**PYROGENESIS CANADA INC.**

## MANAGEMENT'S DISCUSSION AND ANALYSIS

For the three and nine months ended September 30, 2013

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

November 26, 2013

This management's discussion and analysis (MD&A) of PyroGenesis Canada Inc. ("PCI" or the "Company") have 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 nine months ending September 30, 2013 which were prepared in accordance with International Financial Reporting Standards ("IFRS"). The Company's Audit Committee has reviewed and approved this MD&A.

The MD&A was prepared as of November 26, 2013. Additional information regarding the Company is available on SEDAR (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 relating to:

- the business strategies of the Company;
- the capital resources of the Company;
- the ability of the Company to increase sales, including as a result 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 resulting in a decrease in expenses 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 predictions 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 and US economy; 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 labour 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 form for the financial year ended December 31, 2012. 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 important 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 is a leader in the design, development, manufacture and commercialization of plasma torches and advanced plasma waste to energy systems. The Company's torches are some of the most reliable in the world and its systems are capable of converting waste into energy and non-hazardous products. The Company's patented, proprietary and proven technologies have been developed over 20 years. Accepted systems by the US Navy and the US Air Force set the Company's business apart from many of its competitors.

The Company has four distinct product offerings. (i) Torches: the Company has recently been aggressively developing the market for its plasma torches as a standalone product. The Company has found that its torches have novel and promising applications in the mining and metallurgical industry as well as in the petrochemical sector to name only a few; (ii) Engineering Services: the Company's engineering services and piloting capabilities are being increasingly sought after due to its capable and innovative team of professionals and its state of the art facilities; (iii) Marine-Based Waste Treatment: the Company offers a marine based Plasma Arc Waste Destruction System ("PAWDS") which can destroy combustible waste on board ships; and a (iv) Land-based Waste Treatment: Plasma Resource Recovery System ("PRRS") which is designed to treat a range of industrial, hazardous, clinical and municipal waste streams on land.

## SELECTED FINANCIALINFORMATION

**Statement of Comprehensive Loss**

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| **Revenues** | **$ 1,394,255** | $ 516,595 | 170% | **$ 3,877,216** | $ 2,101,735 | 84% |
| Cost of sales and services before amortization of licenses | **818,793** | 772,008 | | **2,246,505** | 2,604,633 | |
| Gross margin before amortization of licenses | **575,462** | (255,413) | | **1,630,711** | (502,898) | |
| Amortization of licenses | **349,268** | 349,268 | | **1,047,805** | 1,047,805 | |
| Gross margin | **226,194** | (604,681) | | **582,906** | (1,550,703) | |
| Selling, general and administrative | **1,013,214** | 1,041,685 | | **3,021,782** | 3,093,902 | |
| Research and development- net | **35,382** | - | | **129,204** | | |
| Financing charges | **94,202** | 96,392 | | **279,557** | 334,503 | |
| | **1,142,798** | 1,138,077 | | **3,430,543** | 3,428,405 | |
| **Loss from operations** | **(916,604)** | (1,742,758) | | **(2,847,637)** | (4,979,108) | |
| Other income | **1,448** | 177 | | **2,869** | 10,115 | |
| **Total comprehensive loss** | **$ (915,156)** | $ (1,742,581) | -47% | **$ (2,844,768)** | $ (4,968,993) | -43% |
| Loss per share - basic | **$ (0.014)** | $ (0.027) | -48% | **$ (0.045)** | $ (0.080) | -44% |
| **EBITDA (loss)** | **$ (275,859)** | **$ (782,367)** | -65% | **$ (932,160)** | **$ (2,529,306)** | -63% |

**Extract from Statement of Financial Position at :**

| | Sept 30, 2013 | Dec 31, 2012 |
|---|---|---|
| Total assets | **$ 7,536,480** | $ 10,235,869 |
| Total non-current liabilities | **$ 7,568,333** | $ 8,458,668 |

## RESULTS OF OPERATIONS

### *Revenues*

Revenues for the third quarter of fiscal 2013, ending September 30, 2013 "2013-Q3" were $1,394,255, an increase of 170% over the revenue of $516,595 reported during the same period in fiscal year 2012. This increase in revenue in 2013 is a result of the execution of a $5.5 million reorder from Newport News Shipbuilding for a plasma waste destruction system to be installed on the CVN-79, the next US Navy Ford-class air craft carrier, which is to be delivered and recognized into income in 2013 and 2014. Revenues in 2013-Q3 are positively impacted by the work achieved and recognition of the revenues on this new major contract, as well as other projects in progress or completed in the quarter.

Revenues for the first nine months of fiscal 2013 were $3,877,216, an increase of 84% over the revenues of $2,101,735 reported during the same period in fiscal year 2012.

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

**Cost of Sales and Services**

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Salaries and sub-contracting | **$ 241,622** | $ 377,116 | -36% | **$ 667,668** | $ 1,763,894 | -62% |
| Materials and equipment | **517,823** | 272,607 | 90% | **1,403,770** | 551,415 | 155% |
| Manufacturing overhead | **60,135** | 145,181 | -59% | **205,866** | 420,467 | -51% |
| Transportation, travel and other | **64,517** | - | | **86,006** | - | |
| Foreign exchange loss (gain) | **17,237** | 10,033 | 72% | **(14,564)** | 12,088 | -220% |
| Government grants and research and development tax credits | **(82,541)** | (32,929) | 151% | **(102,241)** | (143,231) | -29% |
| Sub-total before amortization of licences | **818,793** | 772,008 | 6% | **2,246,505** | 2,604,633 | -14% |
| Amortization of licenses | **349,268** | 349,268 | 0% | **1,047,805** | 1,047,805 | 0% |
| **Total Cost of Sales** | **$ 1,168,061** | $ 1,121,276 | 4% | **$ 3,294,310** | $ 3,652,438 | -10% |

**Gross Margin**

| | Three months ended Sept 30, 2013 | Three months ended Sept 30, 2012 | Nine months ended Sept 30, 2013 | Nine months ended Sept 30, 2012 |
|---|---|---|---|---|
| Revenues | **$ 1,394,255** | $ 516,595 | **$ 3,877,216** | $ 2,101,735 |
| Cost of Sales and Services before amortization of licenses | **818,793** | 772,008 | **2,246,505** | 2,604,633 |
| Gross Margin before amortization of licenses | **575,462** | (255,413) | **1,630,711** | (502,898) |
| Gross Margin % before amortization of licenses | **41.3%** | -49.4% | **42.1%** | -23.9% |
| Amortization of licenses | **349,268** | 349,268 | **1,047,805** | 1,047,805 |
| Gross Margin after amortization of licenses | **$ 226,194** | $ (604,681) | **$ 582,906** | $ (1,550,703) |
| Gross Margin % after amortization of licenses | **16.2%** | -117.1% | **15.0%** | -73.8% |

Cost of Sales before the cost of amortization of licenses for the third quarter of fiscal 2013, ending September 30, 2013 was $818,793, an increase of 6% as compared to costs of $772,008 reported during the same period in the prior fiscal year. On a year-to-date basis, the cost of sales the cost before amortization of licenses was $2,246,505 as compared to $2,604,633 for the same period in the prior year, for a decrease of 14%.

Due to the limited number of significant projects that the Company currently executes at any given time, the type of contracts and the nature of project activity that is being executed during a quarter will have a significant impact on the overall level of cost of sales reported in a period as well as the composition of the cost of sales (mix between labor and materials and equipment). During 2013, the major project being executed is the execution of the CVN-79 project for the next US Navy Ford-class air craft carrier. As this is a repeat order for the Company, the project has a relative lower level of labor and a higher level of equipment and material than in the first order, as reflected in the financial results.

Starting in the second half of 2012, management implemented more stringent and effective project management methods on the execution of its projects. As a result, in-house labor costs recorded on projects have decreased by 36% during Q3 and 62% year-to-date. Additionally, starting in 2013, the costs associated with the execution of internal research and development projects have been isolated and presented as a separate cost element on the Statement of Comprehensive Loss.

The level of Material and Equipment (M&E) costs incurred on projects in 2013-Q3 has increased by 90% from 2012-Q3 and 155% on a year-to-date basis. M&E cost during 2013-Q3 was $517,823 versus $272,607 in 2012-Q3. Year-to-date, M&E for 2013 was $1,403,770 versus $551,415 for 2012. The actual value of Material and Equipment costs can vary very significantly from one quarter to another, and is influenced directly by the number of projects being executed and the level of M&E cost components in the contracts under execution. Throughout 2013, material and equipment costs (and associated revenues) will rise significantly as the Company completes major purchases required for its new contract for the plasma waste destruction system to be installed on the CVN-79 the next US Navy Ford-class air craft carrier.

As previously announced, in May 2012, the Company implemented significant cost containment measures. As a result of these measures, management believes that the Company is better positioned and has become more competitive as many of the cost containment measures have a long term positive impact on the company's profitability, as an example rental expenses were reduced by approximately 50% to $350,000 per year. The savings from the containment measures are reflected in the year over year 50% reduction in manufacturing overhead. All manufacturing overhead has been full applied against Cost of Sales and Services in the quarter.

During 2012, management has been restructured to permit more focus on business development and operations. The results of these changes has been particularly positive on operations, where the Company has benefitted from better utilization of resources and cost containments, on-time delivery, meeting key project milestones, and improved reporting with respect to project progress and issues.

Starting in 2013, as a result of their new ERP system the company has begun allocating transportation, travel and other expenses at the project level. In 2013 the company has recorded $64,517 and $86,006 of costs against projects and Cost of Sales in 2013 Q3 and 2013 YTD respectively. Prior to 2013 these costs were expensed under Selling, General and Administrative expense.

The level of government grants and research and development ("R&D") tax credits recorded in 2013-Q3 was $82,541, versus $32,929 in 2012-Q3. The increase in the amount of R&D tax credits recorded in 2013-Q3 is primarily due to a recovery of tax credits that was higher than what was that accrued in prior years by an amount of $72,573.

The amortization of licenses of $349,268 per quarter is related to licenses and know how purchased in 2011 from a company controlled by a shareholder of the Company. The majority of the expense is a non-cash item and the offsetting debt is repayable $40,000 per month until December 31, 2040.

Building on the improvement in gross margin on projects that started in 2012-Q4, the 2013-Q3 shows an impressive improvement over 2012. Gross margin for 2013-Q3 before amortization of licenses was $575,462 (41.3% on revenues), versus a negative margin of $255,413 (negative 49.4% on revenues) for 2012- Q3. For the nine months ended September 30, 2013, the year-to-date gross margin was $1,630,711 (42.1% on revenues), versus negative $502,898 (negative 23.9% on revenues) for the same period in 2012. The improved level of gross margin in 2013 was achieved through controlled project management, tight control over technical resources employed on projects, and favorable pricing on equipment purchases.

Management is pleased with the performance of its technical and project teams for completing projects under budget and on time. The ability to execute projects on time and also improve the project margins is a key demonstration that PyroGenesis is ready to face the challenges ahead as it volume of projects and revenues grow.

Management is confident that with the increased focus on operations and project execution, PyroGenesis will continue to see favorable gross margins on projects. Margins will naturally fluctuate quarter to quarter depending on the types of projects under execution and the completion stage of the projects.

### *Selling, General and Administrative Expenses*

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Salaries and consulting fees | **$ 560,819** | $ 143,557 | 291% | **$ 1,659,844** | $ 904,771 | 83% |
| Government grants | **(12,280)** | - | | **(12,280)** | - | |
| Professional fees | **75,535** | 147,296 | -49% | **329,929** | 601,771 | -45% |
| Office and general | **187,475** | 232,032 | -19% | **446,884** | 488,639 | -9% |
| Interest and bank charges | **5,838** | 4,246 | 37% | **12,159** | 41,341 | -71% |
| Amortization Machinery & Equipment | **46,044** | 62,890 | -27% | **139,838** | 188,670 | -26% |
| **Sub-total before Share based payments** | **863,431** | 590,021 | 46% | **2,576,374** | 2,225,192 | 16% |
| Share based payments | **149,783** | 451,664 | -67% | **445,408** | 868,710 | -49% |
| **Total selling, general and administrative** | **$ 1,013,214** | $ 1,041,685 | -3% | **$ 3,021,782** | $ 3,093,902 | -2% |

Selling, general and administrative expenses for the third quarter of fiscal 2013, ending September 30, 2013 were $1,013,214, a decrease of 3% versus the $1,041,685, reported during the same period in fiscal year 2012. 2013-Q3, includes stock based compensation of $149,783, ($451,664 in 2012-Q3). The costs associated with stock based compensation (a non-cash item on which options vest over a four year period) commenced in 2011-Q3 when a stock option plan was put in place. Before stock based compensation, Selling, general and administrative, increased by 46% in 2013-Q3 over the same time frame in the prior year, and 16% on a year-to-date basis for the nine months ended September 30th.

The increase in Selling, general and administrative spending is mainly attributable to increased investment in personnel with the hiring of a senior financial executive, and the expansion of the Company's sales force by two seasoned business development people. In 2012 Q3, the level of the vacation pay accrual was re-evaluated which resulted in a one-time reduction to salary expense in the amount of $232,000. This one-time adjustment in the vacation pay accrual decreased significantly the reported net SG&A salary costs in 2012 Q3.

Reduction in Selling, General and Administrative costs were realized on professional fees paid to third parties, office and general and in amortization expense of machinery and equipment.

### *Research and Development ("R&D") Costs*

Starting in 2013, the Company has decided to account and disclose the net costs incurred on internal R&D projects as a line item on the Statement of Comprehensive Loss be better report the level of spending on this important area of its business.

**Internal R&D Project Costs**

| | Three months ended Sept 30, 2013 | 2012 | Nine months ended Sept 30, 2013 | 2012 |
|---|---|---|---|---|
| Salaries and consulting fees | **$ 54,927** | $ - | **$ 206,021** | $ - |
| Materials and equipment | **1,374** | - | **19,809** | - |
| Other expenses | **245** | - | **540** | - |
| **Sub-total before government grants** | **56,546** | - | **226,370** | - |
| Government grants | **(21,164)** | - | **(97,166)** | - |
| **Total net R&D costs** | **$ 35,382** | $ - | **$ 129,204** | $ - |

In 2013-Q3, the company incurred $56,546 of costs on internal R&D projects, and received government grants totaling $21,164, for net R&D spending of $35,382. During the nine month period ending September 30, 2013, the company incurred $206,021 of R&D costs and received $97,166 of government grants for year-to-date net spending of $129,204 on internal R&D projects.

In addition to internal R&D projects, the company incurred R&D eligible expenditures on execution of externally funded projects.

### *Research and Development Tax Credits*

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Research tax credits | **$ 82,541** | $ 41,259 | 100% | **$ 102,241** | $ 119,061 | -14% |

Research and development tax credits were accrued in the amount of $82,541 in 2013-Q3 (of which $72,573 were due to a recovery of tax credits in excess of the amount previously accrued) versus $41,259 in 2012-Q3. For the nine months ended September 30, 2013, research and development tax credits were accrued in the amount of $102,241 as compared to $119,061 during the same period the prior year.

As PyroGenesis focuses on the commercialization (sales and delivery) of its proven technologies, the number of projects eligible for research and development tax credits decreases. PyroGenesis continues to make strategic investments in research and development projects incorporating the involvement of partners and government bodies where strategically justified.

## *Financing Charges*

| Financing Charges | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Financing charges | $ **94,202** | $ 96,392 | -2% | $ **279,557** | $ 334,503 | -16% |

Financing charges decreased by 2% to $94,202 for the three months ended September 30, 2013, (2012: $96,392), and decreased by 16% to $279,557 for the nine months ending September 30, 2013 (2012: $334,503).

The decrease in the financing charges in 2013 versus 2012 is primarily due to the repayment of the $1,000,000 of convertible debenture in 2012 Q1.

As at the end of 2012-Q1, the Company had repaid all bank lines-of-credits and venture capital loans ($1,000,000 convertible debenture). As such there is no debt owing to external non-related parties.

## *Amortization of Property and Equipment*

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Amortization of property and equipment | $ **46,044** | $ 62,890 | -27% | $ **139,838** | $ 188,670 | -26% |

Amortization of machinery and equipment decreased by 27% to $46,044 in 2013-Q3 (2012- Q3: 62,889), and decreased by 26% on a year-to date basis. This is primarily as a result of decreased investments in machinery and equipment in recent years from the level of investment in 2010 when major acquisitions were made.

## *Net Profit/Loss*

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Loss from operations | $ **(916,604)** | $ (1,742,758) | -47% | $ **(2,847,637)** | $ (4,979,108) | -43% |
| Total comprehensive loss | $ **(915,156)** | $ (1,742,581) | -47% | $ **(2,844,768)** | $ (4,968,993) | -43% |

Loss from operations for the third quarter of fiscal 2013, ending September 30, 2013 was $916,604 as compared to a loss of $1,742,758 for the same period in 2012, a decrease of

47%. Year-to-date as at the end of the third quarter, loss from operations was $2,847,637 as compared to a loss of $4,979,108, a decreased by 43% over the prior year.

### *EBITDA*

| | Three months ended Sept 30, 2013 | 2012 | % Change | Nine months ended Sept 30, 2013 | 2012 | % Change |
|---|---|---|---|---|---|---|
| Comprehensive loss | **$ (915,156)** | $ (1,742,581) | -47% | **$ (2,844,768)** | $ (4,968,993) | -43% |
| Amortization of property and equipment | **46,044** | 62,890 | | **139,838** | 188,670 | |
| Amortization of intellectual property | **349,268** | 349,268 | | **1,047,805** | 1,047,805 | |
| Share based compensation expense | **149,783** | 451,664 | | **445,408** | 868,709 | |
| Financing charges | **94,202** | 96,392 | | **279,557** | 334,503 | |
| EBITDA (loss) | **$ (275,859)** | $ (782,367) | -65% | **$ (932,160)** | $ (2,529,306) | -63% |

The Company reports on its EBITDA (Earnings from operations before depreciation and amortization and special charges). EBITDA is not a performance measure defined under IFRS and is not considered an alternative to income from operations or net (loss) earnings in the context of measuring Company's performance. EBITDA does not have a standard meaning and is therefore not likely to be comparable with similar measures used by other publicly traded companies.

The EBITDA decreased by 65% to ($275,859) in the third quarter of 2013 compared to ($782,367) for the same period last year, and decreased by 63% to ($932,160) during the nine months ended September 30, 2013 compared to ($2,529,307) for the same period last year.

The significant improvement in the EBITDA is a result of increased revenues and dramatically improved gross margins on projects.

During 2012, Management took several key steps to restructure and strengthen the Company's management, reduce fixed operating expenses, increase the focus on increasing revenues and improving the gross margins on projects. The results from these measures started to be evident towards the end of 2012 and throughout 2013.

## SUMMARY OF QUARTERLY RESULTS

| | 2013 | | | 2012 | | | | 2011 Restated |
|---|---|---|---|---|---|---|---|---|
| | Q3 | Q2 | Q1 | Q4 | Q3 | Q2 | Q1 | Q4 |
| Revenues | **$ 1,394,255** | **$ 1,341,818** | **$ 1,141,143** | $ 1,221,501 | $ 516,595 | $ 777,197 | $ 807,943 | $ 1,326,420 |
| Loss from operations | **(916,604)** | **(976,894)** | **(954,139)** | (840,167) | (1,742,758) | (1,358,294) | (1,878,056) | (873,569) |
| Total comprehensive loss | **(915,156)** | **(975,473)** | **(954,139)** | (840,142) | (1,742,581) | (1,358,249) | (1,868,163) | (868,468) |
| Net loss per share - basic | **(0.014)** | **(0.015)** | **(0.015)** | (0.094) | (0.027) | (0.021) | (0.032) | (0.020) |

As illustrated above, the revenues and losses from operations have varied considerably from quarter to quarter, however results have become much more consistent over the last four quarters, with increases revenues, improved gross margins and decreased losses. Revenues are recognized based on a percentage of completion basis, and project work is dependent on customer timing for project engineering, manufacturing, and testing.

## LIQUIDITY AND CAPITAL RESSOURCES

During the 2013 fiscal year, the primary sources of funding for PyroGenesis have been cash generated from projects.

At Sept 30, 2013, PyroGenesis had cash on hand of $594,390 and negative working capital of $3,691,001, (negative $1,436,384 at December 31, 2012). Included in the current liabilities at September 30, 2013, are “loans from related parties” totaling $756,591 which have been deferred until March 31, 2014 to provide the Company with additional short-term funding.

Since the end of 2012-Q1, there is no debt owing to non-related third parties.

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. Current market conditions do limit the potential to raise additional funding.

In late November 2012, the Company announced that it had secured a $5.5 million reorder from Newport News Shipbuilding for a plasma waste destruction system to be installed in a new US Navy air craft carrier. This order provides the Company a solid foundation of backlog and workload throughout 2013, as it pursues securing additional new orders.

## Summary of Cash Flows

| | Three months ended Sept 30, 2013 | 2012 | Nine months ended Sept 30, 2013 | 2012 |
|---|---|---|---|---|
| Cash provided by (used) by operating activities | $ **46,926** | $ 623,131 | $ **(1,456,111)** | $ (561,480) |
| Cash provided by (used in) investing actiities | **(93,506)** | (191,203) | **(152,565)** | (425,032) |
| Cash provided by (used in) financing activities | **32,184** | (25,933) | **7,495** | 1,629,365 |
| Increase (decrease) in cash | **(14,396)** | 405,995 | **(1,601,181)** | 642,853 |

Cash flow from operations resulted in a source of cash of $46,926 for the three-month period ended September 30, 2013 and a net use of cash of $1,456,111 for the nine month period ending September 30, 2013, compared to a net source of cash of $623,131 and a net use of $561,480 for the respective periods in the previous year. For 2013-Q3 despite a net comprehensive loss $915,156, costs not requiring outlays of cash total $545,095 consisting mainly of costs related to issuance of options and amortization of property, equipment and licenses.

Investing activities resulted in use of cash of $93,506 and $152,565 for the three month and nine month period ending September 30, 2013. Cash used for investment activities in 2013 was related to increase in the investment in the torch asset under construction (part of Property and equipment) whereby the Company has proven that its Steam Plasma Arc (SPARC) Destruction System for Ozone Depleting Substances (ODS) meets and exceeds environmental regulations while operating at full commercial capacity.

Financing activities resulted in a source of funds of $32,184 for the three-months period ended September 30, 2013, compared to an use of funds of $25,933 for the same period in the previous year. During the first nine months of 2013, financing activities resulted in a net source of funds of $7,495 versus a net source of funds of $1,629,365 for the same period in the prior year. During the first quarter of 2012, the Company completed an equity issuance which raised net proceeds of $3,177,757, of which $1,516,337 was used for the repayment of bank debt, and the repayment of long-term debt.

As described in note 10 of the September 30, 2013 financial statements, the $40,000 per month balance of sale payments were not made during the 2012 and 2013, and as such an amounts totaling $556,591 has been deferred until March 30, 2014. Additionally, the amount payable to a trust beneficially owned by a shareholder of $376,379 has been deferred to July1, 2015. These deferrals of payment have been granted in order to provide the Company with additional short term financing.

For the three months ended September 30, 2013, the net cash position of the Company decreased by $14,396 as compared to a net increase of $405,995 for the same period in the prior year. For the nine month period ending September 30, 2013, the net cash

position of the Company decreased $1,601,181 as compared to a net increase of $642,853 for the same period the prior year.

Increasing revenues and gross margins, decreasing losses from operations and positive cash flows from projects have been critical in providing needed working capital in 2013. The decreasing cash position year-to-date reflects the company's continued need to raise additional cash from operations and/ or to seek additional cash from equity issuances as it continues to further increase revenues and improve its technical offerings.

## GOING CONCERN

Despite the increased level of revenues in 2013, cash generated on projects with external clients was not sufficient to meet the overall cash requirements to cover operating costs. For the Company to generate sufficient positive cash-flow from projects and meet current cash requirements, the level of business intake and revenues must increase. Management's plan for the balance of 2013 and 2014, calls for increased order intake and revenues, competitive gross margins and controlled SG&A expense levels.

The September 30, 2013 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.

The Company has incurred substantial recurring operating losses to date $2,844,768 in 2013. In 2011 and 2012 losses had occurred as a result of the longer than anticipated "gap period" between the initial orders for our waste destructions systems sold to the US Navy and US Air Force and obtaining the critical reorders. During this period of time, the Company has lived through many challenges including a demanding cash management situation. During 2011 and 2012, the funds raised in the initial public offering and the subsequent second public offering which took place in March 2012, have allowed the Company to deal with the difficult market period all the while allowing management to restructure its operations and further develop its technologies and markets.

The increased revenues, improved gross margins and decreases operating losses in 2013, are an important step in Company's objective to achieve break-even measured on an EBITDA basis.

## RELATED PARTY TRANSACTION

Details of related party transactions are disclosed in note 14 of the financial statements for the period ended September 30, 2013.

There are no material changes during the 2013 fiscal year in the nature or extent of the related party transactions from those conducted in the 2012 business year, and these transactions are in the normal course of business.

## SUBSEQUENT EVENTS

No material subsequent events took place pursuant to the end of 2013-Q3.

## OUTLOOK

Over the recent past, and in conjunction with PyroGenesis' successful efforts to secure its first commercial reorder, Management has undertaken substantial measures to lower its operating costs and to refocus its strategic objectives with the intent of leveraging off the Company's strengths. The benefits of the measures put in place during this period, are continuing to show significant results and Management expects this will continue into the foreseeable future.

The realignment of PyroGenesis' business to emphasize higher margin, lower lead-time projects is continuing to impact gross margins positively as the company posts gross margins before amortization of licenses for the 3rd Q of 41.3% and 42.1 % for the 9 months ending Sept 30, 2013.

The Company also is continuing to reap the benefits of the restructuring it has undertaken and which saw a realignment of both its finance and operations departments. This realignment has greatly improved budgeting, reporting and project management within the Company. PyroGenesis is continuing to refocus its business development department and recent contract announcements are a testament to this success. Management is continuing to implement measures to strengthen and focus its business development department, which includes, amongst other things, hiring strategically focused professionals and realigning the Company's business development efforts.

As a result of these improvements, revenues increased 170% in 2013-Q3 over same period last year, and management expects revenues to further increase over the short term as the full effects of the Business Development realignment are felt.

The Company's restructuring together with the development of new markets for its products and its strategic refocusing, combined with the unprecedented commercial validation of PyroGenesis' plasma waste destruction systems by their acceptance and reorder, position the Company as a strong and credible player both within the market for plasma based waste destruction technologies as well as that for niche torch applications.

As a result of these changes and developments, Management believes that the Company is now better positioned to secure multiple contracts and achieve significant growth in revenues and profitability in the mid-term. Management continues to be of the opinion that, although the future is not without its challenges, the Company is executing its strategy embarked on in 2012, and is now well positioned to build on this success.

## ADDITIONAL INFORMATION

Additional information regarding the Company can be found on SEDAR at www.sedar.com.