

# PYROGENESIS CANADA INC.

# PYROGENESIS CANADA INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

(All figures expressed in Canadian dollars unless otherwise noted)

July 21, 2011

The following Management's Discussion and Analysis ("MD&A") provides information that management believes is relevant to an assessment and understanding of the Company's consolidated results of operations and financial condition. Management has prepared this document in conjunction with its broader responsibilities for the accuracy and reliability of the financial statements, the development and maintenance of appropriate information systems and internal controls to ensure that the financial information is complete and reliable. This MD&A as well as the unaudited interim consolidated financial statements have been prepared by management, and were not audited by the Company's external auditors. The Company's management is responsible for the preparation of the consolidated financial statements as well as other information contained in this report. On July 11, 2011, PyroGenesis amalgamated with Industrial Growth Income Corporation ("IGIC"). These financial statements have been prepared on the basis that the amalgamation was effective March 31, 2011.

The Board of Directors is required to ensure that management assumes their responsibility with regards to the preparation of the Company's financial statements. To assist management, the Board created an Audit Committee on July 11, 2011. The Audit Committee has not reviewed these statements. In the future the Audit Committee will meet with members of the management team to discuss the operating results and the financial situation of the Company. It will then make its recommendations and submit the financial statements to the Board of Directors for their examination and approval. Following the recommendation of the Audit Committee, the Board of Directors will approve all future consolidated financial statements.

This Q1 2011 Management's Discussion and Analysis should be read in conjunction with the Company's consolidated interim financial statements for the period ended March 31, 2011, which are prepared in accordance with International Accounting Standard ("IAS") 34 Interim Financial Reporting. These are the Company's first International Financial Reporting Standards ("IFRS") condensed interim financial statements for part of the period covered by the first IFRS annual financial statements and IFRS 1 First-time Adoption of International Financial Reporting Standards has been applied. These condensed interim financial statements do not include all of the necessary information required for full annual financial statements in accordance with IFRS.

Previously the Company prepared its interim and annual consolidated financial statements in accordance with Canadian generally accepted accounting principles ("Canadian GAAP").

For a discussion of the Company's adoption of International Financial Reports Standards (IFRS), refer to page 9 of this MD&A.





For all purposes, the "Company", "PyroGenesis" and "PCI" refer to PyroGenesis Canada Inc.

All financial information is presented in Canadian dollars unless otherwise noted.

Additional information may be found on the Company's website <u>www.pyrogenesis.com</u> and also on SEDAR at <u>www.sedar.com</u>.

#### 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, statements regarding the future financial position, business strategy, proposed acquisitions, budgets, litigation, projected costs and plans and objectives of the Company. Readers can identify many of these statements by looking for words such as "believe", "expects", "will", "may", "intends", "projects", "anticipates", "plans", "estimates", "continues" and similar words or the negative thereof. Although management of the Company believe that the expectations represented in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct.

By their nature, forward-looking statements require assumptions and are subject to inherent risks and uncertainties including those discussed herein. 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 or incorporated by reference 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 risk factors mentioned above. 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.

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





#### **OVERVIEW**

PyroGenesis Canada Inc. is a leader in the design, development, manufacture and commercialization of advanced plasma waste to energy systems. The Company's systems are capable of converting waste into energy and non-hazardous products. The Company's proprietary and proven technologies have been developed over 15 years. A long-standing relationship with the US Navy along with a system in operation at a US Air Force base sets the Company's business apart from many of its competitors. The Company's innovative product offerings have translated into numerous signed contracts. The Company has three distinct product offerings. The Company's marine based PAWDS treats combustible waste on board ships while its land based PRRS is designed to treat a range of industrial, hazardous, clinical and municipal waste streams on land. The Company's plasma torch systems are sold world-wide to other plasma companies who do not have the know-how to build this type of equipment and also to those using high temperature metallurgical and advanced material applications.

### SELECTED INFORMATION

For the quarter ended March 31°	<u>2011</u>	<u>2010</u>
Total Sales	\$1,207,653	\$1,928,656
Expenses	\$1,911,820	\$2,993,708
Inc. (Loss) From Operations	\$(704,167)	\$(1,065,052)
Net Income (Loss)	\$(701,943)	\$(1,064,238)

As at March 31°	<u>2011</u>	<u>2010</u>
Total Assets	\$18,259,683	\$6,130,162
Total Liabilities	\$13,545,498	\$7,447,677
Shareholder's Equity	\$4,714,185	\$1,317,515

#### **REVENUES / SALES**

Sales decreased 37% to \$1,207,653 (2010: \$1,928,656) for the period ended March 31, 2011, reflecting the nearing to completion of the Company's two major projects, namely the marine based contract with NGNN, and the land based contract with the U.S. Airforce. Management expects the successful completion of these two projects to result in a significant increase in demand.

During this same period expenses decreased 36% to \$1,911,820 (2010: \$2,993,708) resulting in a net loss of \$701,943 (2010: loss of \$1,064,238).





PyroGenesis believes that its most significant opportunities for growth are within the US Armed Forces and isolated communities in general.

## **COST OF SALES AND SERVICES**

Quarter ended March 31st	<u>2011</u>	<u>2010</u>
	\$	\$
Materials and Equipment	243,059	1,262,749
Salaries	619,150	421,782
Subcontracts	239,735	593,375
Rent	110,100	110,100
Utilities	60,891	57,365
F/X	5,663	90,115
Factory	4,482	33,605
Repairs	2,282	4,084
Rental	16,828	19,611
Government Grants	(27,719)	(17,144)
Tax Credits	(506,033)	(459,636)
	768,440	2,116,006

Gross Margin as a percentage of sales was 36%, for the quarter ending March 31, 2011.

The increased gross margin in 2011 was primarily attributable to decreased costs associated with the completion of the Company's two major projects (Materials and Equipment decreased 81% to \$243,059; Subcontracts decreased 60% to \$239,735); Offset in part by an increase in salaries by 47% to \$619,150 (2010: \$421,782) as the Company continues to hire in anticipation of future growth.





## SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Quarter ended March 31 <sup>st</sup>	<u>2011</u>	<u>2010</u>
Salaries	400,000	300,000
Professional Fees	95,825	108,576
Royalty	75,000	75,000
Office & General	102,440	147,455
Travel	75,539	99,372
Insurance / Taxes	41,111	20,683
Patent Expenses	0	0
Bank Charges	6,105	3,280
Security	0	0
Advertising	3,399	21,858
Financing fees	108,500	0
	<u>907,919</u>	\$ <u>776,224</u>

Overall, Selling, General and Administrative expenses increased by 17% to \$907,919 (March 2010: \$776,224) for the period ending March 31, 2011. This was primarily as a result of a one-time financing fee, and a 33% increase in Administration Salaries to \$400,000 (March 2010: \$300,000) associated with the Company's hiring in anticipation of growth arising from the successful roll out of its two main projects; offset in part by a 31% decrease in Office and General expenses to \$102,440 (March 2010: \$147,455) over the same period.

PyroGenesis expects that its overall Selling, General and Administrative expenses will decrease as a percentage of sales, as sales increase as a result of the successful acceptance of both projects the Company is currently concluding.





## AMORTIZATION OF MACHINERY AND EQUIPMENT

For the quarter ended	<u>2011</u>	<u>2010</u>
March 31 <sup>st</sup>	<u>(\$)</u>	(\$)
	75,406	29,062

Amortization of machinery and equipment increased by 159% to \$75,406 (2010: \$29,062). This is primarily as a result of the purchase in Q3 2010 of equipment valued at \$1,093,800.

### HARDWARE AND SOFTWARE PURCHASES

For the quarter ended March 31st	<u>2011</u>	<u>2010</u>
Hardware	7,776	5,331
Software	8,506	21,020
Hardware (Under Caplease)	0	0
	<u>16,282</u>	<u>26,351</u>

### FINANCING CHARGES

For the quarter ended March 31st	<u>2011</u>	<u>2010</u>
	97,614	58,896

Financing charges increased by 66% to \$97,614 (2010: \$58,896) for the period ending March 31, 2011.

This increase was primarily due to increased interest charges associated with increased loans (tax credit loans and receivable line of credit) provided by the Company's primary institutional lender.





## RESEARCH AND DEVELOPMENT TAX CREDITS

For the quarter ended	<u>2011</u>	<u>2010</u>
March 31 <sup>st</sup>	(\$)	(\$)
	506,033	459,636

Development costs of \$728,933 were expensed in the first quarter of 2011 (2010 March 31 - \$666,139). As a private company, PyroGenesis qualified to receive research and development tax credits from the federal and Quebec provincial governments in the form of cash. Management foresees such contributions to be significantly impacted in the future given its current public company status; it is envisioned that the vast majority, if not all, of future benefits will be used to offset taxes due as opposed to cash reimbursements.

## **NET PROFIT / LOSS**

For the period ending March 31 <sup>st</sup>	<u>2011</u>	<u>2010</u>
	(701,943)	(1,064,238)

Net losses for the period ending March 31<sup>st</sup>, 2011 were \$701,943 as compared to a loss of 1,064,238 for the same period ending March 31, 2010.

These losses are expected as PyroGenesis focuses on the successful completion of its two current projects. The successful introduction of these systems will, in the opinion of management of PyroGenesis, be the catalyst to PyroGenesis' return to profitability.





## LIQUIDITY AND CAPITAL RESOURCES

At March 31, 2011, the Company had 59,010,766 common shares issued and outstanding.

At the current date of July 21, 2011, the number of issued and outstanding common shares is 59,010,766, a total of 3,253,353 options and 355,827 warrants are outstanding.

The primary sources of funding for PyroGenesis have been cash generated through the sale of shares from debt conversions, as well as increase in bank indebtness.

The subsequent amalgamation and concurrent financing will provide the Company with an additional source of liquidity to finance growth.

## **CASH USED IN OPERATIONS**

For the quarter ended March 31	2011	2010
	(\$)	(\$)
Cash provided by (used in) operating activities	(4,602,965)	(61,779)
Cash provided by (used in) investing activities	(7,171,673)	(136,442)
Cash provided by (used in) financing activities	11,987,697	(17,189)

Included in cash from operations at March 31, 2011 is a non-cash operating working capital use of \$4,149,176 (March 31, 2010: \$959,876)) of which \$3,596,375 (March 31, 2010: nil) represents an increase in escrow deposits from the concurrent financing associated with the subsequent amalgamation (see Subsequent Events).

Cash used in investment activities at March 31, 2011 of \$7,171,673 (March 2010: (\$136,442)) is predominantly related to the Acquisition of Patents from a related party (see Related Party Transactions) of \$7,636,426 (March 2010: nil).

Financing activities of \$11,997,697 at March 31, 2011 included seller financing of \$7,648,602 associated with the patent purchase and proceeds from the issuance of common shares of \$4,632,968.

#### RELATED PARTY TRANSACTION

## Intellectual property

On March 19, 2011, an agreement was signed between PyroGenesis and a company controlled by a shareholder. Per the agreement, intellectual property and know-how was sold to PyroGenesis for \$14,280,000 and will be payable in equal monthly instalments of \$40,000. The payments commence on April 1, 2011 and terminate December 31, 2040. The fair market value of this property is estimated to be \$7,636,426. The intellectual property and know-how were amortized on a straight line basis over their remaining useful life of 5.79 years.





Long term debt of \$7,636,426 was assumed on this transaction, and bears interest at an implicit rate of 4.85% per annum.

#### Class F shares

On March 21, 2011, the holder of the 1,093,800 class F shares of PyroGenesis, a related party, waived and renounced any and all rights to receive dividends or redemption of these shares. Furthermore, the holder agreed to grant PyroGenesis the sole right to demand the exchange of all 1,093,800 class F shares for a total of 1,367,250 Class A shares of PyroGenesis. Such exchange took place immediately prior to the completion of the Qualifying Transaction (see Subsequent Events section).

#### Private Placement

On March 29, 2011, PyroGenesis completed a non brokered private placement with a related party for a total of 312,500 Class A shares at a price of \$0.80 per share for gross proceeds of \$250,000.

### ADOPTION OF ACCOUNTING STANDARDS AND PRONOUNCEMENTS UNDER IFRS

In February 2008, the Canadian Accounting Standards Board ("AcSB") announced that publicly accountable enterprises in Canada will be required to prepare financial statements in accordance with International Financial Reporting Standards ("IFRS") for fiscal periods beginning on or after January 1, 2011. PyroGenesis' first annual IFRS financial statements will be for the year ending December 31, 2011 and will include the comparative period of 2010. Starting with this quarterly report, the Company has provided unaudited consolidated quarterly financial information in accordance with IFRS including comparative figures for 2010. Please refer to note 15 of the First Quarter 2011 Consolidated Interim Financial Statements for a summary of the differences between financial statements previously prepared under Canadian GAAP to those under IFRS.

#### Recent accounting pronouncements

IFRS 9 Financial Instruments: Classification and Measurement

IFRS 9 as issued reflects the first phase of the IASB's work on the replacement of IAS 39 and applies to classification and measurement of financial assets and liabilities as defined in IAS 39. The standard is effective for annual periods beginning on or after January 1, 2013. The adoption of IFRS 9 is not expected to have a significant impact on the financial statements.

#### IFRS 13 Fair Value Measurements

IFRS 13 establishes a single source of guidance for fair value measurements, when fair value is required or permitted by IFRS. The key features of IFRS 13 include: a single framework for measuring fair value while requiring enhanced disclosures when fair value is applied, fair value would be defined as the "exit price", and concepts of "highest and best use" and "valuation premise" would be relevant only for non-financial assets and liabilities. IFRS 13 is effective for annual periods beginning on or after January 1,





2013 and early adoption is permitted. The Company has not yet assessed the impact of the new standard on the financial statements.





## SUBSEQUENT EVENTS

#### RES

Following the completion of a technical feasibility study on the destruction of ozone depleting substances using Pyrogenesis' proprietary thermal destruction plasma technology (the « TDP ») for Recyclage EcoSolutions Inc. (« RES »), PyroGenesis and RES have entered into an agreement on May 6th 2011. Under this agreement Pyrogenesis will be developing, designing, building and operating a 50kg/h TDP dedicated to the destruction of ozone depleting substances.

#### **AMALGAMATION**

On July 11, 2011 Pyrogenesis and Industrial Growth Income Corporation (IGIC), a capital pool corporation, amalgamated to form "PyroGenesis Canada Inc." as contemplated by the arm's length amalgamation agreement dated June 1, 2011. As such, IGIC and PyroGenesis have combined to form a resulting issuer with the same name, PyroGenesis Canada Inc. (the "Resulting Issuer"). Pursuant to the amalgamation, 1,300,000 shares of the Resulting Issuer were issued to IGIC's shareholders at an exchange ratio of 0.32298 Resulting Issuer shares for each IGIC share. In exchange for the shares of PyroGenesis, 57,710,766 Resulting Issuer shares were issued to PyroGenesis shareholders at a deemed price of \$0.80 per share for a total deemed consideration of \$46,168,612.80. This amalgamation was approved as being the Qualifying transaction of IGIC as per Policy 2.4 Exchange Corporate Finance Manual. Following the amalgamation, the TSX Venture Exchange has accepted for filing the Company's Qualifying Transaction described in its Filing Statement dated June 29, 2011 and pursuant to this approval, the Resulting issuer started trading on the TSX Venture Exchange at the opening on Wednesday July 20<sup>th</sup> 2011 under the symbol "PYR".

In addition, immediately prior to the completion of the Qualifying Transaction, the convertible debenture issued to FIER Croissance Durable s.e.c on March 22, 2011 in the amount of \$1,000,000 bearing interest at 15% per annum compounded and payable monthly, was automatically converted into 1,388,889 PyroGenesis Shares at a price of \$0.72 per share.

#### **FIER**

Immediately prior to the completion of the Qualifying Transaction, the convertible debenture issued to FIER Croissance Durable s.e.c on March 22, 2011 in the amount of \$1,000,000 bearing interest at 15% per annum compounded and payable monthly, was automatically converted into 1,388,889 PyroGenesis Shares at a price of \$0.72 per share.





#### Class F share

Also immediately prior to the completion of the Qualifying Transaction, the 1,093,800 class F shares of PyroGenesis, which belonged to a related party (see Related Party section), were automatically converted into 1,367,250 Class A shares of PyroGenesis at a price of \$0.80 per share.

#### **OUTLOOK**

In the long term, PyroGenesis's management believes that it is well positioned to take advantage of the global environmental movement, specifically in the waste to energy sector. As a result, management of PyroGenesis expects to achieve sustained annual growth and profitability. Management of PyroGenesis expects to increase gross margins across the board and expenses, as a percentage of revenue, are expected to decrease as a result. In the short term however, quarterly results will be susceptible to quarter-over-quarter variability as PyroGenesis builds its back log of orders and increases personnel to service this business.

Having been already qualified by the US Department of Defense for several applications, PyroGenesis has led the way with the delivery and operation of actual commercial systems to the marketplace. Management of PyroGenesis believes that PyroGenesis is a strong and credible player in the emerging market for plasma based waste destruction technologies and has a good prospect of gaining a share of the emerging market for plasma-based waste processing.

