information report for the fiscal year ended December 31, 2014. We caution that the foregoing list of factors is not exhaustive, and that, when relying on forward-looking statements to make decisions with respect to the Company, investors and others should carefully consider these factors, as well as other uncertainties and potential events, and the inherent uncertainty of forward-looking statements.

Although the Company has attempted to identify significant factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ



materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Forward-looking statements are provided as of the date of this MD&A, and the Company assumes no obligation to update or revise such forward-looking statements to reflect new events or circumstances except as required under applicable securities laws.

The forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement. The forward-looking statements included in this MD&A are made as of the date of this MD&A or such other date specified herein.

## **OVERVIEW**

PyroGenesis Canada Inc., a TSX Venture 50® company, is the world leader in the design, development, manufacturing and commercialization of advanced plasma processes. The Company provides 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 from its Montreal office and its 3,800m<sup>2</sup> production facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. PyroGenesis' core competencies allows the Company to be a leader in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. PyroGenesis' operations are ISO 9001:2008 certified, and has been certified under ISO standards since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol PYR.V). In addition, the Company recently applied to trade its common shares on the OTCQB in the United States under the symbol "PYRNF".

## **KEY DEVELOPMENTS**

The Company achieved a number of key strategic developments during the first six months of fiscal 2015, the most notable of which are as follows:

### **PROJECTS & TECHNOLOGY**

#### **Oil and gas**

On June 11, 2015, PyroGenesis announced receipt of \$85,000 as a progress payment under a previously announced Oil and Gas project, which uses plasma processing of a specific waste stream to recover valuable metals. So far, the Company has proven that the plasma processing of certain waste streams can not only recover valuable metals, but that there is also a significant 50:1 waste volume reduction which decreases disposal costs by more than 90%. At this point, data generated by the Company indicates that a \$20 million



PyroGenesis system could save the client over \$40 million/year by reducing waste disposal costs combined with generating value from recovered metals.

The installation and commissioning is presently underway, and testing will commence in the coming weeks at PyroGenesis' facilities in Montreal. The total project is expected to be completed at the end of Q3 / early Q4, 2015. If successful, the next step would be to design, manufacture and supply a commercial system. There is a current need for a system, or combination of systems, to process up to 300 tonnes per day.

### DROSRITE™

On June 10, 2015, PyroGenesis announced receipt of a purchase order for the supply of its first commercial DROSRITE™ Furnace System from a North American automobile parts manufacturer for \$600,000, which management expects to deliver by the end of 2015. The contract calls for a 50% down payment and a 10% holdback.

DROSRITE™ is a salt-free, cost-effective, sustainable process for maximizing metal recovery from dross, a waste generated in the metallurgical industry. DROSRITE™ avoids costly loss of metal, while reducing a smelter's carbon footprint and energy consumption, providing an impressive return on investment. PyroGenesis' patented DROSRITE™ process increases aluminum alloy recovery from dross and reduces operating costs. In comparison, competing processes have significantly higher operating costs and produce a hazardous waste that has to be disposed of at additional cost.

The client engaged PyroGenesis earlier this year to perform a two-week pilot demonstration of the DROSRITE™ process at one of its manufacturing facilities in North America. The purchase order is a direct result of the success of the demonstration. Once the system is operational, it is expected that the client will purchase two additional DROSRITE™ systems to be installed at its other manufacturing facilities.

### Ore refining

On June 9, 2015, PyroGenesis announced that it has been engaged by a Junior Mining & Metals company to evaluate the feasibility of using Plasma for the purpose of refining ore into pure metal; in this case converting quartz into pure silicon metal. The world market for silicon metal is about 1.8 million tonnes per year. Revenues resulting from this feasibility study are \$207,000 and PyroGenesis received the full amount as an upfront payment.

The study is expected to be completed within seven (7) months and, once successful, is expected to result in an order to design, manufacture and supply a pilot plant. Under the terms of the transaction, PyroGenesis has granted the client limited exclusive rights to its technology solely for the conversion of quartz into silicon. In return, PyroGenesis will receive 10% of sales, with set minimums, as royalty payments. PyroGenesis maintains the right to introduce this technology into other metals markets.



### 3D printing

As reported in July 2014, PyroGenesis signed a contract with a major international manufacturer for ten plasma-based, powder production systems for 3D printing. Under the contract, PyroGenesis is to supply ten of its unique metal powder production platforms to an Asian Customer for a total contract value of \$12.5 million.

On May 25, 2015, PyroGenesis announced shipment of the first of the ten systems and, on June 8, 2015 the Company announced receipt of a \$385,000 milestone payment that became due upon shipment.

Management expects manufacturing of the last nine powder production systems to commence in the fall of 2015.

Also on May 25, 2015, PyroGenesis announced the filing of a provisional patent for a new plasma atomization process. This new process enables PyroGenesis to produce metallic powders at higher production rates while, at the same time, controlling powder size distribution. The need to produce particles of a specific particle size distribution at increasingly higher production rates is driven by the growing demand created by the additive manufacturing industry, particularly 3D printing. It is expected that PyroGenesis' will file a world-wide patent application within 12 months.

### PAWDS Marine - (Plasma Arc Waste Destruction System - Marine)

On March 12, 2015, PyroGenesis announced that it had completed the fabrication of its second commercial marine plasma arc waste destruction system for the US Navy. Subsequent to the end of the quarter, on July 7, 2015, PyroGenesis announced that it had shipped the system to the shipbuilder, Newport News Shipbuilding, a division of Huntington Ingalls Industries. This second system is to be installed on the aircraft carrier John F. Kennedy (CVN 79). The first system was installed on the Gerald R. Ford (CVN-78). Both ships are future-generation aircraft carriers of the Gerald R Ford Class.

### Tactical PACWADS - (Tactical Plasma Arc Chemical Warfare Agents Destruction System)

On March 2, 2015, PyroGenesis announced a successful kick-off meeting for the second and final phase of the production of a first of its kind tactical mobile plasma system for the destruction of chemical warfare agents, such as those being dealt with in Syria. The meeting involved the defence departments of the countries participating in the international consortium. The project is a two-phase project to design and subsequently manufacture a plasma-based system capable of destroying chemical warfare agents. The System is scheduled to be delivered for testing, using simulated and actual chemical warfare agents, in the third quarter of 2015. PyroGenesis' clients for this project are expected to invest over \$100 million on testing alone.



## FINANCIAL & OTHER

### Private Placement

On March 30, 2015, PyroGenesis announced the closing of a private placement of \$4 million principal amount unsecured subordinated convertible debentures of the Company. The debentures mature three (3) years from the date of issue, bear interest at a rate of 7.5% per annum, paid quarterly in cash, and were subject to a statutory hold period of four months and one day from the closing date of the offering.

The principal amount is convertible at a price of \$0.80 per common share at any time, at the option of the holder, and upon conversion all accrued and unpaid interest will be paid in full within 60 days. The Company may redeem the debenture at any time prior to the maturity date by paying a redemption price equal to: (i) the entirety of the principal amount, (ii) any interest accrued thereon as of the redemption date, and (iii) any interest to be accrued (but not yet accrued as of the redemption date) thereon up until the maturity date. In the event that the average market price of the Common Shares over the course of the 20 trading days immediately preceding the date of the redemption notice is equal to or greater than \$1.20, then the redemption price shall be calculated as comprising (i) the entirety of the Principal Amount and (ii) any interest accrued thereon as of the redemption date only.

PyroGenesis intends to use the net proceeds from the offering for general corporate purposes, working capital and development projects relating to recent business development efforts.

### Board and Management Appointments

On May 26, 2015, PyroGenesis announced the appointment of Mr. Angelos Vlasopoulos, CPA, CA, as a member of the Board of Directors of the Company.

On May 26, 2015 PyroGenesis also announced the appointment of Mr. Paul A. Simmons, AFCA, AAT, as Chief Financial Officer of the Company.

### TSX Venture 50® clean-tech Company

On February 13, 2015, PyroGenesis announced that it was named one of the top 10 clean-tech companies included in the elite TSX Venture 50® group of companies. The TSX Venture 50® is an annual ranking by the TMX Group of the top 50 most performing companies on the Venture Exchange. The companies are chosen by assigning equal weighting to share price appreciation, trading volume, market capitalization growth and analyst coverage.



## SELECTED FINANCIAL INFORMATION

	Three months ended June 30,			% Change	Six months ended June 30,			% Change
	2015	2014	2013	2015vs2014	2015	2014	2013	2015vs2014
<b>Revenue</b>	<b>\$ 1,533,667</b>	<b>\$ 1,958,534</b>	<b>\$ 1,341,818</b>	<b>-22%</b>	<b>\$ 2,650,144</b>	<b>\$ 2,764,959</b>	<b>\$ 2,482,961</b>	<b>-4%</b>
Cost of sales and services before amortization of intangible assets	1,208,578	833,700	797,129		2,022,901	1,316,841	1,427,712	
Gross margin before amortization of intangible assets	325,089	1,124,834	544,689		627,243	1,448,118	1,055,249	
Amortization of intangible assets	349,269	349,268	349,268		698,537	698,537	698,537	
Gross margin	(24,180)	775,566	195,421		(71,294)	749,581	356,712	
Selling, general and administrative	1,108,072	1,079,641	1,005,746		2,299,588	2,026,559	2,008,568	
Research and development	26,995	29,099	76,429		56,119	128,700	93,822	
Financing charges	137,334	85,045	90,140		148,858	177,304	185,355	
	1,272,401	1,193,785	1,172,315		2,504,565	2,332,563	2,287,745	
<b>Loss from operations</b>	<b>(1,296,581)</b>	<b>(418,219)</b>	<b>(976,894)</b>	<b>210%</b>	<b>(2,575,859)</b>	<b>(1,582,982)</b>	<b>(1,931,033)</b>	<b>63%</b>
Other income	470	1,066	1,421		659	1,101	1,421	
Impairment loss on property and equipment	-	-	-		-	-	-	
<b>Comprehensive loss</b>	<b>\$ (1,296,111)</b>	<b>\$ (417,153)</b>	<b>\$ (975,473)</b>	<b>211%</b>	<b>\$ (2,575,200)</b>	<b>\$ (1,581,881)</b>	<b>\$ (1,929,612)</b>	<b>63%</b>
Basic and diluted loss per share	\$ (0.02)	\$ (0.01)	\$ (0.02)		\$ (0.03)	\$ (0.02)	\$ (0.03)	
<b>Adjusted EBITDA (loss)</b>	<b>\$ (734,512)</b>	<b>\$ 138,262</b>	<b>(340,819)</b>	<b>-631%</b>	<b>\$ (1,463,272)</b>	<b>\$ (493,031)</b>	<b>(656,301)</b>	<b>197%</b>

Adjusted EBITDA (loss) is not a performance measure defined under IFRS and it is not considered an alternative to Income (Loss) from operations or Comprehensive Earnings (Loss) in the context of measuring a Company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures provides users of the Company's financial statements with an enhanced understanding of their results and related trends, and as such increases transparency and clarity. Adjusted EBITDA is an important measure of operating performance because it allows management, investors and others to evaluate and compare the Company's core operating results, including return on capital and operating efficiencies, from period to period, by removing the impact of its capital structure (interest expense to service outstanding debt), asset base (depreciation and amortization), tax consequences, and other non-operating items not requiring cash outlays, including share-based compensation.

### Extract from Statement of Financial Position at :

	June 30, 2015	Dec 31, 2014	Dec 31, 2013
Current assets	4,373,433	3,497,020	2,247,261
Non-current assets	2,689,713	3,438,312	4,923,611
<b>Total assets</b>	<b>\$ 7,063,146</b>	<b>\$ 6,935,332</b>	<b>\$ 7,170,872</b>
Current liabilities	2,153,776	1,994,218	3,621,024
Non-current liabilities	3,834,953	2,062,862	8,159,862
<b>Total liabilities</b>	<b>\$ 5,988,729</b>	<b>\$ 4,057,080</b>	<b>\$ 11,780,886</b>
Shareholders' equity (deficiency)	\$ 1,074,417	\$ 2,878,252	\$ (4,610,014)



## **RESULTS OF OPERATIONS**

### ***Revenues***

The Company posted revenues of \$1,533,667 for the second quarter of fiscal year 2015 ended June 30, 2015 (“2015-Q2”), a decrease of 22% as compared to the \$1,958,534 reported in the same period of fiscal 2014. The revenues for 2015-Q2 resulted primarily from the Company’s progress on (i) work completed under phase 1 and phase 2 of the tactical mobile plasma system for destruction of chemical warfare agents, (ii) the ongoing R&D projects incorporating novel plasma based technologies in the oil and gas industrial sector, and (iii) work completed on the Company’s latest project to manufacture ten plasma based powder production systems for 3D printing.

Revenues for the first six months of fiscal 2015 were \$2,650,144, a decrease of 4% over revenues of \$2,764,959 reported during the same period in fiscal 2014.

Revenues in 2015-Q2 continue to be generated from a more diverse client, technology and industry base, which is a direct result of the strategic targeting of new high value niche markets by the Company.

Year-to-date revenues were negatively impacted by the termination of a customer’s Development Use and Commercialization Agreement related to PyroGenesis’ SPARC™ Technology. As such, no revenue could be generated for this project. The SPARC™ technology is a patented PyroGenesis process designed to destroy ozone depleting substances such as end-of-life refrigerants like CFCs, HCFs, and HFCs, which have high global warming potential.

The Agreement was terminated in July 2015. Terms of the termination include, amongst other things, the purchase by PyroGenesis of the customer’s exclusive rights in a Pilot System for \$300,000, and an undertaking by PyroGenesis not to destroy ozone depleting substances in Canada before July 7, 2017, unless for research and development purposes. Management is in discussions to redeploy the Pilot System in a fully commercial environment, either in Asia or with an international oil and gas company in the United States, and expects to complete a transaction in the coming months.



## Cost of Sales and Services and Gross Margin

### Cost of Sales and Services

	Three months ended June 30,			Six months ended June 30,		
	2015	2014	% Change 2015vs2014	2015	2014	% Change 2015vs2014
Employee compensation	\$ 484,832	\$ 313,410	55%	\$ 927,893	\$ 527,157	76%
Subcontracting	97,139	8,949	985%	219,295	12,151	1705%
Direct materials	568,466	389,446	46%	789,122	552,502	43%
Manufacturing overhead & other	118,873	128,329	-7%	238,703	238,741	0%
Foreign exchange loss	5,119	10,729	-52%	(29,827)	21,609	-238%
Investment tax credits	(65,851)	(17,163)	284%	(122,285)	(35,319)	246%
<b>Sub-total before amortization of intangible assets</b>	<b>1,208,578</b>	<b>833,700</b>	<b>45%</b>	<b>2,022,901</b>	<b>1,316,841</b>	<b>54%</b>
Amortization of intangible assets	349,269	349,268	0%	698,537	698,537	0%
<b>Total Cost of Sales and Services</b>	<b>\$ 1,557,847</b>	<b>\$ 1,182,968</b>	<b>32%</b>	<b>\$ 2,721,438</b>	<b>\$ 2,015,378</b>	<b>35%</b>

### Gross Margin

	Three months ended June 30,		Six months ended June 30,	
	2015	2014	2015	2014
Revenue	\$ 1,533,667	\$ 1,958,534	\$ 2,650,144	\$ 2,764,959
Cost of Sales and Services before amortization of intangible assets	1,208,578	833,700	2,022,901	1,316,841
Gross Margin before amortization of intangible assets	325,089	1,124,834	627,243	1,448,118
Gross Margin % before amortization of intangible assets	21.2%	57.4%	23.7%	52.4%
Amortization of intangible assets	349,269	349,268	698,537	698,537
Gross Margin after amortization of intangible assets	\$ (24,180)	\$ 775,566	\$ (71,294)	\$ 749,581
Gross Margin % after amortization of intangible assets	-1.6%	39.6%	-2.7%	27.1%

Gross margin before amortization of intangible assets is not a performance measure defined under IFRS and it is not considered an alternative to gross margin in the context of measuring the Company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures provides users of the Company's financial statements with an enhanced understanding of its results and related trends, and increases transparency and clarity. Gross margin before amortization of intangible assets is an important measure of operating performance as it allows management, investors and others to evaluate and compare the Company's core operating results, including its return on capital and operating efficiencies, from period to period, by removing the impact of non-operating items not requiring cash outlays.

Cost of Sales and Services before amortization of intangible assets increased 45% to \$1,208,578, in 2015-Q2 as compared to \$833,700 posted in the same quarter of fiscal 2014. On a year-to-date basis, the cost of sales and services before amortization of intangible assets was \$2,022,901 as compared to \$1,316,841 for the same period in the prior year, an increase of 54%.

The type of contracts being executed and the nature of project activity during any given quarter has a significant impact on both the overall level of cost of sales and services reported in a period, as well as the composition of the cost of sales and services, as the mix between labour and materials and equipment may be significantly different.

A key development impacting gross margins in 2015-Q2 was again the utilization of many of the Company's engineering and research & development resources on accelerating the development and implementation of projects that would have otherwise been committed to advancing the implementation of current live projects. Although this has significantly increased Cost of Goods Sold in the first six months of fiscal 2015, management believes that these resources accelerated the progress of certain projects, and



that gross margins upon completion of these projects will be in line with previous estimates, and will be more reflective of recent trends.

The number of projects/contracts the Company is currently executing, and has under development, has increased significantly. The Company has continued to invest in reducing fixed manufacturing costs and streamlining its operating procedures, and management firmly believes that the Company is well positioned to address this higher business volume. All manufacturing overhead costs are fully applied against Cost of Sales and Services.

The amortization of intangible assets of \$349,269 in 2015-Q2 (\$349,268 in 2014-Q2) relates to 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 the end of 2016.

2015-Q2 Gross Margins before amortization of intangible assets was \$325,089 (21.2% of revenues), as compared to a Gross Margin of \$1,124,834 (57.4% of revenues) for 2014-Q2. Of note, is that the 2014-Q2 gross margins were positively impacted by a one-time event wherein a customer's breach of contract resulted in the termination of a project.

As previously noted, it is important to note that despite the Company's initiatives to improve gross margins, these may fluctuate due to the innovative nature of these projects, as well as one-time events which may positively or negatively impact gross margins in any given quarter, or fiscal year.

### ***Selling, General and Administrative Expenses***

	Three months ended June 30,			Six months ended June 30,		
	2015	2014	% Change 2015vs2014	2015	2014	% Change 2015vs2014
Employee compensation	\$ 540,346	\$ 565,174	-4%	\$ 975,523	\$ 1,084,845	-10%
Professional fees	304,279	215,959	41%	658,718	381,394	73%
Office and general	90,518	78,886	15%	204,735	159,076	29%
Travel	68,054	42,138	62%	117,991	81,503	45%
Depreciation on property and equipment	41,315	42,602	-3%	81,401	84,509	-4%
Government grants	(22,653)	(10,000)	127%	(39,724)	(10,000)	297%
Other expenses	52,532	66,382	-21%	117,812	116,732	1%
<b>Sub-total before Share-based payments</b>	<b>1,074,391</b>	<b>1,001,141</b>	<b>7%</b>	<b>2,116,456</b>	<b>1,898,059</b>	<b>12%</b>
Share-based payments	33,681	78,500	-57%	183,132	128,500	43%
<b>Total selling, general and administrative</b>	<b>\$ 1,108,072</b>	<b>\$ 1,079,641</b>	<b>3%</b>	<b>\$ 2,299,588</b>	<b>\$ 2,026,559</b>	<b>13%</b>

Selling, general and administrative expenses ("SG&A") for 2015-Q2 were \$1,108,072, an increase of 3% as compared to \$1,079,641 reported during the same quarter of fiscal 2014. The costs associated with share-based compensation (a non-cash item in which options vest over a four year period) commenced in the third quarter of 2011 when the stock option plan was put in place. SG&A before share based payments increased by 7% in 2015-Q2 as compared to the same quarter of the prior fiscal year and 12% on a year-to-date basis for the six months ended June 30, 2015.



Within SG&A are costs associated with corporate administration, business development, proposals, operations administration, investor relations and employee training.

Of note, during 2013, management decided to dedicate business development resources to other high value niche markets other than those within the US military. It is expected that there will be a natural lag between incurring business development related expenses and the resulting increase in revenues. This commitment resulted in record levels of signed backlog at fiscal year-end 2014.

Total SG&A expenses before share based payments increased 7% to \$1,074,391 for 2015-Q2 as compared to \$1,001,141 for the same period of fiscal 2014, and relate to the following:

- Employee compensation decreased 4%, this was due to the departure of two senior employees within the administrative function of the Company.
- Professional fees increased 41% due to increased levels of external investor relations services and business development services.
- Travel costs increased 62%, due to increased Business Development activities in international markets.
- Government grants increased by 127% due to progress made on a long-term development project that is supported by the Industrial Research Assistance Program of the National Research Council Canada.
- Other expenses decreased 21%.

Separately, share based payments decreased 57% as a result of the vesting structure of the stock option plan. New options were issued in 2015-Q2 of which \$12,969 has been expensed when options were granted.

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

In 2013, management made the strategic decision to increase the level of R&D funding, and to account and disclose the net costs incurred on these projects as a separate line item in the Statement of Comprehensive Loss. Management believes that internally funded R&D projects will become a significant source of new business opportunities, and as such, this new reporting reflects management’s commitment to such. Prior to 2013, all of the Company’s R&D work was done as part of contract research services as well as with externally client funded projects, some of which were R&D tax credit expenditure eligible. However, during the first six months of 2015, many of our R&D resources that would customarily work on internal R&D projects were engaged with the delivery of certain customer orders as the Company deals with record levels of order backlog.



#### Internal R&D Project Costs

	Three months ended June 30,		% Change	Six months ended June 30,		% Change
	2015	2014	2015vs2014	2015	2014	2015vs2014
Employee compensation	\$ 27,905	\$ 29,978	-7%	\$ 54,742	\$ 152,398	-64%
Subcontracting	-	7,610	-100%	9,000	16,110	-44%
Materials and equipment	2,577	3,101	-17%	4,602	18,787	-76%
Other expenses	749	726	3%	1,599	1,788	-11%
<b>Sub-total before government grants</b>	<b>31,231</b>	<b>41,415</b>	<b>-25%</b>	<b>69,943</b>	<b>189,083</b>	<b>-63%</b>
Government grants	(4,236)	(12,316)	-66%	(13,824)	(60,383)	-77%
<b>Total net R&amp;D costs</b>	<b>\$ 26,995</b>	<b>\$ 29,099</b>	<b>-7%</b>	<b>\$ 56,119</b>	<b>\$ 128,700</b>	<b>-56%</b>

During 2015-Q2, the Company incurred \$26,995 in costs, net of grants, on internal R&D projects as compared to \$29,099 for the same quarter of fiscal 2014, a decrease of 7% year-over-year. For the six months ended June 30, 2015, net spending on internal R&D projects was \$56,119 versus \$128,700 during the same period of fiscal 2014, a decrease of 56%.

In addition to internally funded R&D projects, the Company incurred R&D eligible expenditures on the execution of external client funded projects. R&D tax credits on external client funded projects were applied against Cost of Sales and Services (see below).

#### Investment Tax Credits

	Three months ended June 30,		% Change	Six months ended June 30,		% Change
	2015	2014	2015vs2014	2015	2014	2015vs2014
Investment tax credits	\$ (65,851)	\$ (17,163)	284%	\$ (122,285)	\$ (35,319)	246%

Investment tax credits of \$65,851 were accrued in the second quarter of fiscal 2015 as compared to \$17,163 for the same quarter of the prior fiscal year, an increase of 284% year-over-year. The increased level of investment tax credits in 2015 is in line with the level of qualifying costs on external R&D projects.

The Company continues to make investments in research and development projects incorporating strategic partners and government bodies.

#### Financing Charges

	Three months ended June 30,		% Change	Six months ended June 30,		% Change
	2015	2014	2015vs2014	2015	2014	2015vs2014
Financing charges	\$ 137,334	\$ 85,045	61%	\$ 148,858	\$ 177,304	-16%

Financing charges for the 2015-Q2 were \$137,334 as compared to \$85,045 for the same period of the prior fiscal year, an increase of 61% year-over-year.



Financing charges relate to:

- the interest component of the Company's debt, due to a related party, that was paid during the period;
- the interest component of the convertible debenture that was paid during the period; and
- the accretion and amortization of financing costs of the convertible debenture.

Financing charges would have decreased significantly in 2015-Q2 due to the conversion of \$6,000,000 of debt to equity which took place in May 2014 (see note 15(i) of the 2014 Audited Financial Statements) but was offset by the interest, accretion and financing costs associated with the new convertible debentures issued end of March 2015.

### ***Depreciation on Property and Equipment***

	Three months ended June 30,			Six months ended June 30,		
	2015	2014	% Change 2015vs2014	2015	2014	% Change 2015vs2014
Depreciation on property and equipment	\$ 41,315	\$ 42,602	-3%	\$ 81,401	\$ 84,509	-4%

Depreciation on property and equipment decreased by 3% to \$41,315 in 2015-Q2, as compared to \$42,602 for 2014-Q2. This decrease is primarily a result of decreased investments in machinery and equipment since 2010 when major acquisitions were made.

### ***Comprehensive Loss***

	Three months ended June 30,			Six months ended June 30,		
	2015	2014	% Change 2015vs2014	2015	2014	% Change 2015vs2014
Loss from operations	\$ (1,296,581)	\$ (418,219)	210%	\$ (2,575,859)	\$ (1,582,982)	63%
Comprehensive loss	\$ (1,296,111)	\$ (417,153)	211%	\$ (2,575,200)	\$ (1,581,881)	63%

The Loss from operations for 2015-Q2 was \$1,296,581 as compared to a Loss of \$418,219 in the same quarter of fiscal 2014, an increase of 210% year-over-year. Year-to-date, Loss from operations was \$2,575,859 as compared to comparable losses of \$1,582,982 for the same period in 2014, an increase of 63%.

The total Comprehensive loss for 2015-Q2 was \$1,296,111 as compared to a Comprehensive loss of \$417,153 in the same period of fiscal 2014, an increase of 211% year-over-year. Year-to-date, Comprehensive loss was \$2,575,200 as compared to comparable losses of \$1,581,881 for the same period in 2014, an increase of 63%.

The increase in the Comprehensive loss in 2015-Q2 as compared to 2014-Q2 is primarily a result of: (i) acceleration of project development in the quarter which resulted in significant increases in Cost of Goods Sold; (ii) increase in professional services costs within SG&A as a result of additional investor relations activities, together with



investments in our internal and external reporting structure; and (iii) an increase in travel expenses associated to increased sales and marketing activities.

## **EBITDA**

	Three months ended June 30,		% Change	Six months ended June 30,		% Change
	2015	2014	2015vs2014	2015	2014	2015vs2014
Comprehensive loss	\$ (1,296,111)	\$ (417,153)	211%	\$ (2,575,200)	\$ (1,581,881)	63%
Depreciation on property and equipment	41,315	42,602		81,401	84,509	
Amortization of intangible assets	349,269	349,268		698,537	698,537	
Financing charges	137,334	\$ 85,045		148,858	\$ 177,304	
EBITDA (loss)	\$ (768,193)	\$ 59,762	-1385%	\$ (1,646,404)	\$ (621,531)	165%
Other non-cash items:						
Share-based payments	33,681	78,500		183,132	128,500	
Adjusted EBITDA (loss)	\$ (734,512)	\$ 138,262	-631%	\$ (1,463,272)	\$ (493,031)	197%

The Company reports on its EBITDA (earnings from operations before interest, taxes, depreciation and amortization) and Adjusted EBITDA (earnings from operations before interest, taxes, depreciation, amortization and other non-cash items including share-based payment costs).

EBITDA and Adjusted EBITDA are not performance measures defined under IFRS and they are not considered an alternative to income (loss) from operations or Comprehensive earnings (loss) in the context of measuring a Company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures provides users of the Company's financial statements with an enhanced understanding of its results and related trends and increases transparency and clarity. Management believes Adjusted EBITDA is an important measure of operating performance because it allows management, investors and others to evaluate and compare the Company's operating results, including its return on capital and operating efficiencies, from period-to-period by removing the impact of the capital structure (interest expense to service outstanding debt), asset base (depreciation and amortization), tax consequences, and other non-operating items not requiring cash outlays including share-based compensation.

Other companies may calculate Adjusted EBITDA differently, and therefore the Company's Adjusted EBITDA may not be comparable to similarly titled measures of other companies.

EBITDA loss for 2015-Q2 was \$768,193 as compared to an EBITDA of \$59,762 for the same period of fiscal 2014, a decrease of 1385%. Year-to-date, EBITDA loss was \$1,646,404 as compared to comparable losses of \$621,531 for the same period in 2014, an increase of 165%. The increase in the EBITDA (loss) in the quarter is due primarily to lower gross margins resulting from the utilization of many of the Company's engineering and research & development resources on accelerating the development and implementation of projects that would have otherwise been committed to advancing the implementation of current live projects, as previously explained. EBITDA in 2015-Q2



was also negatively impacted by the increased investment in investor relations activities, and additional spend on business development with the goal to increase backlog and future revenues.

Adjusted EBITDA loss for 2015-Q2 was \$734,512 as compared to an Adjusted EBITDA of \$138,262 for the same period of fiscal 2014, a decrease of 631%. Year-to-date, Adjusted EBITDA loss was \$1,463,272 as compared to comparable losses of \$493,031 for the same period in 2014, an increase of 197%.

## SUMMARY OF QUARTERLY RESULTS

	2015		2014				2013	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenues	\$ 1,533,667	\$ 1,116,477	\$ 1,784,676	\$ 1,215,261	\$ 1,958,534	\$ 806,425	\$ 1,878,793	\$ 1,394,255
Gross margin before amortization of intangible assets	325,089	302,154	1,132,635	492,401	1,124,834	323,284	991,486	575,462
gross margin %	21.2%	27.1%	63.5%	40.5%	57.4%	40.1%	52.8%	41.3%
Loss from operations	(1,296,581)	(1,279,278)	(703,083)	(995,742)	(418,219)	(1,164,763)	(561,696)	(916,604)
Comprehensive loss	(1,296,111)	(1,279,089)	(701,034)	(995,695)	(417,153)	(1,164,728)	(1,143,309)	(915,156)
Net loss per share - basic and diluted	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)

Although the revenues and losses from operations have varied from quarter to quarter, Management continues to believe that the investments currently being made in accelerating development projects, together with investments in business development activities, will yield significant results in the near future. It must be noted that revenues are recognized based on a percentage of completion basis, and are dependent on the timing of project initiation and execution, including project engineering, manufacturing, and testing.

## LIQUIDITY AND CAPITAL RESOURCES

During the first six months of 2015, the primary sources of funding for the Company have been cash generated from projects and private placements. In March 2015, the Company completed a private placement which resulted in the net proceeds (gross proceeds minus cash commissions and convertible debentures issue costs) of \$2,957,804. The proceeds from these offerings have been used to fund operations and strengthen the Company's working capital position.



At June 30, 2015, the Company had cash on hand of \$1,208,904 and positive working capital of \$2,219,657 (cash balance of \$362,183 and positive working capital of \$1,502,802 at December 31, 2014).

Although the Company has significantly increased its backlog of new projects, this will not impact cash flow until the 2<sup>nd</sup> half of 2015; the active projects in 2015-Q2 were not producing sufficient positive cash flow to fund operations. Based on current backlog and known pipeline of prospective new projects, cash flows from operations are expected to be positive in the near future.

Separately, on March 30, 2015, the Company raised an additional \$4 million through an issuance of convertible debentures which mature in three (3) years from the date of issuance and bear interest at 7.5% per annum, paid quarterly. As part of this offering, \$755,000 of existing debt was converted to convertible debentures, thereby further strengthening the balance sheet.

Since the Company went public in July 2011, the primary source of funding has been the issuance of shares via public offerings. The Company's ability to raise additional funds from the equity markets will largely depend upon general market conditions and the Company's ability to secure contracts.

In July 2014, the Company announced that it has signed a \$12.5 million contract with a major international manufacturer to supply ten plasma-based, powder production systems for 3D printing. Work is currently underway; the remainder of this contract is expected to be executed over the next 15 months.

In April of 2015, the Company substantially completed the final phase of the \$5.6 million reorder from Newport News Shipbuilding for a plasma waste destruction system to be installed in a new US Navy air craft carrier. In July of 2015, PyroGenesis shipped the system to the shipbuilder, Newport News Shipbuilding, a division of Huntington Ingalls Industries. This second system is to be installed on the aircraft carrier John F. Kennedy (CVN 79). The first system was installed on the Gerald R. Ford (CVN-78). Both ships are future-generation aircraft carriers of the Gerald R Ford Class.

The Company is also working on several other strategic mandates in the oil and gas industry as well as on military related contracts.

These orders provide the Company with a solid foundation of contracted backlog at 2015-Q2. As of August 28, 2015, the backlog of signed contracts stood at \$15.7 million.



## SUMMARY OF CASH FLOWS

	Three months ended June 30,		Six months ended June 30,	
	2015	2014	2015	2014
Cash provided by (used in) operating activities	\$ (1,445,987)	\$ (2,317,173)	\$ (1,421,206)	\$ (3,424,102)
Cash provided by (used in) investing activities	(19,132)	(17,549)	(31,339)	(40,496)
Cash provided by (used in) financing activities	(167,711)	3,035,466	2,299,266	3,034,760
Increase (decrease) in cash	(1,632,830)	700,744	846,721	(429,838)
Cash - end of period	1,208,904	752,997	1,208,904	752,997

For the three months ended June 30, 2015, cash flows from operating activities resulted in a net use of cash of \$1,445,987 compared to a net use of cash from operating activities of \$2,317,173 for the same period in the prior year. Despite the increase in the Comprehensive loss in 2015-Q2 versus 2014-Q2 (an increase of \$878,958), 2015-Q2 had an adjusted net use of cash from operating activities of \$810,736, plus a negative net change in non-cash operating working capital items of \$635,251.

The cash flows used in operating activities were negatively impacted by the following items:

- Decrease in Accounts receivable, Sales tax receivable, Investment tax credits receivable, and Prepaid expenses and Deposits of \$207,419 (increase of \$390,327 in 2015-Q2 versus an increase of \$597,746 in 2014-Q2).
- Decrease in Costs and profits in excess of billings on uncompleted contracts of \$46,291 (increase of \$185,502 in 2015-Q2 versus an increase of \$231,793 in 2014-Q2).
- Increase in Billings in excess of costs and profits on uncompleted contracts of \$1,572,775 (increase of \$167,834 in 2015-Q2 versus a decrease of \$1,404,941 in 2014-Q2).

Investing activities in 2015-Q2 resulted in use of cash of \$19,132 as compared to \$17,549 in the same period of the prior fiscal year. Cash used for investment activities in 2015-Q2 was related to property and equipment. It was required to upgrade computer hardware, software used in the operations of the Company and leasehold improvements of the Head office.

Financing activities in 2015-Q2 resulted in a use of funds of \$167,711 as compared to source of funds of \$3,035,466 in the same period of the prior fiscal year. Financing activities during 2015-Q2 consist of the repayment of long term debt and additional financing cost relating to March 2015 private placement.

The details of these variances in cash flows from financing activities are outlined in detail in Note 15 of the Company's 2015-Q2 Unaudited Financial Statements.



On December 16, 2013, the Company signed an amending agreement to amend the terms and conditions of the balance of sale with a company under common control. Based on the amending agreement payments starting on October 1, 2013 and ending May 1, 2014 plus other past due payments were deferred until April 1, 2015, except for a payment of \$178,175 to be made on or before December 31, 2013 and for a payment of \$30,000 to be made on or before January 31, 2014. As per the terms of the amending agreement, as the Company concluded a financing in excess of \$3,000,000 before April 1, 2015, all deferred amounts became immediately due and payable on the closing date of the financing.

On December 1, 2014, the Company signed an additional amending agreement to amend the terms and conditions of the deferred payments, whereby the balance of the deferred payments as at December 31, 2014 is completely deferred until June 30, 2016. However, in the event of any change within the Company that would be considered material by the holder of the balance of sale, such as a significant financial development, any and all amounts outstanding will become immediately due and payable on the date of the material change.

On December 1, 2014, the Company signed an additional amending agreement to amend the terms and conditions of the payments, whereby the complete balance of the amounts payable to a trust beneficially owned by a shareholder as at December 31, 2014, is completely deferred until June 30, 2016. These deferrals of payment have been granted in order to provide the Company with additional short-term financing.

For the three month period ended June 30, 2015, the net cash position of the Company decreased by \$1,632,830 as compared to an increase of \$700,744 for the same period in the prior year.

The Company remains committed to raising additional cash from operations and or to seek additional cash from equity issuances as it continues to further increase its business volume and improve its technical offerings.

### **CAPITAL STOCK INFORMATION**

The Authorized share capital of the Company consists of an unlimited number of Class A common shares without par value. As at June 30, 2015 and at August 28, 2015 PCI had 84,831,729 Class A common shares issued. As at June 30, 2015 and at August 28, 2015, PCI had 9,604,655 warrants. As at June 30, 2015, PCI had 6,412,000 outstanding options issued and 3,792,100 exercisable options and at August 28, 2015 had 6,356,000 outstanding options issued and 3,646,100 exercisable options.



## GOING CONCERN

Cash generated from projects has historically not been sufficient to meet the overall cash requirements of the Company to cover operating costs. For the Company to generate sufficient positive cash flows from operations and meet current cash requirements, the level of business must exceed that recorded at June 30<sup>th</sup> 2015. Management expects that the investments currently being made in accelerating development projects, together with the benefits of previously announced steps to reduce fixed operating expenses, increase revenues and improve gross margins, will continue to improve the Company's cash position, and recent investments in business development activities will continue to improve the Company's backlog.

In the future, it may be necessary for the Company to raise additional capital to fund its operations and the continued development and introduction of new lines to its family of products. To date, the Company has raised financing through successive issuances of equity and convertible debenture. There is no certainty that the Company will continue to be able to raise additional financing or expand its sales to fund its operations, although management is confident that it will be able to do so.

The June 30, 2015 financial statements have been prepared using International Financial Reporting Standards ("IFRS") applicable to a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business as they become due.

## RELATED PARTY TRANSACTION

In March 2015, the Company closed a private placement of \$4,000,000 principal amount unsecured subordinated convertible debentures of the Company ("the Debentures"). As part of the private placement of \$4,000,000, \$755,000 of the Debentures were purchased from the settlement of \$755,000 of the carrying value of a loan made by a related party (the Balance of Sale).

In 2014, the Company completed a share for debt transaction by issuing 7,500,000 common shares at a deemed price of \$0.80 per common share to settle \$6,000,000 of the carrying value of the Balance of Sale, being the last two-hundred and eight-five and a half monthly payments owed by the Company under the purchase agreement. Note 15 (i) and Note 19 of the Company's December 31, 2014 Audited Financial Statement, more fully describe the nature of this conversion as well as the related party involved.

Office rent was charged by a trust beneficially owned by a shareholder of the Company in the amount of \$43,943 (Q2 2014 - \$28,461) and for the six month period ended June 30, 2015 in the amount of \$87,683 (2014 - \$55,689). A balance due of \$16,841 (December 31, 2014 - \$16,609) is included in accounts payable and accrued liabilities. The lease term is ending January 31, 2017.



During the three and six month period ended June 30, 2015, interest on amounts payable was charged by a trust beneficially owned by a shareholder of the Company in the amount of \$Nil and \$Nil respectively (2014 - \$5,816 and \$11,547)). The balance of interest that has not been paid of \$Nil (December 31, 2014 - \$125,384) is included in loans - other. On March 31, 2015, the Company's management agreed to make these payments early resulting in a payment of \$405,467 to a trust beneficially owned by a shareholder. The loan is now fully paid.

During the three and six month period ended June 30, 2015, interest on balance of sale was charged by a company under common control in the amount of \$1,223 and \$12,747 (2014 - \$79,229 and \$165,757). An unpaid amount of interest was added to the Balance of Sale in the amount of \$Nil (December 31, 2014 - \$115,105). Balance of sale - company under common control ("Balance of Sale") arose from the purchase of the intangible assets in March 2011. It bears an implicit interest rate of 4.753% per annum. The implicit rate of interest was based on the present value of cash flows having the same value as the intangible assets at the time of sale. All payments have been completely deferred until June 30, 2016. Although instalment payments were to begin in June 2016, management agreed, prior to this date, to make instalment payments during the three and six month period ended June 30, 2015 for a total amount of \$120,000 and \$280,000 respectively.

During the three and six month period ended June 30, 2015, interest on convertible debenture was charged by a shareholder of the Company in the amount of \$14,156 and \$14,156 respectively.

During the three and six month period ended June 30, 2015, fees of \$21,000 and \$52,000 respectively were charged for services rendered by the independent directors who are members of the Company's Board of Directors (2014 - \$21,000 and \$51,000). A balance of \$10,000 (December 31, 2014 - \$Nil) is included in accounts payable and accrued liabilities.

During the three and six month period ended June 30, 2015, total compensation to key management consisted of salaries of \$139,451 and \$263,561 respectively (2014 - \$206,309 and \$410,432), pension contributions of \$1,975 and \$3,913 respectively (2014 - \$2,307 and \$4,422) and other benefits of \$10,284 and \$20,537 (2014 - \$1,411 and \$2,822). A balance of \$135,477 (December 31, 2014 - \$164,782) is included in accounts payable and accrued liabilities.

### **SUBSEQUENT EVENTS**

On July 20, 2015, the Company announced the receipt of a \$340,000 down payment for the supply of its first commercial DROSRITE™ Furnace System to a North American automobile parts manufacturer, which is expected to be delivered by year-end.

This contract was executed based on the successful results of a two-week pilot demonstration of the DROSRITE™ process at one of the client's North American manufacturing facilities earlier this year. The system is expected to become operational in



Q1, 2016, and will showcase the transformative nature of PyroGenesis' DROSRITE™ technology to an industry that has been plagued by rising electricity costs, large carbon footprint, and poor environmental legacies. It is expected that, soon after successful commissioning, the client will purchase two additional DROSRITE™ systems.

DROSRITE™ is a salt-free, cost-effective, sustainable process for maximizing metal recovery from dross, a waste generated in the metallurgical industry. DROSRITE™ avoids costly loss of metal, while reducing a smelter's carbon footprint and energy consumption, providing an impressive return on investment. PyroGenesis' patented DROSRITE™ process increases aluminum alloy recovery from dross and reduces operating costs while at the same time producing no hazardous by-products. In comparison, competing processes have significantly higher operating costs and produce a hazardous waste that has to be disposed of at additional cost.

On July 27, 2015, the Company announced that it commenced the application process for a US listing of its common shares on the OTCQB. The Company recognized that recent commercial success has generated considerable interest from US investors, but that such investors often have difficulty investing in public companies that are not listed on US markets. The Company believes that a listing in the USA will provide PyroGenesis access to a broader investment base, while at the same time strengthening the Company's financing flexibility and provide greater liquidity to shareholders.

The application is subject to review and approval by the OTC Markets Group Inc., a US trading platform aimed at venture market companies. Management is confident that the application process will go smoothly and expects to be listed in the fall of 2015.

PyroGenesis' shares will continue to be listed in Canada on the TSX Venture Exchange and the Company will continue to prepare its financial reports in accordance with International Financial Reporting Standards as well as continue to file all public regulatory filings on SEDAR.

Also on July 27, 2015, the Company announced the appointment of Ms. Sophy Cesar as Vice President, Investor Relations and Corporate Communications.

Ms. Cesar has over 15 years of experience specializing in marketing, branding and operations. Prior to joining PyroGenesis, Ms. Cesar was responsible for the management and execution of the Investor Relations and Communications program for a TSX listed company. She successfully implemented investor awareness campaigns and deployed effective corporate communications strategies, both of which included developing relevant support materials. She also successfully raised tens of millions of dollars and supported the company's graduation from the TSX-V to Toronto's senior exchange: the TSX.

In her role as Vice President, Investor Relations and Corporate Communications at PyroGenesis, Ms. Cesar will serve as the principal point of contact for the investment community, liaising with analysts while establishing and maintaining relationships with



key, new, and existing investors as well as developing the Company's strategic investor relations plan.

On July 28, 2015, the Company announced that it has received USD \$917,532 as final payment for the second, and final, phase of the \$2.2 million plasma torch contract previously announced to an Asian company. The contract is for the design, manufacture and delivery of a fully automated plasma torch system comprised of eight air plasma torches to be used for waste gasification. The first phase of this contract was successfully completed and shipped last year. The payment represents the final payment for the last phase of the Contract which is expected to be completed within eight months.

On July 28, 2015, the Company approved the grant of 100,000 incentive stock options to a new officer of the Company. The options have an exercise price of \$0.36 per share and are exercisable over a period of five years.

On Aug. 4, 2015, the Company announced that it had reached mutual agreement with a customer, who wishes to remain unnamed, to terminate the customer's Development Use and Commercialization Agreement related to PyroGenesis' SPARC™ Technology. The terms of the mutual agreement include the purchase by the Company of the customer's exclusive rights in a Pilot System for \$300,000 and an undertaking by the Company not to destroy ozone depleting substances in Canada before July 7, 2017, unless for research and development purposes. Management expects to redeploy the Pilot System in a fully commercial environment, either in Asia or with an international oil and gas company in the United States, and expects to close a contract for the Pilot System as early as September, 2015

## OUTLOOK

PyroGenesis continued to take positive strides towards the execution of the Company's key initiatives during the first six months of fiscal 2015. These key initiatives are:

- Continued investment in Business Development – a healthy pipeline of new business ensures the Company's ability to continue to grow top-line revenue and create critical mass in its key sectors of operation. The Company continues to implement measures to strengthen and focus its business development department, which includes, amongst other measures, hiring additional strategically focused professionals.
- Diversification by sector – over 21 months ago the Company began to strategically explore the applicability of its patented technology to sectors outside of defense, and which had not yet had the opportunity to consider plasma as an option to current procedures. This sector diversification has been very successful to date with new clients and signed contracts in the metallurgical, mining, advanced materials (including 3D printing), and oil & gas industries. Management believes that the order backlog, currently approximately \$15.7 million, is testament to the success of this initiative.



- Diversification by geography – traditionally the Company focused on sales in the North American market; this exposed the Company to the market volatility of North America without the offsetting benefit of more robust or faster growing markets in other parts of the world. The Company has now launched business development initiatives in Europe and Asia, and has successfully signed contracts in these markets.
- Improved order structure – In prior years, the Company’s sales were exclusively one-off systems that required significant engineering resources that were specific to that order. Currently, the Company has moved to orders of multiple systems for the same client which allows for more efficient and cost effective manufacturing processes to be applied, thereby reducing resources and improving margins.

Reaffirming the initiatives of the previous year, the Company continues to de-risk its business model by including recurring revenue features within sales agreements, which will result in a solid base of reliable revenue with a strong mix of new business revenue. This initiative will remove the inherent fluctuations in revenues that the Company has previously experienced, while providing clients with a reliable support system for the large investments made in PyroGenesis’ products.

Management is confident that the strategic plan adopted by the Board and which has given effect to the realignment and de-risking of the Company’s business, has thus far been successful and Management will continue to execute against this plan as the Company achieves its stated initiatives in the coming years.

Additional information regarding the Company can be found on SEDAR at [www.sedar.com](http://www.sedar.com).