PYROGENESIS CANADA INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS

For the three months ended March 31, 2013

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

May 28, 2013

This management's discussion and analysis (MD&A) of PyroGenesis Canada Inc. ("PCI" 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 period ending March 31, 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 May 28, 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 FINANCIAL INFORMATION

Statement of Comprehensive Loss

	Three months ended March 31, 2013	2012	% Change
Revenues	$ 1,141,143	$ 807,943	41%
Cost of sales and services	918,131	1,513,116	
Selling, general and administrative	1,081,936	1,039,134	
Financing charges	95,215	133,749	
	2,095,282	2,685,999	
Loss from operations	(954,139)	(1,878,056)	
Other income	-	9,893	
Total comprehensive loss	$ (954,139)	$ (1,868,163)	-49%
Loss per share - basic	$ (0.02)	$ (0.03)	

Statement of Financial Position at :

	March 31, 2013	December 31, 2012
Total assets	$ 8,275,097	$ 10,235,869
Total liabilities	11,537,707	12,690,180
Shareholders' equity	$ (3,262,610)	$ (2,454,311)

RESULTS OF OPERATIONS

Revenues

Revenues for the first quarter of fiscal 2013, ending March 31, 2013 "2013-Q1" were $1,141,143, an increase of 41.2% over revenues of $807,943, reported during the same period in fiscal 2012. This increase in revenue in 2013 reflects the end of the "gap period" the Company has been faced with while securing its first reorder from its established client base.

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 on the CVN-79, the next US Navy Ford-class air craft carrier, which is to be delivered and recognized into income over the next two years. The Company has received the initial funds of $2.1 million of the $5.5 million and the balance is to be released over the next 18 months. Revenues in 2013-Q1 are positively impacted by the commencement of work and recognition of the revenues on this new major contract, as well as other projects in progress or completed in the quarter.

Cost of Sales and Services and Gross Margin

Cost of Sales and Services

	Three months ended March 31, 2013	2012	% Change
Salaries and sub-contracting	**233,927**	793,043	-71%
Materials and equipment	**301,157**	272,013	11%
Manufacturing overhead	**85,077**	161,997	-47%
Government grants and research and development tax credits	**(51,299)**	(63,205)	-19%
Sub-total before amortization of licences	**568,862**	1,163,848	-51%
Amortization of licenses	**349,269**	349,268	0%
Total Cost of Sales	**$ 918,131**	$ 1,513,116	-39%

Gross Margin

	Three months ended March 31, 2013	2012
Revenues	**1,141,143**	807,943
Cost of Sales and Services before amortization of licenses	**568,862**	1,163,848
Gross Margin before amortization of licenses	**572,281**	(355,905)
Gross Margin % before amortization of licenses	**50.1%**	-44.1%
Amortization of licenses	**349,269**	349,268
Gross Margin after amortization of licenses	**$ 223,012**	$ (705,173)
Gross Margin % after amortization of licenses	**19.5%**	-87.3%

Cost of Sales and Services before amortization of licenses for 2013-Q1 was $568,862, a decrease of 51.1% over costs of $1,163,848 in 2012-Q1. Starting in the second half of 2012, management has 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 47%. Due to the nature and location of the projects, the level of sub-contracted services is only $9,852 in 2013–Q1 compared to $320,474 in 2012-Q1.

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 will 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 53% 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.

The level of Material and Equipment costs incurred on projects in 2013-Q1 has increased by 10.7% from 2012-Q1. 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 Material and Equipment cost components in contracts under execution. During the balance of 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.

The level of government grants and research and development ("R&D") tax credits recorded in 2013-Q1 was $51,299, versus $63,205 in 2012-Q1. The decrease in R&D tax credits recorded is due to decreased spending on R&D eligible projects as the company focused greater portion of its resources on revenue generating projects.

The amortization of licenses of $349,269 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-Q1 shows an extra-ordinarily improvement over most of 2012. Gross margin before amortization of licenses was $572,281 (50.1% on revenues) for 2013-Q1, versus negative $355,905 (negative 44.1%) for 2012- Q1. The high level of gross margin in 2013-Q1 was achieved through controlled project management, tight control over technical resources employed on projects, and favorable pricing on equipment purchases. In 2013-Q1, PyroGenesis benefited from the completion of one its projects which helped increase the gross margin for the quarter. In 2012-Q1, the Company incurred unusually high levels of salary and sub-contracting costs it was in the final completion stages of two first of a kind projects.

Management is pleased with the performance of its technical and projects 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 its 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 March 31, 2013	2012	% Change
Salaries and sub-contracting	$ 615,605	$ 400,639	54%
Professional fees	91,674	205,120	-55%
Office and general	177,169	130,329	36%
Interest and bank charges	3,315	31,633	-90%
Amortization Machinery & Equipment	48,333	62,890	-23%
Sub-total before Share based payments	936,096	830,611	13%
Share based payments	145,840	208,523	-30%
Total selling, general and administrative	$ 1,081,936	$ 1,039,134	4%

The category of Selling, general and administrative (SG&A) consists of all costs not associated with the direct execution of sold projects. SG&A consists of the following categories of departmental costs: business development, proposal costs, corporate administration, operations administration, and research and development costs. The above costs are managed on a department basis, so as to enable management to clearly budget and control costs by source and type of spending. The Company's new Enterprise Resource Planning (ERP) system is providing management much better insight into categorizing spending by department, which will be key in fine-tuning the management there-of.

SG&A expenses (before Share based payment expense) for 2013-Q1 were $936,096, an increase of 13% over the $830,611, reported in 2012-Q1. By far the largest increase was in the area of labor costs. Starting in 2013-Q1, management has isolated the cost of Operations administration costs as well as R&D development costs that are now recorded under SG&A. This was done so that management is able to clearly budget and identify these cost factors, and in order to isolate these costs from Cost of Sales providing a better picture on the evolution of costs and gross margin on projects. Salary costs of 2013-Q1 were also increased due to the upgrade of the management team through the hiring of a

Vice-President of Finance in 2012-Q2. Management is of the opinion that we can still realize some cost savings on the labor costs contained in SG&A.

Savings were realized in professional fees by performing much of the external reporting from inside the Company and decreasing the Company's reliance on external service providers.

Office and general costs increased by $46,000 or 36% in 2013-Q1 over the cost level recorded in 2012-Q1. Investment in sales personnel related expenses increased in the quarter as PyroGenesis is increasing efforts to widen its presence in key markets. More than 50% of the reported increase is due to timing of expenses recorded in 2012, where 2012-Q1 costs were under-accrued as the Company was migrating to its new ERP system. These costs were captured and expensed in later quarters in 2012.

The costs associated with share based payments (a non-cash item on which options vest over a four year period) commenced in 2011-Q3 pursuant to the grant of stock options in accordance with the Company's stock option plan. The value of the share based payments for 2013-Q1 is $145,840 versus $208,523 for the same period in 2012.

Management is confident that additional cost reductions will be achieved through a closer management of expenses and better management of information from its recently implemented ERP system, as well as through its realigned management structure.

Financing Charges

Financing Charges

	Three months ended March 31, 2013	2012	% Change
Financing charges	$ 95,215	$ 133,749	-28.8%

Financing charges for the 2013-Q1were $95,215 versus $133,749 for the same period in 2012. In 2013-Q1 financing charges relate solely to the non-current debt and current portion of long-term debt. In 2012, the amount includes the current portion of the long-term debt as well as the interest on the venture capital loan outstanding of $1,000,000.

As at the end of 2012-Q1, the Company had repaid all bank lines-of-credit and Venture Capital loan ($1,000,000 convertible debenture from Fier Croissance Durable). As such, there is currently no debt owed to non-related parties.

Amortization of Property and Equipment

	Three months ended March 31, 2013	2012	% Change
Amortization of machinery and equipment	**$ 48,333**	$ 62,890	-23.1%

Amortization of property and equipment decreased by 23.1% to $48,333 in 2013-Q1 from the 2012-Q1 level of $62,890. The reduction in amortization expenses is primarily a result of decreased investments in property and equipment during both 2011 and 2012 compared to investments made in 2010 when major assets were acquired by the Company.

Research and Development Tax Credits

	Three months ended March 31, 2013	2012	% Change
Research tax credits	$ **12,000**	$ 63,205	-81.0%

R&D tax credits of $12,000 were accrued in 2013-Q1 versus $63,205 in 2012-Q1. Projects qualifying for R&D tax credit treatment have decreased significantly in 2012 due to the fact that the Company is now commercializing its product lines.

Investment in R&D remains a priority for the Company, as new applications for its core technologies are identified. Whereas a significant source of funding for R&D projects in the past has been government R&D tax credits, current and future R&D investment type projects will be less reliant on this form of funding as the Company will focus more heavily on partnerships and other granting agencies.

Net Profit/Loss

	Three months ended March 31, 2013	2012	% Change
Loss from operations	$ (954,139)	$ (1,878,056)	-49.2%
Total comprehensive loss	(954,139)	(1,868,163)	-48.9%

Loss from operations for the 2013-Q1 period was $954,139 compared to a loss of $1,878,056 in 2012-Q1; a decrease of 49.2%.

Total comprehensive loss for the period was $954,139 compared to a loss of $1,868,163 in fiscal 2011, for a decrease of 48.9%.

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 in the first quarter of 2013.

The 49% decrease in comprehensive loss from 2012-Q1 to 2013-Q1, is due a combination of positive factors and directions:

- revenues have increased by 41.2% for a net increase in revenues of $333,200,

- gross margin before amortization of licenses was $572,281 for 2013-Q1 as compared to a negative margin of $355,905 in 2012-Q1, for an net improvement of $928,186. The dramatic improvement in gross margin is a positive sign that Management's restructuring to allow greater concentration on operations is bringing positive results.

Loss from operations for 2013-Q1 before non-cash items (share based payments: $145,840; amortization of licenses and property and equipment: $397,602) was $410,697.

SUMMARY OF QUARTERLY RESULTS

	2013	2012				2011 Restated		
	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2
Revenues	**1,141,143**	1,221,501	516,595	777,197	807,943	1,326,420	1,909,231	167,054
Loss from operations	**(954,139)**	(840,167)	(1,742,758)	(1,358,294)	(1,878,056)	(873,569)	(2,165,062)	(2,643,105)
Total comprehensive loss	**(954,139)**	(840,142)	(1,742,581)	(1,358,249)	(1,868,163)	(868,468)	(2,815,300)	(2,643,105)
Net loss per share - basic	**(0.02)**	(0.01)	(0.03)	(0.02)	(0.03)	(0.02)	(0.05)	(0.05)

Revenues and losses from operations have varied considerably from quarter to quarter. 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 2012 fiscal year, the primary sources of funding for PyroGenesis has been cash generated through the sale of shares. On March 29, 2012, PyroGenesis completed its second public offering whereby it issued 4,424,555 units at a price of $0.80 per unit (each unit being comprised of one common share and one warrant for the purchase of a common share at $1.20 expiring on March 29th 2015), for aggregate gross proceeds of $3,539,644.

At March 31, 2013, PyroGenesis had cash on hand of $563,659 and the Company's current liabilities exceed its current assets in the amount of $2,670,616. Included in the current liabilities at March 31, 2013, are "loans from related parties" totalling $768,130 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. The Company has received a purchase order for the initial $2.1 million of the $5.5 million, and the balance will be released over the next 18 months. This order provides the Company a solid foundation of backlog and workload going into 2013, as it works at securing additional new orders.

GOING CONCERN

During 2011 and 2012, due to the reduced level of revenues, 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 2013, calls for increased intake and revenues, competitive gross margins and controlled SG&A expense levels.

The March 31, 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 material operating losses in 2011 and 2012 which have 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 bring the company to a future break-even point.

CASH USED IN OPERATIONS

	Three months ended March 31	
	2013	2012
Cash provided by (used) by operating activities	$ **(1,576,507)**	$ (248,144)
Cash provided by (used in) investing actiities	-	(271,189)
Cash provided by (used in) financing activities	**(55,405)**	1,711,906

For the 2013-Q1, cash flow from operating activities resulted in a net use of cash of $1,576,507 compared to a net use of cash of $248,144 for the same period in 2012.

Despite the strong reduction in the Comprehensive loss ($954,139 in 2013-Q1 as compared to $1,868,163 in 2012-Q1), the net change in non-cash operating working capital items, resulted in a net usage of cash of $1,165,810 in 2013-Q1 as per note 12 of the financial statements. The major changes in the non-cash operating working capital in the 2013-Q1 are a reduction of accounts payable and accrued liabilities by $736,475, and a reduction in Billings in excess of costs and profits on uncompleted contracts by $360,593.

Financing activities for the 2013-Q1 resulted in a use of cash of $55,405, compared to a source of cash of $1,711,906 for the same period in 2012. During 2012-Q1, the Company completed an equity issuance which raised net proceeds of $3,177,757, of which $1,465,851 was used for the repayment of bank debt, and the repayment of long-term debt.

During 2012, as described in note 10 of the March 31, 2013 financial statements, the $40,000 per month balance of sale payments were not made during the year and as such an amount of $466,591 has been deferred until March 31, 2014. This deferral of payment has been granted in order to provide the Company with additional short term financing.

For the three months ended March 31, 2013, the net cash position of the Company decreased by $1,631,912 as compared to a net increase of $1,192,573 for the same period in the prior year. The decreasing cash position in the quarter reflects the company's continued need to raise additional cash from operations or to seek additional cash from equity issuances as it continues to increase revenues and improve its technical offerings.

RELATED PARTY TRANSACTION

Details of related party transactions are disclosed in note 14 of the financial statements for the quarter ended March 31, 2013.

There were no material changes during the 2013-Q1 in the nature or extent of the related party transactions from those conducted in the 2012 fiscal 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-Q1.

OUTLOOK

Over the past 18 months, 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, have begun to show significant results which Management expects will continue into the foreseeable future.

The realignment of PyroGenesis' business lines to emphasize higher margin, lower lead-time projects is reflected in 2013-Q1 gross margins of 50.1%. Management expects healthy gross margins to now continue into (30-40%) in 2013-Q2 and beyond.

The Company is also reaping the benefits of the restructuring it has undertaken and which saw a realignment of both its finance and operations departments. These realignments have greatly improved budgeting, reporting and project management within the Company. PyroGenesis is also in the process of strategically refocusing its business development department. As such, 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 along product lines. These changes are expected to result in an improved management of the significant business opportunities arising from small improvements to date.

As a result of these improvements, revenues have increased in 2013-Q1 over same period last year, and management expects revenues to further increase 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.

Management expects that as revenues from higher margin products increase, the Company is well on its way to previously advertised profitability. 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 is of the opinion that, although the future is not without its challenges, the Company is well positioned to build on this success and execute on its strategy embarked on in 2012.

ADDITIONAL INFORMATION

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