

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

This management's discussion and analysis ("MD&A") is intended to assist readers in understanding the business environment, strategies, performance and risk factors of PyroGenesis Canada Inc. ("PyroGenesis", or the "Company"). The MD&A provides the reader with a view and analysis, from the perspective of management, of the Company's financial results for the three and six-month periods ended June 30, 2025. The MD&A has been prepared in accordance with National Instrument 51-102, Continuous Disclosure Requirements, and should be read in conjunction with the audited consolidated financial statements and related notes thereto of the Company for the year ended December 31, 2024.

The condensed consolidated interim financial statements and MD&A have been reviewed by PyroGenesis' Audit Committee and were approved by its Board of Directors on August 6, 2025. 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 directors. The Audit Committee reports its findings to the Board of Directors for its consideration when it approves the MD&A and financial statements for issuance to shareholders.

The following information takes into account all material events that took place up until August 6, 2025, the date on which the Company's Board of Directors approved this MD&A. Unless otherwise indicated, all amounts are presented in Canadian dollars. The Company's functional and reporting currency is the Canadian dollar.

Additional information regarding PyroGenesis is available on the System for Electronic Document Analysis and Retrieval ("SEDAR+") at www.sedarplus.ca, the Electronic Data Gathering, Analysis, and Retrieval system ("EDGAR") at www.sec.gov (up until the NASDAQ voluntary delisting in November 2023) and on the Company's website at www.pyrogenesis.com.

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements and forward-looking information (collectively, "forward-looking statements") within the meaning of applicable securities legislation. 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 clients; 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 Company's business strategies, strategic objectives and growth strategy;
- the Company's current and future capital resources and the need for additional financing;
- the Company's ability 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 resulting in 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 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.

Many factors could cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by forward-looking statements, including, without limitation, risks and uncertainties relating to: the strength of the Canadian, US, European 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 labour disputes; foreign exchange fluctuations and collection risk; competition from other suppliers, or alternative, less capital intensive, energy solutions; and risk factors described elsewhere under the heading "Risk Factors" in the 2024 annual MD&A and the Annual Information Form of the Company dated March 31, 2025, (the "Annual Information Form") and elsewhere in this MD&A and other filings that the Company has made and may make in the future with applicable securities regulatory authorities. 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.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Although the Company has attempted to identify significant factors that could cause 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.

BASIS OF PRESENTATION

For reporting purposes, we prepared the 2024 consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The financial information contained in this MD&A was derived from the 2024 consolidated financial statements. Unless otherwise indicated, all references to "\$" are to Canadian dollars. Unless otherwise indicated, all references to a specific "note" refer to the notes to the 2024 consolidated financial statements. Certain totals, subtotals and percentages throughout this MD&A may not reconcile due to rounding.

NON-IFRS MEASURES

This MD&A makes reference to certain non-IFRS measures. These measures are not recognized measures under IFRS and do not have a standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies. Rather, these measures are provided as additional information to complement those IFRS measures by providing further understanding of our results of operations from management's perspective. Accordingly, these measures should not be considered in isolation nor as a substitute for analysis of our financial information reported under IFRS.

We use non-IFRS measures, including EBITDA and Modified EBITDA, both of which are not considered an alternative to income or loss from operations, or to net earnings or loss, in the context of measuring a company's performance. EBITDA is used by management in order to facilitate operating performance comparisons from period to period, to prepare annual operating budgets and forecasts and to determine components of management compensation. Management believes that EBITDA is used by investors as it provides supplemental measures of operating performance and thus highlights trends in our business that may not otherwise be apparent when relying solely on IFRS measures, and to compare the results of our operations with other entities that have similar structures. Management uses Modified EBITDA as it brings additional clarity to operating performance, and it eliminates variations in the fair value of strategic investments, among others, which may be beyond the control of the Company. Management believes that investors use Modified EBITDA for similar purposes as management and to evaluate performance while adjusting for non-cash discretionary expenses. Modified EBITDA allows for a more appropriate comparison to other companies whose earnings or loss is not adjusted by fair value adjustments from strategic investments. The Company also uses "Backlog" or "Backlog of signed and/or awarded contracts" interchangeably, as a non-IFRS measure. Backlog figures allow management of the Company to foresee and predict their future needs and resource planning. Management believes that "Backlog" is used by investors to evaluate the Company, its future performance and better understand the production capacity.

EBITDA: We define EBITDA as net earnings before net financing costs, income taxes, depreciation and amortization. See "Results of Operations - Reconciliation of Non-IFRS measures (EBITDA and Modified EBITDA)".

Modified EBITDA: We define Modified EBITDA as EBITDA and adjust for non-cash items namely share-based payments expenses and changes in fair value of strategic investments. See "Results of Operations - Reconciliation of Non-IFRS measures (EBITDA and Modified EBITDA)".

Backlog or Backlog of signed and/or awarded contracts: This measure is defined as contracts with customers, firm purchase order and contracts agreed between us and the customer, whereby we can determine the proceeds and the obligations to perform.

OVERVIEW

PyroGenesis Canada Inc. is a leader in the design, development, manufacture and commercialization of advanced plasma processes. We provide engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, additive manufacturing (including 3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working out of our Montreal office and our 40,902 sq. ft. (3,800 m²) and 31,632 sq. ft. (2,940 m²) manufacturing facilities, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Our core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Our operations are ISO 9001:2015 and AS9100D certified, having been ISO certified since 1997. The Company's subsidiary, Pyro Green-Gas Inc. which

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

is present in Canada, Italy and India offers technologies, equipment, and expertise in the area of biogas upgrading, and air pollution control. Pyro Green-Gas provides potential synergies with our current land-based waste destruction offerings. Our common shares are listed on the Toronto Stock Exchange (TSX) (Ticker Symbol: PYR) and tradeable through the OTCQX Best Market (Ticker Symbol: PYRGF) and the Frankfurt Stock Exchange (FSX) (Ticker symbol: 8PY1). In November 2023, the Company's Common Shares were voluntarily delisted from NASDAQ (see "Market for Securities – Delisting from NASDAQ" in the Annual Information Form).

This MD&A includes the accounts of the Company, Pyro Green-Gas Inc (including the subsidiaries in Italy and India) as well as PyroGenesis International LLC ("PyroGenesis International"). PyroGenesis International is owned 100% by the Company from the time it was acquired and renamed in July 2024. Prior to July 2024, it was known as Drosrite International and owned by a member of the Company's key management personnel and close family member of the Chief Executive Officer ("CEO") and controlling shareholder and deemed for the purposes of the consolidated financial statements to be controlled by the Company. Unless otherwise stated, reference to subsidiaries in the consolidated financial statements and this MD&A shall include PyroGenesis International and/or Pyro Green-Gas Inc. All transactions and balances between the Company and its subsidiaries have been eliminated upon consolidation.

INFORMATION FROM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) FOR THE QUARTERS ENDED JUNE 30 (expressed in dollars):

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Revenues	3,007,647	3,939,098	(931,451)	5,995,182	7,425,495	(1,430,313)
Cost of sales and services	1,337,381	2,814,455	(1,477,074)	3,526,433	5,544,507	(2,018,074)
Gross profit	1,670,266	1,124,643	545,623	2,468,749	1,880,988	587,761
Expenses						
Selling, general and administrative (excluding share-based compensation expenses)	3,451,852	(59,138)	3,510,990	7,175,608	3,999,742	3,175,866
Research and development, net	424,786	262,520	162,266	734,157	495,608	238,549
Total expenses (excluding share-based compensation expenses)	3,876,638	203,382	3,673,256	7,909,765	4,495,350	3,414,415
Net income (loss) from operations (excluding share-based compensation expenses)	(2,206,372)	921,261	(3,127,633)	(5,441,016)	(2,614,362)	(2,826,654)
Share-based compensation expenses	140,120	295,395	(155,275)	152,787	774,993	(622,206)
Net income (loss) from operations	(2,346,492)	625,866	(2,972,358)	(5,593,803)	(3,389,355)	(2,204,448)
Changes in fair value of strategic investments and net financial expenses (income)	569,020	386,097	182,923	1,583,698	769,719	813,979
Gain from settlement	—	(1,180,335)	1,180,335	—	(1,180,335)	1,180,335
Net income (loss)	(2,915,512)	1,420,104	(4,335,616)	(7,177,501)	(2,978,739)	(4,198,762)
Foreign currency translation gain (loss) on investments in foreign operations	(194,952)	(6,255)	(188,697)	(300,440)	(13,297)	(287,143)
Comprehensive income (loss)	(3,110,464)	1,413,849	(4,524,313)	(7,477,941)	(2,992,036)	(4,485,905)
Gain (loss) per share						
Basic	(0.02)	0.01	(0.03)	(0.04)	(0.02)	(0.02)
Diluted	(0.02)	0.01	(0.03)	(0.04)	(0.02)	(0.02)
Modified EBITDA⁽¹⁾	(2,136,278)	2,429,178	(4,565,456)	(5,102,426)	(739,363)	(4,363,063)

⁽¹⁾ See "Non-IFRS Measures"

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

INFORMATION FROM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) FOR THE QUARTERS ENDED JUNE 30 (expressed in dollars):

	Three months ended June 30			Six months ended June 30		
	2025	2024	2023	2025	2024	2023
Revenues	3,007,647	3,939,098	3,039,479	5,995,182	7,425,495	5,631,101
Cost of sales and services	1,337,381	2,814,455	1,927,664	3,526,433	5,544,507	3,992,713
Gross profit	1,670,266	1,124,643	1,111,815	2,468,749	1,880,988	1,638,388
Expenses						
Selling, general and administrative (excluding share-based compensation expenses)	3,451,852	(59,138)	5,669,789	7,175,608	3,999,742	12,238,735
Research and development, net	424,786	262,520	742,685	734,157	495,608	1,065,901
Total expenses (excluding share-based compensation expenses)	3,876,638	203,382	6,412,474	7,909,765	4,495,350	13,304,636
Net income (loss) from operations (excluding share-based compensation expenses)	(2,206,372)	921,261	(5,300,659)	(5,441,016)	(2,614,362)	(11,666,248)
Share-based compensation expenses	140,120	295,395	740,940	152,787	774,993	1,729,102
Net income (loss) from operations	(2,346,492)	625,866	(6,041,599)	(5,593,803)	(3,389,355)	(13,395,350)
Changes in fair value of strategic investments and net financial expenses (income)	569,020	386,097	307,140	1,583,698	769,719	(908,005)
Gain from settlement	—	(1,180,335)	—	—	(1,180,335)	—
Net income (loss) from operations	(2,915,512)	1,420,104	(6,348,739)	(7,177,501)	(2,978,739)	(12,487,345)
Foreign currency translation gain (loss) on investments in foreign operations	(194,952)	(6,255)	15,031	(300,440)	(13,297)	(3,980)
Comprehensive income (loss)	(3,110,464)	1,413,849	(6,333,708)	(7,477,941)	(2,992,036)	(12,491,325)
Gain (loss) per share						
Basic	(0.02)	0.01	(0.04)	(0.04)	(0.02)	(0.07)
Diluted	(0.02)	0.01	(0.04)	(0.04)	(0.02)	(0.07)
Modified EBITDA⁽¹⁾	(2,136,278)	2,429,178	(4,740,877)	(5,102,426)	(739,363)	(10,587,001)

SELECTED FINANCIAL INFORMATION (expressed in dollars)

	June 30, 2025	December 31, 2024	December 31, 2023
Current assets	11,426,912	19,351,220	16,803,425
Non-current assets	10,534,634	9,849,455	11,631,926
Total assets	21,961,546	29,200,675	28,435,351
Current liabilities	25,476,267	28,567,765	23,811,144
Non-current liabilities	5,027,730	4,096,298	7,452,784
Total liabilities	30,503,997	32,664,063	31,263,928
Shareholders' equity (deficiency)	(8,542,451)	(3,463,388)	(2,828,577)

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

FINANCIAL CONDITION (expressed in dollars)

	June 30, 2025	December 31, 2024	Variation 2025 vs 2024
<i>Current Assets</i>			
Cash	1,195,453	2,975,461	(1,780,008)
Accounts receivable	4,425,659	9,624,611	(5,198,952)
Costs and profits in excess of billings on uncompleted contracts	609,747	1,209,479	(599,732)
Inventory	2,562,554	2,542,633	19,921
Investment tax credits receivable	255,397	237,616	17,781
Income tax receivable	15,910	16,810	(900)
Current portion of deposits	784,808	693,729	91,079
Current portion of royalties receivable	235,588	1,041,419	(805,831)
Contract assets	449,225	441,991	7,234
Prepaid expenses	892,571	567,471	325,100
Total Current Assets	11,426,912	19,351,220	(7,924,308)
<i>Non-Current assets</i>			
Deposits	99,238	99,238	—
Strategic investments	1,146,549	30,774	1,115,775
Property and equipment	2,596,069	2,838,810	(242,741)
Right-of-use-assets	4,398,281	4,763,389	(365,108)
Royalties receivable	560,963	529,137	31,826
Intangible assets	1,733,534	1,588,107	145,427
Total Non-Current Assets	10,534,634	9,849,455	685,179
<i>Current Liabilities</i>			
Bank indebtedness	—	88,046	(88,046)
Accounts payable and accrued liabilities	12,063,924	12,855,422	(791,498)
Billings in excess of costs and profits on uncompleted contracts	9,016,527	9,010,451	6,076
Current portion of term loans	90,000	90,000	—
Current portion of lease liabilities	2,432,847	2,571,377	(138,530)
Current portion of balance due on business combination	771,120	1,787,271	(1,016,151)
Current portion of convertible debentures	1,101,849	1,021,596	80,253
Current portion of convertible loan	—	1,143,602	(1,143,602)
Total Current Liabilities	25,476,267	28,567,765	(3,091,498)
<i>Non-current Liabilities</i>			
Lease liabilities	3,297,458	3,204,091	93,367
Term loans	188,948	218,774	(29,826)
Convertible debentures	101,607	673,433	(571,826)
Secured loan	1,439,717	—	1,439,717
Total Non-Current Liabilities	5,027,730	4,096,298	931,432

Working capital, (expressed as current assets less current liabilities) varied since December 31, 2024, by \$4.8 million, mainly a result of:

- a decrease of cash of \$1.8 million, explained in the section Summary of Cash Flows,
- a decrease of \$5.2 million of accounts receivable, primarily due to a \$5.0 million reduction in trade receivables, with the most significant improvement occurring in balances outstanding for more than 90 days, as a result of the HPQ Silicon accounts receivable being exchanged for shares in early 2025. Additionally, the allowance for expected credit losses declined by \$0.3 million, reflecting the successful recovery of a previously provisioned receivable. Other receivables decreased by \$0.2 million, largely attributable to collections, while sales tax receivables declined by \$0.3 million upon collection of a federal refund,
- a decrease of \$0.6 million in costs and profits in excess of billings on uncompleted contracts, reflecting the timing of project milestones and related billing activities,

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

- an increase of \$0.1 million in current portion of deposits, attributable to advance payments made to suppliers in support of upcoming project activities,
- a decrease of \$0.8 million in current portion of royalties receivable, resulting from the debt-to-equity conversion with HPQ Silicon Inc., to settle prior year unpaid royalties, with the issuance of shares,
- an increase of \$0.3 million in prepaid expenses mainly related to the prepayment of the annual insurance program,
- a decrease of \$0.8 million in accounts payable and accrued liabilities due to timing of supplier payments,
- a decrease of \$0.1 million in the current portion of lease liabilities due to the regular repayment of lease obligations,
- a decrease of \$1.0 million in current portion of balance due on the business combination is due to the reversal of a contingent liability. The reduction reflects the non-achievement of a milestone condition associated with the business combination, resulting in the reversal of the related milestone, and;
- a decrease of \$1.1 million in current portion of convertible loan, due to the conversion of the entire loan balance into Common shares of the Company, as a result, 2,541,683 Common shares were issued in February 2025.

Non-current assets varied since December 31, 2024, by \$0.9 million, mainly a result of:

- an increase in strategic investments of \$1.1 million, primarily due to the conversion of a \$4.9 million outstanding receivable and royalties receivable from HPQ Silicon Inc. into equity as part of a debt-to-equity transaction. The increase was partially offset by a \$2.1 million decrease in the fair value of the Company's holdings in HPQ Silicon Inc.'s common shares and warrants, as well as \$1.7 million from the partial disposal of those common shares since May 2025,
- a decrease of property and equipment of \$0.2 million due to recurring depreciation,
- a decrease of \$0.4 million in right-of-use-assets due to the depreciation expense in the period, and,
- an increase of \$0.1 million in intangible assets, attributable to the capitalization of additional patent-related expenditures.

Non-current liabilities varied since December 31, 2024, by \$0.7 million, mainly a result of:

- a decrease of \$0.6 million in convertible debentures due to the principal repayment of \$0.6 million, slightly offset by the interest accretion incurred during the six-month period ended June 30, 2025, and,
- an increase of \$1.4 million in secured loan primarily due to the successful closing of the first tranche of a \$2.4 million non-brokered secured loan with a related party.

RESULTS OF OPERATIONS

Revenues (expressed in dollars)

PyroGenesis recorded revenue of \$3.0 million in the second quarter of 2025 ("Q2, 2025"), representing a decrease of \$0.9 million compared with \$3.9 million recorded in the second quarter of 2024 ("Q2, 2024"). Revenue for the six-month period ended June 30, 2025, was \$6.0 million, a decrease of \$1.4 million over revenue of \$7.4 million in the same period of 2024.

Revenues recorded in the three and six-months ended June 30, 2025, were generated primarily from:

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
High purity metallurgical grade silicon & solar grade silicon from quartz (PUREVAP™)	136,275	101,790	34,485	296,104	496,234	(200,130)
Aluminium and zinc dross recovery (DROSRITE™)	125,234	327,503	(202,269)	293,974	990,688	(696,714)
Development and support related to systems supplied to the U.S. Navy	146,075	237,175	(91,100)	363,941	1,281,609	(917,668)
Torch-related sales	1,225,094	2,792,009	(1,566,915)	1,755,361	3,669,057	(1,913,696)
Refrigerant destruction (SPARC™)	333,124	149,173	183,951	609,908	251,891	358,017
Biogas upgrading and pollution controls	779,883	175,959	603,924	2,192,344	208,008	1,984,336
Other sales and services	261,962	155,489	106,473	483,550	528,008	(44,458)
Revenue	3,007,647	3,939,098	(931,451)	5,995,182	7,425,495	(1,430,313)

During the three-month period ended June 30, 2025, revenues decreased by \$0.9 million, mainly as a result of:

- DROSRITE™ related sales decreased by \$0.2 million due to the decrease in spare parts orders from existing clients and the decrease in storage revenue and other ancillary revenue related to the DROSRITE units,

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

- Torch-related products and services decreased by \$1.6 million, primarily due to the completion and delivery of the Company's 1MW torch systems. Additionally, revenue was impacted by the transition of key 4.5MW projects from the fabrication phase to delivery and installation, as well as the early stages of other major projects that have recently commenced. These declines were partially offset by recurring monthly revenue from onsite support services, and,
- Biogas upgrading and pollution controls increased by \$0.6 million due to continued advancement of the Company's gas desulfurization projects.

During the six-month period ended June 30, 2025, revenues varied by \$1.4 million, mainly as a result of:

- PUREVAP™ related sales decreased by \$0.2 million due to the completion of the project in a prior period and due to the current project phase, whereby lower revenue was expected,
- DROSRITE™ related sales decreased by \$0.7 million due to the decrease in spare parts orders from existing clients and the decrease in storage revenue and other ancillary revenue related to the DROSRITE units,
- Development and support related to systems supplied to the U.S Navy decreased by \$0.9 million due to the current stage of the project, whereby, in the comparable period, and beginning of 2024, significant advancement was made related to inspection, packaging and shipment of the equipment to our customer in order to move forward with installation and commissioning, in addition to the increase in awarded contracts for spare parts and engineering services from clients that are third-party suppliers of the US Navy,
- Torch-related products and services decreased by \$1.9 million as a result of reduced project advancements compared to the first half of 2024, which included significant progress in receipt of major equipment related to the torch system projects,
- SPARC™ related sales increased by \$0.4 million, reflecting the steady progress achieved throughout the period, specifically, the anticipated completion of fabrication, followed by a structured ramp-up for delivery,
- Biogas upgrading and pollution controls related sales increased by \$2.0 million as a result of new project commissioning and growing market demand for emissions control solutions.

As of August 6, 2025, revenue expected to be recognized in the future related to backlog of signed and/or awarded contracts is \$51.1 million, ⁽¹⁾ of which 83% is in US dollars. Revenue will be recognized as the Company satisfies its performance obligations under long-term contracts, which are expected to occur over a maximum period of approximately 3 years.

⁽¹⁾ This excludes the contract with Varennes Carbon Recycling following the March 21, 2025, announcement that the company managing the project filed for protection under the Companies Creditor Arrangement Act.

Cost of Sales and Services and Gross Profit (expressed in dollars)

	Three months ended June 30		Six months ended June 30	
	2025	2024	2025	2024
Revenues	3,007,647	3,939,098	5,995,182	7,425,495
Cost of Sales and Services	1,337,381	2,814,455	3,526,433	5,544,507
Gross Profit	1,670,266	1,124,643	2,468,749	1,880,988
Gross Margin %	56%	29%	41%	25%

Cost of sales and services totaled \$1.3 million in Q2 2025, representing a decrease of \$1.5 million compared to \$2.8 million for the same period in 2024. The decrease was primarily attributable to a \$1.0 million reduction in direct material costs, driven by improved procurement timing and project scheduling that optimized material receipts across fabrication, delivery, and installation phases. Subcontracting expenses declined by \$0.4 million, reflecting a reduced need for third-party support during the quarter. Employee compensation costs remained relatively stable, with minor fluctuations in line with project activity levels. Manufacturing overhead and other related costs also decreased modestly, reflecting operational efficiencies and ongoing cost control efforts. Investment tax credits remained consistent period over period. The overall decrease in cost of sales and services during the quarter reflects both project timing and an improved cost structure, supporting the increase in gross margin for the period.

Gross profit for Q2 2025 was \$1.7 million, representing 56% of revenue, compared to \$1.1 million, or 29% of revenue, in Q2 2024. The significant improvement in gross margin percentage was primarily driven by a favorable sales mix, with a higher proportion of revenue derived from higher-margin service offerings. As well, one project generated revenue, and minimal costs were incurred for scoping, conceptualisation and associated engineering work. In addition, enhanced cost efficiencies contributed to the margin expansion, including reductions in direct material costs and the benefits of operational improvements that increased productivity and optimized resource utilization.

During the six-months ended June 30, 2025, cost of sales and services totaled \$3.5 million, representing a decrease of \$2.0 million compared to \$5.5 million for the same period in 2024. This decrease was primarily driven by a \$1.8 million reduction in direct material

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

costs, reflecting the timing of material procurement for ongoing projects. Employee compensation decreased by \$0.2 million due to lower headcount and reduced variable compensation, consistent with the level of project activity during the period. Subcontracting expenses increased slightly by \$0.1 million, largely due to reliance on third-party specialists for specific project phases. Other manufacturing overhead costs saw a modest decline, reflecting cost control efforts and operational efficiencies. Investment tax credits remained consistent with the prior year. Overall, the year-over-year reduction in cost of sales and services is attributable to project timing, projects with lower direct costs and ongoing efforts to improve cost efficiency and resource utilization.

The amortization of intangible assets for Q2, 2025 was \$0.01 million compared to \$0.02 million for Q2, 2024, and during the six-month period ended June 30, 2025, was \$0.03 million compared to \$0.1 million for the same period in the prior year. This expense variation relates mainly to the intangible assets in connection with the Pyro Green-Gas acquisition, which have been fully amortized by January 2024. These expenses were non-cash items, and the remaining intangible assets are composed of patents, and deferred development costs that will be amortized over the expected useful lives.

As a result of the type of contracts being executed, the nature of the project activity, as well as the composition of the cost of sales and services, the mix between labour, materials and subcontracts may be significantly different. In addition, due to the nature of these long-term contracts, the Company has not necessarily passed on to the customer, the increased cost of sales which was attributable to inflation, if any. The costs of sales and services are in line with management's expectations and with the nature of the revenue.

Selling, General and Administrative Expenses (expressed in dollars)

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Employee compensation	2,429,395	2,654,821	(225,426)	4,363,877	4,812,851	(448,974)
Share-based compensation expenses	140,120	295,395	(155,275)	152,787	774,993	(622,206)
Professional fees	432,019	684,463	(252,444)	889,113	1,272,646	(383,533)
Office and general	459,089	364,872	94,217	445,556	603,184	(157,628)
Travel	75,779	76,477	(698)	116,132	120,513	(4,381)
Depreciation of property and equipment	68,406	106,099	(37,693)	248,729	212,040	36,689
Depreciation of right-of-use assets	182,553	211,416	(28,863)	365,107	392,609	(27,502)
Investment tax credits	—	21,110	(21,110)	—	21,110	(21,110)
Government grants	(32,823)	109,856	(142,679)	(33,679)	74,956	(108,635)
Insurance and other expenses	397,789	314,714	83,075	839,953	962,554	(122,601)
Foreign exchange loss (gain)	168,302	(96,219)	264,521	113,477	(376,884)	490,361
Expected credit loss & bad debt	(728,657)	(4,506,747)	3,778,090	(172,657)	(4,095,837)	3,923,180
Total selling, general and administrative	3,591,972	236,257	3,355,715	7,328,395	4,774,735	2,553,660

Included within Selling, General and Administrative expenses ("SG&A") are costs associated with corporate administration, business development, project proposals, operations administration, investor relations and employee training.

SG&A expenses totaled \$3.6 million in Q2 2025, compared to \$0.2 million in the same period in 2024, representing an increase of \$3.4 million. The year-over-year change was primarily attributable to a \$3.8 million decrease in the recovery of the expected credit loss and bad debt recorded in the prior year, which had significantly reduced SG&A expenses in Q2 2024. Excluding this item, SG&A expenses declined by a net of \$0.4 million and spread across numerous categories, even though a foreign exchange loss was recognized in the current period. Employee compensation decreased by \$0.2 million, driven by lower headcount and organizational cost reductions. Share-based compensation declined by \$0.2 million due to fewer grants issued and lower valuation of new awards. Professional fees were down \$0.3 million as a result of reduced reliance on external advisors and consultants. These decreases were partially offset by higher office and general expenses, which increased by \$0.09 million due to inflationary pressures and timing of administrative costs. Foreign exchange also contributed an unfavorable variance of \$0.3 million, reflecting a loss in the current quarter compared to a gain in the prior year. Government grant income declined by \$0.1 million as no grants were recognized in the current period, and both depreciation of property and right-of-use assets were lower compared to the same period last year.

During the six-month period ended June 30, 2025, SG&A expenses totaled \$7.3 million, an increase of \$2.6 million from \$4.8 million in the 2024 comparable period. The increase was largely due to a \$3.9 million reduction in the expected credit loss recovery recognized in the prior year, which had favorably impacted 2024 results. Excluding this item, overall SG&A expenses were lower in 2025 by \$1.4 million, reflecting cost containment initiatives. Employee compensation decreased by \$0.4 million, and share-based compensation declined by \$0.6 million, both reflecting workforce optimization and a reduction in new equity-based awards. Professional fees were \$0.4 million lower due to reduced external legal and advisory support. Travel costs remained relatively flat, while depreciation of property and equipment

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

increased by \$0.04 million due to timing of asset additions. Government grant income was lower by \$0.1 million due to the absence of program funding in 2025. Foreign exchange losses of \$0.1 million were recorded in 2025 compared to a \$0.4 million gain in the prior year, resulting from the average foreign exchange rate between the Canadian and US dollar. Overall, the increase in SG&A expenses for the six-month period was almost entirely attributable to the non-recurrence of prior year credit loss recoveries and unrealized foreign exchange.

Share-based payments expenses as explained above, are non-cash expenses and are directly impacted by the vesting structure of the stock option plan whereby options vest between 10% and up to 100% on the grant date and may require an immediate recognition of that cost.

Research and Development ("R&D") Costs, net (expressed in dollars)

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Employee compensation	162,219	187,287	(25,068)	346,204	332,309	13,895
Investment tax credits	(12,718)	73	(12,791)	(12,718)	(9,664)	(3,054)
Subcontracting	3,373	—	3,373	3,373	—	3,373
Materials and equipment	317,526	69,500	248,026	344,558	164,641	179,917
Other expenses	(45,614)	5,660	(51,274)	52,740	8,322	44,418
Total net R&D expenses, net	424,786	262,520	162,266	734,157	495,608	238,549

During the three-months ended June 30, 2025, the Company incurred \$0.4 million of R&D costs on internal projects, an increase of \$0.2 million when compared to Q2 2024. The increase was primarily driven by higher materials and equipment costs, which rose by \$0.2 million due to increased prototype development and testing activities during the period.

During the six-months ended June 30, 2025, the Company incurred \$0.7 million of R&D costs on internal projects, an increase of \$0.2 million when compared to the same period in the prior year. The increase was mainly attributable to a \$0.2 million rise in materials and equipment expenses, to support ongoing development activities.

In addition to internally funded R&D projects, the Company also incurred R&D expenditures during the execution of client funded projects. These expenses are eligible for Scientific Research and Experimental Development ("SR&ED") tax credits. SR&ED tax credits on client funded projects are applied against cost of sales and services (see "Cost of Sales" above).

Finance Expenses (income), net (expressed in dollars)

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Financial expenses						
Interest on lease liabilities	61,540	72,021	(10,481)	124,803	128,881	(4,078)
Interest on convertible debentures	51,550	52,857	(1,307)	99,312	127,765	(28,453)
Interest on convertible loan	14,532	10,625	3,907	5,313	18,958	(13,645)
Interest on secured loan	16,349	—	16,349	16,349	—	16,349
Interest accretion of long-term loan	7,402	(11,182)	18,584	15,175	(14,439)	29,614
Interest accretion of convertible debentures	36,662	98,575	(61,913)	90,191	136,611	(46,420)
Interest accretion of convertible loan	—	52,792	(52,792)	30,908	91,952	(61,044)
Interest accretion of secured loan	36,331	—	36,331	36,331	—	36,331
Penalties and other interest	50,912	52,286	(1,374)	145,506	77,768	67,738
	275,278	327,974	(52,696)	563,888	567,496	(3,608)
Financial income						
Interest accretion on and revaluation of balance due on business combination	(1,035,892)	36,624	(1,072,516)	(1,016,151)	14,791	(1,030,942)
Interest accretion of royalties receivable	(23,051)	(23,052)	1	(45,192)	(45,437)	245
Financial expenses (income), net	(783,665)	341,546	(1,125,211)	(497,455)	536,850	(1,034,305)

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Net financial income for Q2 2025 totaled \$0.8 million as compared to net financial expenses of \$0.3 million in the same period of 2024, representing a favorable variance of \$1.1 million. This improvement was primarily driven by a \$1.0 million non-cash gain related to the revaluation of the balance due on business combination. In contrast, a \$0.04 million expense was recognized in the prior year for the same item.

Interest accretion expenses declined across several categories, including a \$0.06 million reduction in accretion on convertible debentures which is approaching maturity and the absence of \$0.05 million in accretion on a convertible loan which was redeemed in 2025. Interest on lease liabilities also declined by \$0.01 million. These reductions were partially offset by new financing costs in the current period, including \$0.02 million of interest and \$0.04 million of accretion related to a newly issued secured loan. Overall, the Company's financial performance in the quarter benefited from favorable fair value adjustments and lower interest and accretion expenses across several instruments.

During the six-month period ended June 30, 2025, the net financial income of \$0.5 million, compared to net financial expenses of \$0.5 million for the same period in 2024, reflects a favorable variance of \$1.0 million. Similar to the quarterly trend, this improvement was largely attributable to a \$1.0 million non-cash gain related to the revaluation of contingent consideration on a past business combination, compared to a \$0.01 million expense in the prior year.

Interest accretion of convertible instruments declined materially, with accretion on convertible debentures decreasing by \$0.05 million and on convertible loans by \$0.06 million. Lease liability interest declined slightly as the current leases approach maturity. The current year included \$0.02 million of interest and \$0.04 million of accretion on a new loan, which was not present in the prior year. Additionally, penalties and other interest increased by \$0.07 million.

The Company also recorded a \$0.02 million accretion gain on royalties receivable in both years, with no material variance. On a year-to-date basis, the increase in financial income reflects a shift from net interest and accretion expenses in the prior year to a gain position in 2025, primarily due to favorable non-cash revaluation adjustments and reduced financing costs.

Strategic Investments (expressed in dollars)

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Changes to fair value of strategic investments	<u>1,352,685</u>	<u>44,551</u>	<u>1,308,134</u>	<u>2,081,153</u>	<u>232,869</u>	<u>1,848,284</u>

During the three-months ended June 30, 2025, the adjustment to fair market value of strategic investments for Q2, 2025 resulted in a loss of \$1.4 million compared to a loss in the amount of \$0.04 million in Q2, 2024, a variation of \$1.3 million.

During the six-months ended June 30, 2025, the adjustment to fair market value of strategic investments resulted in a loss of \$2.1 million compared to a loss in the amount of \$0.2 million for the same period in the prior year, a variation of \$1.8 million. The increase in loss is attributable to the variation of the market value of the common shares owned by the Company of HPQ Silicon Inc. and the fair value of the warrants. The decrease in stock price was greater in Q2 2025 than in the same period last year, and a larger number of units were held in 2025.

Other Income

During the three-months ended June 30, 2024, Other Income includes a gain on settlement of legal proceedings with a third party which was also a customer of the Company's subsidiary, Pyro Green-Gas. As a result, the Company received a settlement of \$1.5 million and recognized a gain of \$1,180,335 and the remainder as a reduction of accounts receivable.

Comprehensive Income (loss) (expressed in dollars)

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Comprehensive income (loss)	<u>(3,110,464)</u>	<u>1,413,849</u>	<u>(4,524,313)</u>	<u>(7,477,941)</u>	<u>(2,992,036)</u>	<u>(4,485,905)</u>

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

The comprehensive loss for the three months ended June 30, 2025, totaled \$3.1 million, compared to an income of \$1.4 million for the same period in 2024, representing a decrease of \$4.5 million. This decline was primarily driven by a combination of lower revenue recognition during the quarter and a comparative quarter whereby SG&A expense were favourable impacted by the reversal of the expected credit loss expenses. These elements collectively impacted the Company's profitability and resulted in the reported comprehensive loss.

The comprehensive loss for the six months ended June 30, 2025, totaled \$7.5 million, compared to a loss of \$3.0 million in the same period in 2024, reflecting an increased loss of \$4.5 million year over year. The larger loss over the six-month period also reflects reduced revenue recognition and the fact that the comparative period was favourably impacted by the reversal of the expected credit loss expense. These factors, combined with macroeconomic challenges affecting project execution and resource allocation, influenced the overall financial performance during the period.

Reconciliation of Non-IFRS measures (EBITDA, and Modified EBITDA) (expressed in dollars)

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Comprehensive loss	(3,110,464)	1,413,849	(4,524,313)	(7,477,941)	(2,992,036)	(4,485,905)
Depreciation of property and equipment	68,406	106,099	(37,693)	248,729	212,040	36,689
Depreciation of right-of-use assets	182,553	211,416	(28,863)	365,107	392,609	(27,502)
Amortization of intangible assets	14,087	16,322	(2,235)	25,194	103,312	(78,118)
Financial expenses (income), net	(783,665)	341,546	(1,125,211)	(497,455)	536,850	(1,034,305)
EBITDA⁽¹⁾	(3,629,083)	2,089,232	(5,718,315)	(7,336,366)	(1,747,225)	(5,589,141)
Other non-cash items:						
Share-based compensation expenses	140,120	295,395	(155,275)	152,787	774,993	(622,206)
Change in fair value of investments	1,352,685	44,551	1,308,134	2,081,153	232,869	1,848,284
Modified EBITDA⁽¹⁾	(2,136,278)	2,429,178	(4,565,456)	(5,102,426)	(739,363)	(4,363,063)

⁽¹⁾ See "Non-IFRS Measures"

The EBITDA in Q2, 2025 was a loss of \$3.6 million compared to an EBITDA gain of \$2.1 million for Q2, 2024, representing a variation of \$5.7 million year-over-year. This decline was primarily driven by a \$4.5 million swing in comprehensive loss, largely attributable to the 2024 reversal of the expected credit loss, the change in fair value of strategic investment, as well as a shift in operating and financial results.

Depreciation and amortization expenses declined year-over-year, with depreciation of property and equipment and right-of-use assets down by \$0.04 million and \$0.3 million, respectively. Amortization of intangible assets decreased slightly due to the full amortization of certain assets in 2024. Despite these reductions, financial income improved significantly by \$1.1 million, primarily due to the revaluation gain on contingent consideration.

The Modified EBITDA, which adjusts for non-cash items such as share-based compensation and changes in the fair value of strategic investment, was a loss of \$2.1 million in Q2 2025, compared to Modified EBITDA gain of \$2.4 million in Q2 2024. The \$4.6 million decline was primarily due to the absence of non-recurring positive adjustments recognized in the prior year.

The EBITDA during the six-month period ended June 30, 2025, was a loss \$7.3 million compared to a loss of \$1.7 million in the same period in 2024, representing a negative variance of \$5.6 million. This change reflects the year-to-date impact of increased SG&A expenses caused by the absence of the 2024 credit loss reversal, the fair value adjustment of strategic investments, and higher comprehensive loss driven by weaker operating results.

Depreciation of property and equipment increased by \$0.04 million, while depreciation of right-of-use assets declined slightly. Amortization of intangible assets was significantly lower, down \$0.08 million, reflecting the completion of amortization on certain prior-period intangibles. Financial income improved by \$1.0 million year-over-year, driven by the fair value remeasurement gain on contingent consideration.

The Modified EBITDA during the six-month period ended June 30, 2025, was a loss of \$5.1 million, compared to a loss of \$0.7 million in 2024, representing a variance of \$4.4 million. The year-over-year change reflects higher operating expenses, once again, due to the absence of the prior year credit loss reversal.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

The Modified EBITDA, which considers non-cash items, for both the three and six-month periods ended June 30, 2025, do not reflect an adjustment for the gain on legal settlement presented in Other Income and is an item that the Company does not expect to occur regularly.

The EBITDA and Modified EBITDA for both the three and six-months periods ended June 30, 2024 included the aforementioned gain on legal settlement of \$1.2 million which favourably impacted the results in the 2024 period and contribute to the year over year explanation of the variation.

SUMMARY OF QUARTERLY RESULTS (expressed in dollars)

	2025		2024				2023	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenues	3,007,647	2,987,535	4,224,138	4,002,689	3,939,098	3,486,397	3,028,255	3,685,725
Gross profit	1,670,266	2,189,052	1,745,562	1,672,637	1,124,643	756,345	1,745,562	1,099,392
Gross margin %	56%	27%	41%	42%	29%	22%	41%	30%
Comprehensive income (loss)	(3,110,464)	(4,367,477)	115,564	(3,907,068)	1,413,849	(4,405,885)	(9,768,239)	(6,256,292)
Earnings (loss) per share								
Basic	(0.02)	(0.02)	0.00	(0.02)	0.01	(0.02)	(0.06)	(0.03)
Diluted	(0.02)	(0.02)	0.00	(0.02)	0.01	(0.02)	(0.06)	(0.03)

The majority of PyroGenesis' revenue is recognised over the time of the contract and is dependent on the timing of project initiation and execution, including project engineering, manufacturing, and testing.

SUMMARY OF CASH FLOWS (expressed in dollars)

	Three months ended June 30		Six months ended June 30	
	2025	2024	2025	2024
Cash provided by (used in) operating activities	(2,350,726)	2,201,687	(4,378,735)	(561,585)
Cash provided by (used in) investing activities	1,688,034	590,381	1,571,625	2,179,340
Cash provided by (used in) financing activities	1,659,568	458,389	1,053,631	(17,405)
Effect of exchange rate changes on cash denominated in foreign currency	(25,595)	19,854	(26,529)	37,273
Increase (decrease) in cash	971,281	3,270,311	(1,780,008)	1,637,623
Cash - end of period	1,195,453	3,440,239	1,195,453	3,440,239

During the three-months ended June 30, 2025, cash flow used by operating activities was \$2.3 million compared to cash flow provided of \$2.2 million for the same period in the prior year. The use of cash during Q2, 2025, consists of the net loss of \$2.9 million (Q2, 2024 – net income of \$1.4 million) plus adjustments for operating activities of \$0.9 million (Q2, 2024 - \$1.0 million), including a net change in non-cash operating working capital items of \$0.4 million (Q2, 2024 – net change of \$0.2 million). The variation is due to collections of accounts receivables offset by higher payments of accounts payables in the current quarter compared to 2024.

Investing activities resulted in a net source of funds of \$1.7 million in Q2, 2025, compared to \$0.6 million in Q2 2024. In Q2 2025, the proceeds were mainly from the \$1.7 million from the disposal of strategic investments, whereas in 2024, it resulted from the net effect of purchases and disposals of the strategic investments. In both periods, similar amounts were disbursed for property and equipment and additions to intangible assets.

Financing activities in Q2, 2025, resulted in a source of funds of \$1.7 million, compared with a source of funds of \$0.5 million for the same period in 2024. The increase was primarily driven by the receipt of net proceeds from a new secured loan totaling \$2.1 million during the quarter. In the comparative period, financing inflows included \$1.0 million in proceeds from a loan provided by the controlling shareholder.

The net cash position of the Company increased by \$1.0 million for Q2, 2025, compared to a increase of \$3.2 million for Q2, 2024.

During the six-months ended June 30, 2025, cash flow used by operating activities was \$4.4 million compared to cash flow used of \$0.6 million for the same period in the prior year. The cash provided consists of the net loss of \$7.1 million (2024 – net loss of \$3.0 million) plus adjustments for operating activities of \$2.2 million (six-month period ended June 30, 2024 - \$2.2 million), including a net change in non-cash operating working capital items of \$0.6 million (2024 – net change of \$0.2 million). The variation is due to collections of accounts receivables.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Investing activities resulted in a net source of funds of \$1.6 million compared to a net source of funds of \$2.2 million and caused mainly from the \$1.7 million disposal of strategic investments in Q2 2025, versus a net disposal of \$2.3 million in Q2 2024.

Financing activities resulted in a source of funds of \$1.1 million during the six-month period ended June 30, 2025, compared with a use of funds of \$0.02 million for the same period in 2024. The variation is due to the completion of the secured loan for net cash proceeds of \$2.1 million for the six-month period ended June 30, 2025, in addition to \$0.25 million received upon exercise of warrants.

During the six-month period ended June 30, 2025, the net cash position of the Company decreased by \$1.8 million compared to an increase of \$1.6 million for the same period in the prior year.

USE OF PROCEEDS FROM FINANCINGS

<i>Description of intended use of funds from financings in the past 12 months</i>	<i>Proposed use of proceeds from financings completed in the past 12 months</i>	<i>Use of funds to Date</i>
March 8, 2023: Private Placement for total gross proceeds of \$5,000,000	Proceeds were intended and used for working capital and general corporate purposes	\$ 5,000,000
July 21, 2023: Private Placement of Convertible Debenture Units for total gross proceeds of \$3,030,000	Proceeds were intended and used for working capital and general corporate purposes	\$ 3,030,000
December 20, 2023: Private Placement of Convertible Debenture loan for total gross proceeds of \$1,250,000	Proceeds were intended and used for working capital and general corporate purposes	\$ 1,250,000
July 22, 2024: Private Placement for total gross proceeds of \$2,804,600	Proceeds were intended and used for working capital and general corporate purposes	\$ 2,804,600
May 12, 2025: Private Placement for total gross proceeds of \$2,385,000	Proceeds were intended and used for working capital and general corporate purposes	\$ 2,385,000

CAPITAL STOCK INFORMATION

The authorized share capital of the Company consists of an unlimited number of common shares. As at August 6, 2025, PyroGenesis had 187,531,289 Common Shares, 6,788,673 share purchase warrants, 10,570,000 outstanding stock options issued, and 9,665,000 exercisable options issued. In addition, the Company issued a convertible loan in December 2023, convertible debentures in July 2023 and closed a private placement in July 2024 (refer to notes 20 and 21 of the 2024 consolidated financial statements) and a private placement in May 2025 (refer to note 14 of the condensed consolidated interim financial statements for the period ended June 30, 2025), whereby warrants were issued in these offerings. The exercise of stock options and/or other exchangeable securities, as well as any new equity financing, represents dilution factors for present and future shareholders.

FINANCIAL RISKS

Foreign Currency Risk

The Company enters into transactions denominated in US dollars and Euros, for which the related revenues, expenses, accounts receivable and accounts payable and accrued liabilities balances are subject to exchange rate fluctuations.

As at June 30, 2025, and December 31, 2024, the Company's exposure to foreign exchange risk for amounts denominated in US dollars and Euros is as follows, as expressed in Canadian dollars:

	Three months ended June 30		Twelve months ended December 31	
	2025		2024	
	US \$	Euro \$	US \$	Euro \$
Cash	405,298	—	2,228,077	818,337
Accounts receivable	4,121,844	389,717	3,401,015	1,730,014
Accounts payable and accrued liabilities	(2,187,729)	(306,406)	(2,235,050)	(1,318,652)
Total	2,339,413	83,311	3,394,042	1,229,699

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

Sensitivity analysis

At June 30, 2025, if the US dollar and Euro had changes by 10% against the Canadian dollar with all other variables held constant, the impact on pre-tax gain or loss and equity for the three-month period ended June 30, 2025, would have been \$158,794 and \$38,681, respectively (December 31, 2024 - \$339,404 and \$4,562, respectively).

Credit concentration

During the three-month period ended June 30, 2025, three customers accounted for 55%, (Three-month period ended June 30, 2024 – three customers for 72%) of revenues from operations.

During the six-month period ended June 30, 2025, three customers accounted for 51%, (Six-month period ended June 30, 2024 – one customer for 13%) of revenues from operations.

Two customers accounted for 52% and 13%, respectively (December 31, 2024 – two customers for 37% and 36%, respectively) of the total trade accounts receivable before expected credit loss allowance representing the Company's major credit risk exposure. Credit concentration is determined based on customers representing 10% or more of total revenues and/or total accounts receivable.

Credit Risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The maximum credit risk to which the Company is exposed as at June 30, 2025, represents the carrying amount of cash, accounts receivable (except sales tax receivable), costs and profits in excess of billings on uncompleted contracts, deposits and royalties receivable.

Cash is held with major reputable financial institutions.

Management has established a credit policy under which each new customer is analysed individually for creditworthiness before the Company's payment and delivery terms and conditions are offered. The Company's review could include reviewing external ratings, if they are available, financial statements, credit agency information, industry information and in some cases bank references. The Company's exposure to credit risk is mainly influenced by the individual characteristics of each customer. In monitoring customer credit risk, customers are identified according to their characteristics such as their geographic location, industry, trading history with the Company and existence of previous financial difficulties.

The Company does not generally require collateral or other security from customers on accounts receivable, however, the contract terms may include the possibility of recourse in the event of late payment. The Company believes that there is no unusual exposure associated with the collection of these receivables.

The credit risk associated with costs and profits in excess of billings on uncompleted contracts is similar to that of accounts receivable, as these amounts are accumulated and converted to accounts receivable as invoicing milestones are reached.

The royalties receivable are due from a company in which the Company has a strategic investment. The Company does not have collateral or other security associated with the collection of this receivable. The carrying amount of the royalties receivable have been discounted to reflect the time value of money and credit risk of the counterparty.

The deposits are payments made to suppliers and entities from which the Company leases property. The Company does not have collateral or other security associated with the collection of these deposits. As at June 30, 2025, and 2024, no loss allowance has been recognized in connection with these deposits and the maximum exposure is the carrying amount of these deposits.

During the six-month period ended June 30, 2025, and year-end December 31, 2024, provisions for expected credit losses were recorded, however, the accounts provisioned by the loss are still subject to enforcement activity in order to collect the balances due.

Liquidity and Capital Resources

As at June 30, 2025, the Company had cash of \$1.2 million, included in the net working capital deficiency of \$14.0 million. Certain working capital items such as billings in excess of costs and profits on uncompleted contracts do not represent a direct outflow of cash. The Company expects that with its cash, liquidity position, the proceeds available from the strategic investment and its access to capital markets it will be able to finance its operations for the foreseeable future.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

The Company's term loan balance at June 30, 2025, was \$0.3 million and decreased by \$0.01 million since December 31, 2024, due to the net accretion and monthly payments. During the six-month period, the Company fully reimbursed and extinguished the credit facility. The average interest expense on the other term loans and convertible debenture is approximately 10%. The Company does not expect changes to the structure of term loans and convertible debentures in the next twelve-month period.

The following table summarizes the contractual amounts payable and maturities of financial liabilities and other liabilities at June 30, 2025:

	Carrying Value	Total contractual amount	Less than one year	Maturities		Over 5 Years
				2-3 years	4-5 years	
	\$	\$	\$	\$	\$	\$
Accounts payable and accrued liabilities ⁽¹⁾	10,901,741	10,901,741	10,901,741	—	—	—
Term loans	278,948	337,500	90,000	247,500	—	—
Balance due on business combination	771,120	771,120	771,120	—	—	—
Lease liabilities	5,730,305	7,006,373	2,667,893	854,503	863,529	2,620,448
Convertible debentures	1,203,456	1,383,083	1,282,083	101,000	—	—
Secured loan	2,170,946	3,347,975	162,077	3,185,898	—	—
	21,056,516	23,747,792	15,874,914	4,388,901	863,529	2,620,448

(1) Accounts payable and accrued liabilities exclude amounts which are not financial liabilities.

The Company's Canadian subsidiary benefited from a line of credit of \$0.5 million (\$0.09 million was drawn on this facility as at December 31, 2024). In January 2025, the entirety of the facility was reimbursed, and the available facility was terminated.

A commercial bank issued standby letters of credit on behalf of the Company to customers in the amounts of \$0.2 million and \$0.3 million on advance guarantees secured by Export Development Canada. The letters of credit expire in March 2026 and November 2026, respectively.

GOING CONCERN

These condensed consolidated interim financial statements have been prepared on a going concern basis, which presumes that the Company will be able to continue its operations for the foreseeable and will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

The Company is subject to certain risks and uncertainty associated with the achievement of profitable operations such as the successful signing and delivery of contracts and access to adequate financing.

The Company has incurred, in the last years, operating losses and negative cash flows from operations, and as a result, the Company has an accumulated deficit of \$135.7 million as at June 30, 2025 (\$128.6 million as at December 31, 2024). Furthermore, there have been unexpected delays in the collection of certain accounts receivable from contracts closed in a prior year. This has resulted in a shortfall in cash flows from operating activities that would be used in funding the Company's operations.

As at June 30, 2025, the Company has working capital deficiency of \$14.0 million (working capital deficiency of \$9.2 million as at December 31, 2024) including cash of \$1.2 million (\$3.0 million as at December 31, 2024). The working capital is net of an allowance for credit losses amounting to \$2.6 million (\$2.9 million as at December 31, 2024) as further described in Notes 6 and 7. The Company's business plan is dependent upon the successful completion of contracts and also the receipt of payments from certain contracts closed in a prior year and expects these payments to be made during fiscal 2025, as well as the achievement of profitable operations through the signing, completion and delivery of additional contracts or a reduction in certain operating expenses. In the absence of this, the Company is dependent upon raising additional funds to finance operations within and beyond the next twelve months. The Company has been successful in securing financing in the past and has relied upon external financing to fund its operations, primarily through the issuance of equity, debt and convertible debentures. The Company completed a private placement in March 2023 for net proceeds of \$5.0 million. In addition, in July 2023, the Company also completed a brokered private placement of convertible debenture units for gross proceeds of \$3.0 million and in December 2023, the Company also completed a non-brokered private placement of a convertible loan for gross proceeds of \$1.3 million. In July 2024, the Company secured gross proceeds of \$2.8 million from the completion of another private placement. In May 2025, the Company completed a non-brokered secured loan for gross proceeds of \$2.4 million. While the Company has been successful in securing financing, raising additional funds is dependent on a number of factors, some of which are outside the Company's control, and therefore there is no assurance that it will be able to do so in the future or that these sources will be available to

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

the Company or that they will be available on terms which are acceptable to the Company. These conditions indicate the existence of a material uncertainty that may cast significant doubt about the Company's ability to continue operating as a going concern.

The condensed consolidated interim financial statements have been prepared on a going concern basis and do not include any adjustments to the amounts and to classifications of the assets and liabilities that might be necessary should the Company be unable to achieve its plan and continue in business. If the going concern assumption were not appropriate, adjustments, which could be material, would be necessary to the carrying value of assets and liabilities, the reported expenses, and the classification of items on the condensed consolidated interim statement of financial position.

RELATED PARTY TRANSACTIONS

During the three and six-month period ended June 30, 2025, the Company concluded the following transactions with related parties:

A balance due to the controlling shareholder and CEO of the Company amounted to \$0.3 million at June 30, 2025, (\$0.6 million at December 31, 2024) and is included in accounts payable and accrued liabilities.

In May 2024, the President and CEO provided a \$1.0 million loan to the Company, bearing interest at 10%, with a maximum term of twelve months. The borrower agreed to waive the interest expense if the loan is repaid within sixty days from the loan date. The loan was repaid in July 2024.

In July 2024, the President and CEO, along with close family members, participated in a non-brokered private placement for gross proceeds of \$1.2 million and \$0.3 million, respectively. Two directors of the Company also participated for a total amount of \$0.05 million.

In May 2025, the President and CEO, participated in a non-brokered secured loan for gross proceeds of \$2.4 million.

The Key Management Personnel of the Company, in accordance with IAS 24, are the members of the Board of Directors and certain officers. Total compensation to key management consisted of the following:

	Three months ended June 30		Variation	Six months ended June 30		Variation
	2025	2024	2025 vs 2024	2025	2024	2025 vs 2024
Salaries - key management	758,211	307,051	451,160	1,201,902	660,766	541,136
Pension contributions	13,825	3,749	10,076	21,967	10,324	11,643
Fees - Board of Directors	75,900	40,100	35,800	116,500	87,100	29,400
Share-based compensation - officers	98,166	114,515	(16,349)	219,631	302,834	(83,203)
Share-based compensation - Board of Directors	32,406	149,672	(117,266)	80,408	362,738	(282,330)
Other benefits - key management	176,134	228,568	(52,434)	329,126	232,503	96,623
Total compensation	1,154,642	843,655	310,987	1,969,534	1,656,265	313,269

CORPORATE HIGHLIGHTS

On January 20, 2025, the Company announced the receipt of a US\$1.28 million (CA\$1.85 million) payment representing a portion of an outstanding receivable under PyroGenesis' existing CA\$25+ million Drosrite™ contract with Radian Oil and Gas Services Company.

On January 21, 2025, the Company announced the receipt of a US\$730,000 (CA\$1.04 million) payment for engineering and production milestones reached under PyroGenesis' existing CA\$4.1 million contract with an aeronautics and defense industry client.

On January 23, 2025, the Company announced the grant of European Patent EP 2 686 100 B1, titled "Steam Plasma Arc Hydrolysis of Ozone Depleting Substances". This granted patent covers PyroGenesis' cutting-edge process for the highly efficient destruction of ozone depleting substances, such as used refrigerants from end-of-life cooling apparatus.

On January 27, 2025, the Company announced that its subsidiary, Pyro Green-Gas Inc., had signed a contract totaling US\$1.74 million (approx. CA\$2.5 million) with one of the world's largest integrated environmental services companies. The contract, for the design and delivery of gas flaring components, is part of a large urban waste-to-energy project. An initial payment of CA\$400,000 had been received. On February 18, 2025, the Company announced that Pyro Green Gas had signed another contract with the same client in the amount of US\$511,000 (approx. CA \$725,000).

On January 31, 2025, the Company announced that up to 1,710,350 common share purchase warrants were amended. Of the 1,710,350 warrants, 1,520,350 warrants had an exercise price of \$0.75 and 190,000 warrants had an exercise price of \$1.25. Commencing February

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

17, 2025, the exercise price of the warrants held by holders wishing to participate in this repricing was reduced to \$0.60 per share. These amended warrants expired on March 7, 2025.

On February 3, 2025, the Company announced that its subsidiary, Pyro Green-Gas Inc., had signed a \$1.1 million second contract with the Varennes Carbon Recycling ("VCR") plant, a large biofuel production project currently under construction in Varennes, Quebec. As a result, the overall project contracts with Pyro Green-Gas increase in total to \$3.6 million. On March 21, 2025, the Company announced that Varennes Cellulosic Ethanol LP ("VCE") which is the entity managing the VCR project, filed for protection under the Companies Creditor Arrangement Act ("CCAA") as part of its strategy to address liquidity challenges. This allows VCE to continue operations while seeking financial solutions under court supervision. Pyro Green-Gas has been asked to continue its work on the project and would receive timely payments for contracted goods and services moving forward. Pyro Green-Gas will continue to monitor developments closely and is hopeful that, through the CCAA process, VCE will reach a resolution that ensures the successful continuation of this important initiative.

On February 10, 2025, the Company announced that recent data from a current contract confirms that PyroGenesis plasma torches posted significantly lower operational energy requirements. Savings of up to 45%, when compared to legacy diesel burners, had been obtained in destroying PFAS (often called "forever chemicals"). This new data, combined with other recent results, highlights how a transition from fossil fuels to PyroGenesis plasma torches can generate both significant operating expenses and emission reduction advantages.

On February 24, 2025, the Company announced that it had signed a €1.63 million (CA\$2.4 million) contract with aluminium and renewable energy company Norsk Hydro ASA as part of its stated plan to test plasma technology as one of the ways to replace fossil fuel with renewable alternatives in its aluminum casthouses.

On February 27, 2025, the Company announced that the next milestone for the fumed silica reactor pilot plant had been reached, with its successful week-long operation and the production of the first batch of materials. This initial test was designed to evaluate the system's ability to precisely regulate the feedstock thermal profile, encompassing pre-heating, controlled heating rates, and stabilization at target operational parameters required for fumed silica synthesis.

On March 3, 2025, the Company announced that, given intense public speculation and investor requests, PyroGenesis now identifies Boeing as the global aerospace original equipment manufacturer that had previously been unnamed in company press releases. PyroGenesis further confirms that PyroGenesis' Ti64 "coarse" metal powder with a size fraction in the range of 45µm to 150µm, produced by PyroGenesis' NexGen™ plasma atomization system, had met all technical requirements for Boeing, and PyroGenesis continues to move forward in the approved supplier list process.

On March 11, 2025, the Company announced the signing of a memorandum of understanding with GE Vernova's Power Conversion & Storage business. The MOU initiated discussions toward a multi-year strategic collaboration in the development and testing of PyroGenesis technologies that replace fossil fuel combustion in high temperature processes with all-electric plasma torches. This would specifically target multi-megawatt industrial processes of the type required by aluminum and steel producers, or calcination processes such as in the alumina, cement, and quicklime industries.

On May 5, 2025, the Company announced that it had completed a non-brokered private placement consisting of a loan in the amount of up to \$5,750,000 with P. Peter Pascali. Subsequently, on May 12, 2025, the Company announced that the first tranche was successfully closed, and the Company received \$2,385,000. As per the agreement, the Company issued 5,207,423 common share purchase warrants to the lender.

On May 15, 2025, the Company's client HPQ Silicon Inc. announced, the material produced during the latest phase of system testing of the Fumed Silica Reactor pilot plant had been successfully retrieved from the baghouse. The material, assumed to be fumed silica, had been sent to a 3rd party laboratory for analysis.

On May 21, 2025, the Company's client HPQ Silicon Inc. announced, independent analysis of material produced during the latest phase of system testing of the Fumed Silica Reactor is in fact fumed silica.

On May 28, 2025, the Company's client HPQ Silicon Inc. announced, HPQ Silica Polvere Inc. had received multiple requests for delivery of its fumed silica powder for further analysis by potential clients. These powders will be shipped within 10 days.

On May 29, 2025, the Company announced, it has received official confirmation of approved supplier status with Boeing. PyroGenesis' Ti64 "coarse" metal powder with a particle size that is within the range of 53-150µm (microns) had been qualified for use and added to Boeing's qualified list of metal powders available for use in additive manufacturing.

On June 9, 2025, the Company announced that up to 1,581,250 common share purchase warrants were amended. The warrants, which have an exercise price of \$1.20, will currently expire on July 22, 2025. Commencing on June 25, 2025, the expiration date of the warrants held by holders wishing to participate in this proposal will be extended until November 18, 2025.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

On June 12, 2025, the Company's client HPQ Silicon Inc. announced, HPQ Silica Polvere Inc. had received notice from a leading global supplier of fumed silica that the material samples recently delivered to them have successfully passed the client's test protocols for being confirmed as fumed silica.

On July 2, 2025, the Company announced that it had signed a contract for €379,000 (approximately CA\$600,000) with one of the world's largest integrated environmental services companies, expanding PyroGenesis' relationship with this client to include developing a solution for the plastic waste problem in Europe. The client, whose name is being withheld for competitive, and confidentiality reasons, operates more than 100 waste treatment sites and facilities across Europe.

On July 8, 2025, the Company's client HPQ Silicon Inc. announced, the latest upgrades to the fumed silica reactor project have resulted in increased material quality, purity, and improved product consistency across multiple production cycles. These results were verified by a leading global fumed silica manufacturer, who had previously requested, tested, and verified first stage material samples produced in the FSR pilot plant under the terms of a letter of intent. PyroGenesis has been engaged to develop and build the FSR pilot plant for HPQ Polvere Inc. a subsidiary of HPQ Silicon Inc. PyroGenesis has: (i) a 50% interest in HPQ Polvere Inc., and (ii) an exclusive arrangement to be the sole supplier of equipment relating to any commercialization of this new process.

On July 15, 2025, the Company announced that its subsidiary, Pyro Green-Gas Inc., had completed the previously announced \$9.3 million coke-oven gas valorization (via purification, desulphurization, and heavy hydrocarbon removal) and hydrogen production project for Tata Steel, one of the world's largest diversified steel producers.

On July 28, 2025, the Company announced and further to a press release from the Company's client HPQ Silicon Inc., PyroGenesis confirmed that third-party Scanning Electron Microscopy analysis of Phase 1 Test #5 material from the Fumed Silica Reactor further validated recently announced key technical metrics for fumed silica samples generated by the pilot scale plant.

CRITICAL ACCOUNTING ESTIMATES, NEW AND FUTURE ACCOUNTING POLICIES AND FINANCIAL INSTRUMENTS

For a discussion of significant accounting policies, judgements, estimates assumptions and financial instruments, please refer to notes 4, 5 and 27 of the 2024 consolidated financial statements.

CONTROLS AND PROCEDURES

The Company's shares are listed on the Toronto Stock Exchange ("TSX") since November 2020. Prior to November 2020, the Company's shares traded on the TSX Venture Exchange ("TSXV"), and all requirements of the TSXV were attained by the Company. The Company acknowledged that being listed on the TSX, would require more stringent disclosure controls and began implementing such improvements.

As a result of the graduation to the TSX, the Company became subject to additional requirements under applicable securities laws relating to the establishment and maintenance of disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR"), as defined in NI 52-109. Such requirements also include the assessment and evaluation of both DC&P and ICFR, which was not required while the Company was listed on the TSXV. Consequently, the Company continues to take several actions to improve its DC&P and ICFR, in accordance with the thresholds provided by the regulators. The Company is currently implementing measures designed to improve its ICFR environment and remediate the control deficiencies that led to the material weaknesses identified below.

In accordance with the provisions of National Instrument 52-109 – Issuers' annual and interim filings ("NI 52-109") adopted by Canadian securities regulators, the Company has filed certificates signed by the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") that report on, among other items, i) their responsibility for establishing and maintaining DC&P and ICFR for the Company, ii) the design of DC&P and the design of ICFR, and the effectiveness of DC&P and ICFR.

Disclosure controls and procedures

The Company under the supervision of the CEO and CFO, have designed DC&P (as defined in NI 52-109), in order to provide reasonable assurance that:

- material information relating to the Company is made known to the CEO and CFO by others; and
- information required to be disclosed by the Company in its filings, under applicable securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation.

As of December 31, 2024, an evaluation was carried out under the supervision of the CEO and CFO, of the design and operating effectiveness of the Company's DC&P. Based on this evaluation, the CEO and CFO concluded that due to the material weaknesses in our ICFR as described below in Management's Annual Report on Internal Controls over Financial Reporting, the Company's DC&P were not effective as of December 31, 2024.

Management's Annual Report on Internal Controls over Financial Reporting

The Company under the supervision of the CEO and CFO, are responsible to design ICFR (as defined in NI 52-109) in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS as issued by the IASB.

As of December 31, 2024, an evaluation was carried out, under the supervision of the CEO and the CFO, of the effectiveness of the Company's ICFR. Based on this evaluation, the CEO and the CFO concluded that material weaknesses exist, as described below, and due to these material weaknesses, the Company's ICFR is not effective as of December 31, 2024. The control framework used to design and evaluate effectiveness of the Company's ICFR is established under the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) on Internal Control – Integrated Framework (2013 framework). A material weakness is a deficiency, or combination of deficiencies, in ICFR, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

In connection with the Company's evaluation of ICFR, the following are the control deficiencies that were considered to be material weaknesses in the current quarter and in fiscal 2024 and any remediation that occurred up to June 30, 2025:

Deficiency remediated by the Company in the current quarter:

- **Complex Spreadsheet Controls:** The Company did not implement and maintain effective controls surrounding certain complex spreadsheets, including addressing all identified risks associated with manual data entry, completeness of data entry, and the accuracy of mathematical formulas, impacting complex spreadsheets used in fixed asset continuity schedules, production and revenue forecasting, and the calculation of the fair value of investments.

The Company has significantly improved the safeguarding of spreadsheets and data, through the addition of various controls, password protections, limiting access, and improved segregation of duties with the objective of reducing the possibility of error. Controls have been added to further restrict file permissions, additional independent review and reasonability assessments, version controls and regular file safeguarding. The Company and management are comfortable with the data generated from such spreadsheets and the robust procedures that support it.

Deficiencies no longer considered a material weakness by the Company in 2024:

- **Control activities:** The Company did not fully design and implement effective control activities and has identified deficiencies relating to: (i) selecting and developing control activities that contribute to the mitigation of risks to acceptable levels, and (ii) deploying control activities through policies that establish what is expected and procedures that put policies into action.

The Company affirms that since the beginning of this deficiency and until December 31, 2024, numerous internal controls were added, including compensating controls to mitigate these risks, as well as adding additional levels of review and approval in order to reduce the risk related to control activities thereby improving the quality and reliability of financial information that is prepared and used by management. As a result of these improvements, management no longer considers this to be a material weakness.

- **Control environment:** The Company did not maintain an effective control environment and has identified deficiencies relating to appropriate organizational structure and authority and responsibilities. The Company did not have a sufficient number of trained resources with the appropriate skills and knowledge with assigned responsibilities and accountability for the design and operation of ICFR and for holding individuals accountable for their internal control-related responsibilities.

Prior to December 31, 2024, the Company determined that the appropriate improvements related to the control environment over reporting lines as well as authority, and responsibilities were implemented along with additional internal controls. Oversight and governance of financial reporting and related party transactions was not indicative of a control environment deficiency. The Company has financial reporting resources internally, or at their disposal to ensure they can deal with complex accounting matters, as well as period-end controls to mitigate the risk of misstatement in the financial information. The Company feels it has sufficient resources and segregation of duties and internal controls that this is no longer a material weakness.

- **Journal Entries:** The Company did not effectively design and maintain appropriate segregation of duties and controls over the effective preparation, review and approval, and associated documentation of journal entries, across its ERP platform. The Company did not have adequate review procedures for the recording of manual entries.

The Company has improved their processes to ensure that journal entries are sufficiently reviewed and approved, supporting analysis is also approved and compensating controls exist to ensure the financial information is free of misstatement. Due to the review procedure of journal entries, system access limitations, among other internal controls, the Company no longer considers this to be a material weakness.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

- **User Access Controls:** The Company did not maintain effective user access controls to adequately restrict user access to financial applications and related data in accordance with job responsibilities.

Throughout fiscal 2023 and 2024, the Company has continued to implement controls to limit access to financial and non-financial applications, based on employee profile. The Company implemented IT environment best practices for access controls, including prompt changes and access limitation to appropriate users and systematic periodic reviews of account privileges, in addition to increasing the IT department's capabilities. These controls and additional automated access controls are being integrated into the new ERP system with an expected deployment in the upcoming quarters. The new ERP system will also be subject to such internal controls analysis to ensure it adheres to all access controls. The Company is confident that user access controls do not pose a risk of material weaknesses.

As a consequence, the Company did not have complete effective control activities related to the design, implementation and operation of process-level and management review control activities related to order-to-cash (including revenue trade receivables, and billings in excess of cost/cost in excess of billings), procure-to-pay (including operating expenses, prepaid expenses, accounts payable, and accrued liabilities), hire-to-pay (including compensation expense and accrued liabilities), long-lived assets, significant unusual transactions, related party transactions and other financial reporting processes for the entire year.

Aside from these material weaknesses, management has concluded that the Company's consolidated financial statements as at and for the six-month period ended June 30, 2025, present fairly, in all material respects, the Company's financial position, results of operations, changes in shareholders' equity and cash flows in accordance with IFRS as issued by the IASB. There were no material adjustments to the Company's consolidated financial statements for the six-month period ended June 30, 2025, and there were no changes to previously released financial results. However, because the pre-existing deficiencies and material weaknesses create a reasonable possibility that a material misstatement to our consolidated financial statements would not be prevented or detected on a timely basis, the CEO and CFO concluded that as of June 30, 2025, the Company's design and operation of ICFR and DC&P were not effective.

Management's Ongoing Remediation Measures

During the year ended December 31, 2024, and six-month period ended June 30, 2025, management implemented remediation measures as outlined above and continues to monitor and add controls as necessary and Management has performed an initial risk assessment using a top-down, risk-based approach with respect to the risks of material misstatement of the consolidated financial statements. In addition, compensating controls further support areas where the risks of material misstatement are considered moderate to high, throughout the various accounting cycles. The Company intends to also rely on the use outside resources to strengthen the business process documentation and help with management's self-assessment and testing of internal controls. In 2025, the Company's management, with oversight of the Audit Committee, continues to document, test, and refine internal controls, while adding additional automated controls which be an inherent part of the upgrade to a new ERP system in the short term.

Although the Company can give no assurance that additional material weaknesses in our ICFR will not be identified in the future, management believes the foregoing efforts have strengthened our ICFR and DC&P and effectively remediate the identified material weaknesses.

Changes in internal controls over financial reporting

Other than the material weaknesses described above, and the remediation process described above, there were no changes to the Company's ICFR during the six-month period ended June 30, 2025, that have materially affected, or are reasonably likely to materially affect, the Company's ICFR.

Limitations on Effectiveness of Disclosure Controls and Procedures and Internal Control over Financial Reporting

The Company's management recognizes that any DC&P and ICFR, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives. Because of their inherent limitations, DC&P and ICFR may not prevent or detect all errors or misstatements on a timely basis.

Risk Factors

Please refer to the Company's 2024 annual Management Discussion and Analysis for a summary of risk factors.

RECENT DEVELOPMENTS AND OUTLOOK

The Company believes that as the Company's broad range of solutions advance toward commercialization, and as performance improvements continues in the quarters and years ahead, the effect will be two-fold:

1. higher power plasma torches open doors to more intensive applications and higher heat industries

PyroGenesis Inc.

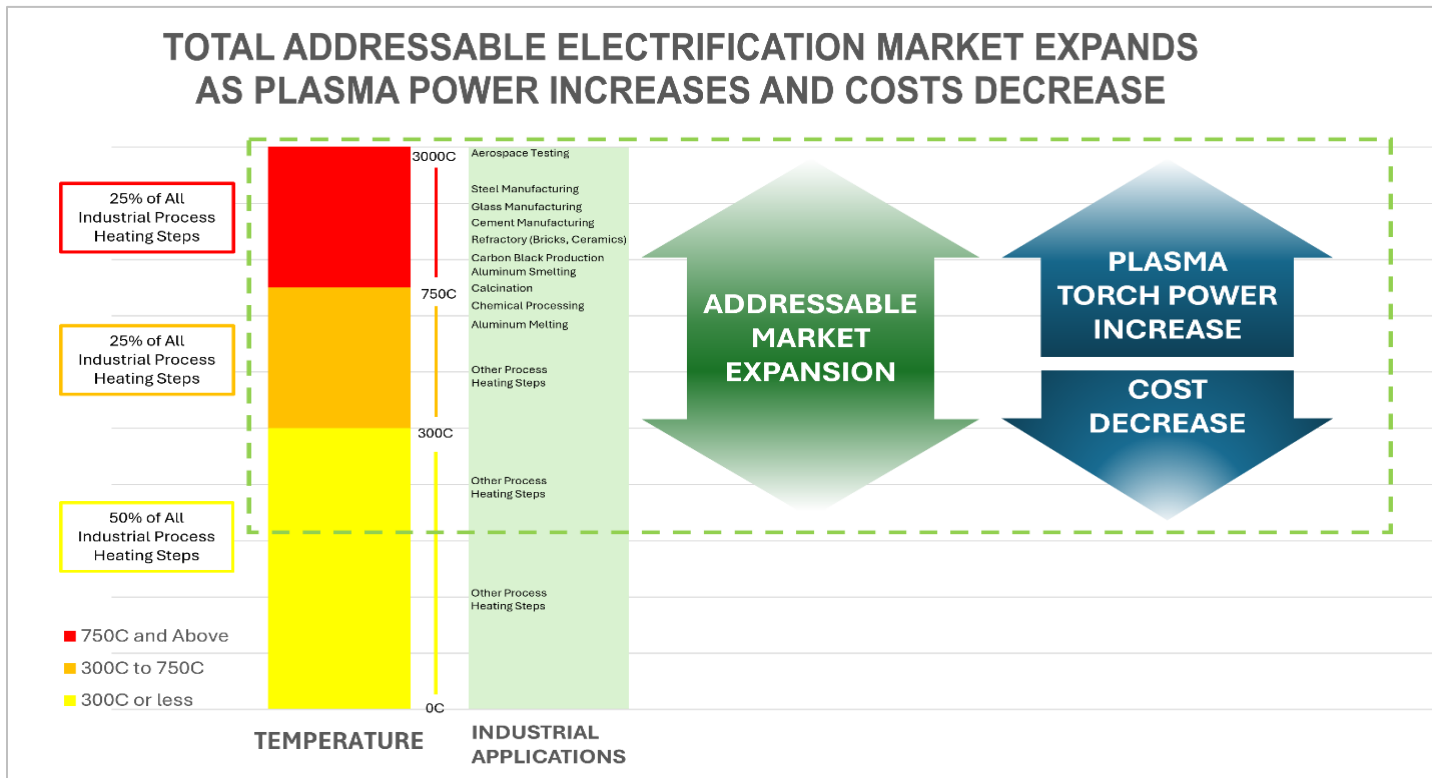
Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

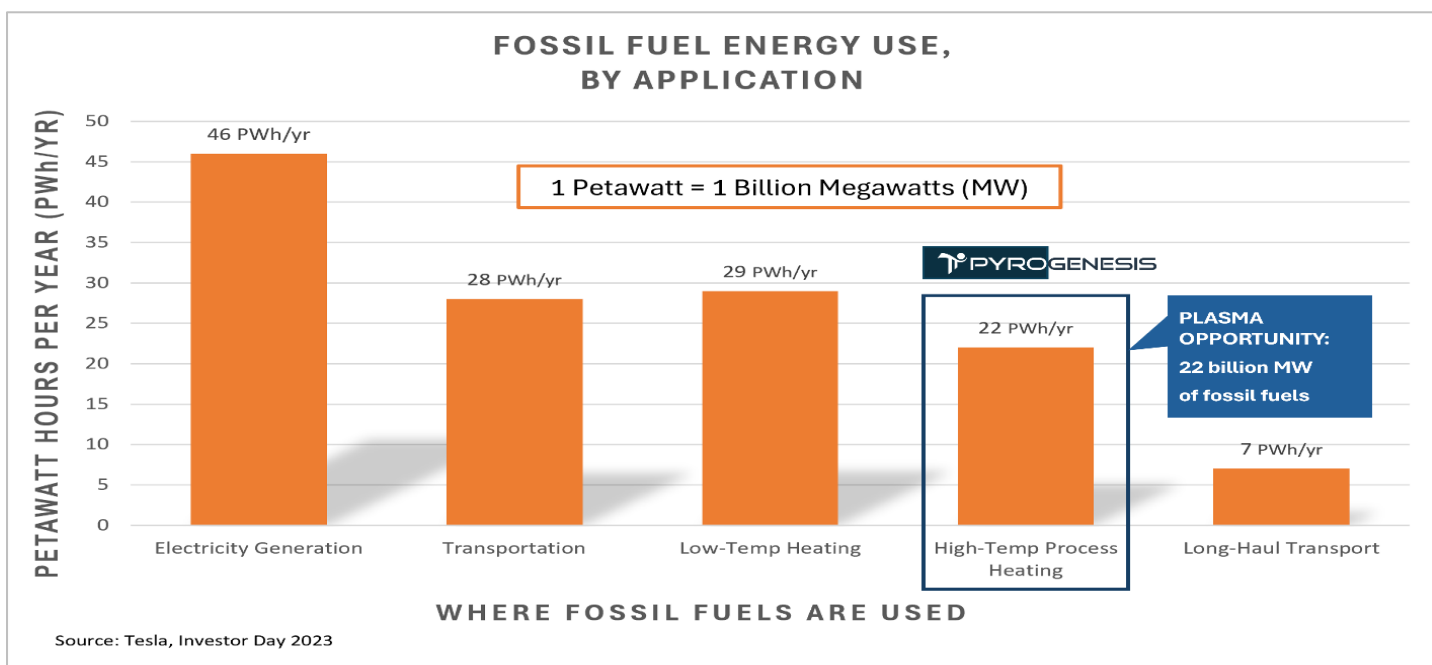
(Unaudited)

2. lower costs from higher efficiency and lower CAPEX brings less-intensive applications in smaller industries, and smaller customers, into view.

As a result, the total addressable market for the Company's offering may expand at both the high and low ends, as demonstrated in the graph below:



For perspective, fossil fuels used in industrial process heating – PyroGenesis' target market – account for approximately 17% of the fossil fuels used globally, an amount equivalent to 22 billion megawatts of power:



PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

The Company expects future technology improvements may continue to drive down costs and improve project economics for current and potential customers. With more comprehensive business cases possible, and with energy savings, efficiency gains, and lower costs now a proven part of the equation to complement CO₂ reduction in the suite of advantages, the possibilities for future market expansion and sales opportunities become clearer:

Now: aluminum, military, specialty manufacturing, clean technology, waste destruction

New: steelmaking, aerospace

Next: mass manufacturing / production, chemical, glass, calcination, cement.

The information below represents important highlights from the past quarter, followed by an outline of the Company's strategy and outlook for the remainder of 2025.

Q2 2025 PRODUCTION AND SALES HIGHLIGHTS

The Company operates primarily within three business verticals that align with economic drivers that are key to global heavy industry:

1. Energy Transition & Emission Reduction:

- where fuel switching to PyroGenesis' electric-powered plasma torches helps heavy industry reduce energy costs, fossil fuel use, and emissions,

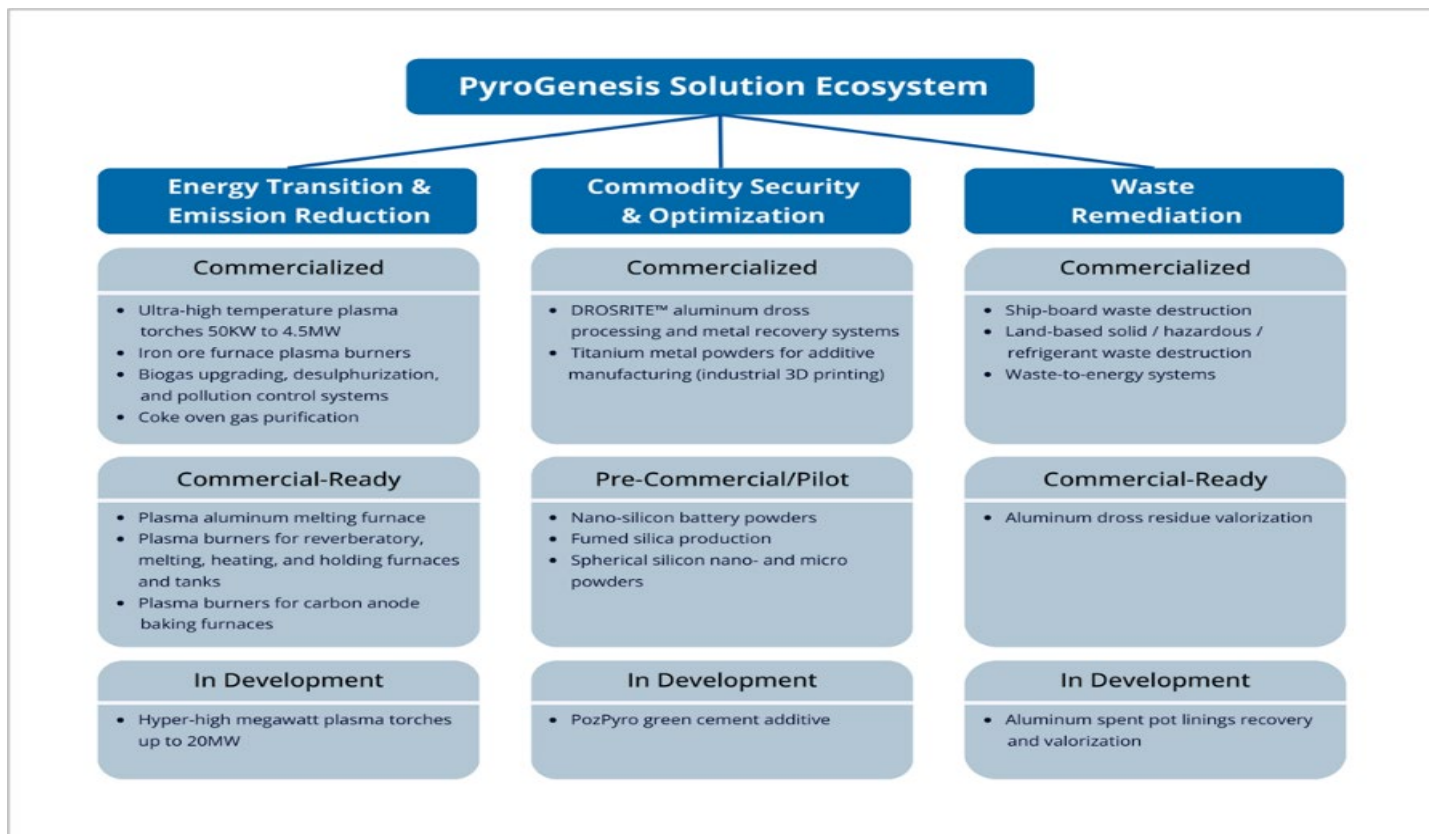
2. Commodity Security & Optimization:

- where the development of advanced material production techniques, and the use of technology such as plasma to recover viable metals, chemicals, and minerals from industrial waste, helps to maximize raw materials and improve the availability of critical minerals,

3. Waste Remediation:

- safe destruction of hazardous materials, and the recovery and valorization of underlying substances such as chemicals and minerals.

Within each vertical the Company offers a selection of solutions at different stages of commercialization:



PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

The information below represents highlights from the past quarter for each of the Company's main business verticals.

Commodity Security & Optimization

- **In May** [news release dated May 15, 2025], the Company announced that during the latest phase of system testing of the Fumed Silica Reactor (the "FSR") pilot plant, material was successfully produced, and then collected, from the product recovery unit, known as the "baghouse". The material, assumed to be fumed silica, was sent to a 3rd party laboratory for analysis. PyroGenesis has been engaged to develop the Fumed Silica Reactor by HPQ Silica Polvere Inc. ("Polvere"), a subsidiary of HPQ. If the 3rd party lab analysis is successful, this would confirm (i) underlying assumptions that the PyroGenesis process can produce material for collection from within the baghouse of the system, (ii) that what has formed is what was expected, and (iii) that any impurities that are observed were not only anticipated but are also in a state that was expected and which can be removed.
- **Subsequently in May** [news release dated May 21, 2025], the Company announced that the independent analysis of the material produced during the previously announced testing of the FSR was in fact fumed silica. The analysis further confirmed that any impurities observed were not only anticipated, but were in a state that was expected and which can be removed, and that the amount produced was greater than anticipated and as such bodes well for the ultimate economics of the project.
- **In May** [news release dated May 28, 2025], the Company announced it could confirm that it had received accelerated requests for samples of fumed silica produced by the FSR, from multiple potential clients. It was announced that samples would be shipped within ten days. These shipments were taking place prior to further refinement or optimization of the material and reflect a growing interest from industry in PyroGenesis' innovative plasma-based process for producing fumed silica directly from quartz.
- **Subsequently in June** [news release dated June 12, 2025], the Company announced it had received notice from a leading global supplier of fumed silica that the material samples recently delivered to them, which were produced by the FSR, successfully passed the client's test protocols for being confirmed as fumed silica.
- **In May** [news release dated May 29, 2025], the Company announced it had achieved approved supplier status with Boeing, for titanium metal powder produced by PyroGenesis' NexGen plasma atomization process. The Company also stated that all technical requirements for titanium coarse metal powder have been met by PyroGenesis NexGen plasma atomized powder for Boeing. With this approved supplier status, PyroGenesis' Ti64 "coarse" metal powder with a particle size that is within the range of 53-150µm (microns) has been qualified for use and added to Boeing's qualified list of metal powders available for use in additive manufacturing.

Waste Remediation

- **Post quarter-end, in July** [news release dated July 2, 2025], the Company announced it had signed a contract for €379,000 (approximately \$600,000) with one of the world's largest integrated environmental services companies, expanding PyroGenesis' relationship with this client to include developing a solution for the plastic waste problem in Europe. The client, whose name is being withheld for competitive, and confidentiality reasons, operates more than 100 waste treatment sites and facilities across Europe. This announcement is the third project announced with this client. The first project announced on January 27, 2025, was for the design and delivery of components related to 'flaring' that provide for the safe and environmentally friendly incineration of emissions that occur during renewable natural gas production. The second project, announced February 18, 2025, is for the engineering, design, fabrication, and delivery of condensate pots that will be strategically placed within a biogas production infrastructure to collect and separate water from the biogas.

Energy Transition & Emission Reduction

- **Post quarter-end, in July** [news release dated July 15, 2025], the Company announced that its subsidiary, Pyro Green-Gas Inc., had completed the previously announced \$9.3 million coke-oven gas valorization (via purification, desulphurization, and heavy hydrocarbon removal) and hydrogen production project for Tata Steel, one of the world's largest diversified steel producers. As outlined in a news release dated May 3, 2023, Pyro Green-Gas was contracted to supply (i) coke-oven gas purification solutions and (ii) hydrogen production processes, to extract hydrogen and other toxic gases from the blast furnace process, then separate, clean, and process the gases to render hydrogen to a 99.999% purity level. With the announcement, the project has been completed, and the systems developed by Pyro Green-Gas are in continuous 24 hr./day operation at the Tata steel facility in Kalinganagar India. The newly reformed hydrogen produced by the system is being reused by other applications at the facility, improving production efficiency and environmental outcomes.

Q2 Financial Highlights

- **In May** [news release dated May 5, 2025], the Company announced the completion of a non-brokered private placement consisting of a loan (the "Loan") in the amount of up to \$5,750,000 with P. Peter Pascali (the "Lender") who as the President and CEO of PyroGenesis, is a related party. The Loan may be advanced in up to three tranches, at such times and in such

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

amounts as shall be mutually agreed upon by PyroGenesis and the Lender, provided that the final tranche shall be advanced no later than June 16, 2025.

- **Subsequently in May** [news release dated May 12, 2025], the Company announced it successfully closed the first tranche of the previously announced non-brokered loan with P. Peter Pascali (the "Lender"). Under this first tranche, PyroGenesis received \$2,385,000.
- **In May** [news release dated May 13, 2025], the Company announced 2025 Q1 results: quarterly revenue of \$3 million, down 14% year-over-year; quarterly net loss of \$4.26 million; backlog of \$52 million, gross margin of 27%, a 5.3 point (24%) improvement year over year.
- **In June** [news release dated June 9, 2025], the Company announced that up to 1,581,250 common share purchase warrants (the "Warrants") will be amended. The Warrants, which have an exercise price of \$1.20, were to expire on July 22, 2025. Commencing on June 25, 2025, the expiration date of the Warrants held by holders wishing to participate in this proposal will be extended until November 18, 2025. The warrant certificates will also be amended to reflect the changes in PyroGenesis' corporate name and address, which occurred after the Warrants were initially issued. All other terms of the Warrants remained unchanged.

OUTLOOK

Consistent with the Company's past practice, and in view of the early stage of market adoption of our core lines of business, the Company is not providing specific revenue or net income (loss) guidance for 2025.

The following is an outline of the many factors that impact the Company's strategy and future success, plus key developments that are expected to impact subsequent quarters.

Overall Strategy

PyroGenesis provides technology solutions to heavy industry that leverage the Company's expertise in ultra-high temperature processes. The Company has evolved from its early beginnings as a specialty-engineering firm to being a provider of a robust technology eco-system for heavy industry that helps address key strategic goals.

The Company believes its strategy to be timely, as multiple heavy industries are committing to major electrification, carbon reduction, and waste reduction programs at the same time as many governments are increasingly supportive – from both a policy and financial perspective – of environmental technologies and infrastructure projects. Additionally, both industry and government are developing strategies to ensure the availability of critical minerals during the coming decades of increased output demand.

While there can be no guarantees, the Company believes the evolution of its strategy beyond greenhouse gas emission reduction, to an expanded focus that encapsulates the key verticals listed in the section "Q2 2025 Production and Sales Highlights", both (i) improves the Company's chances for success while (ii) also providing a clearer picture of how the Company's wide array of offerings work in tandem to support heavy industry goals.

PyroGenesis' market opportunity is significant, as major industries such as aluminum, steelmaking, manufacturing, cement, chemicals, defense, aeronautics, and government seek factory-ready, technology-based solutions to help steer through the challenging landscape of increasing demand, tightening regulations, and material availability.

As more of the Company's offerings reach full commercialization, PyroGenesis will remain focused on attracting influential customers in broad markets while at the same time ensuring that operating expenses are controlled to achieve profitable growth.

Key Performance Indicators

The Company uses key performance indicators (KPIs) to monitor, analyze, and optimize organizational output and performance, with KPIs specific to different parts of its production and manufacturing (such as cycle time, capacity utilization, yield, changeover time, and scrap), plus a different set of KPIs designed to evaluate the broader corporate results and uptake, identify trends affecting the business, and make strategic decisions. This latter category of KPIs includes:

Industry Depth: number of customers within an industry and/or amount and % of revenue from that industry. To date, the Company's greatest depth has been with the aluminum, military, and government industries.

New Industry Engagement: as the energy transition and carbon/GHG-reduction trends grow, more industries are realizing the benefit of using PyroGenesis' technology. Over the past five years the Company has begun to penetrate the mining and metal, iron ore, aerospace, automotive, general parts manufacturing, steel, materials (especially silica and silicon), chemical, and cement industries, among others.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Customer Depth: the number of projects with a single customer and/or amount of revenue from that customer. The Company treats most customer identities as confidential unless otherwise approved or suggested by the customer.

New Customer Engagement: as a relatively small company with technology that is potentially of interest across thousands of companies in many different industries, the Company takes a cautious approach when engaging with new customers. Primarily, the Company evaluates the potential customer's access to capital, operational history, and reputation when weighing engagement. With regard to new technology ideas or start-up customers, PyroGenesis considers the long-term commercialization potential of the idea, the possibility of revenue sharing or royalties, and access to capital. Aligning to the Company's three tier business model is imperative, though exceptions can be made.

Studies Undertaken: scientific and engineering studies have been a key part of new customer acquisition for much of the Company's history. A study such as a computational fluid dynamics (CFD) study is often the first phase requirement for a potential customer in investigating the potential future use of the Company's technology. Since transitioning from a legacy fossil fuel-based system to the Company's all-electric plasma can be a transformative and often expensive proposition, a study allows a potential new client to better understand the future technological fit and prospective budgetary requirements, while also gaining an understanding of the high-quality working relationship with the Company. The wide array of different specs, uses, industries, and in-factory customization of furnace, heating, and melting machinery, mandates ground-up studies for most new initiatives. The Company's experience conducting studies and its exposure to more and different types of systems, especially over the last 5 years, has allowed the Company to further streamline and perfect its study process as a route to new business. The number, type, and duration of studies undertaken during each quarter varies.

Monthly Recurring Revenue: ongoing, repeating revenue is a major goal for the Company. To date, after-sale parts and components (such as those related to consumable aspects of plasma torches) have represented the largest revenue and growth potential on a recurring basis. As the energy transition trend grows and more plasma systems are sold, recurring revenue is expected to represent a much larger percentage of overall revenue. Other areas targeted for recurring revenue include sales of titanium metal powders, revenue from tolling contracts in areas such as aluminum dross treatment and metal recovery, and co-venture/royalty agreements such as those related to waste remediation.

Revenue Mix: PyroGenesis has established a technology eco-system comprised of a number of inter-related solutions, often referred to in previous Company communications as a "multi legged stool". This type of diversification offers a measure of protection to the Company in both difficult and rapidly changing economic environments. As such, the Company targets a wide versus a narrow mix of revenue sources.

Growth Mix: new revenue is currently driven by existing customers. A key goal for the Company is to develop an optimal mix of existing and new customers.

Cost Controls and Efficiencies

PyroGenesis has been, and continues to, scrutinize both potential and existing projects to ensure that the utilization of labour and financial resources are optimized. The Company continues to only engage in projects that reflect significant benefits to PyroGenesis and the risks of which are defined. The Company intends to intensify its focus on project and budgetary clarity during this period of elevated inflationary pressures, by identifying alternative suppliers while constantly adjusting project resources. The early-stage project assessment process has also been refined to allow for faster "go / no-go" decisions on project viability. Through an ongoing Cost Optimization program, the Company has further identified areas to reduce costs and expenses in 2025.

Continuing the cost optimization program began in fiscal 2024, as described in the Q4 2024 Financial Highlights, which resulted in over \$3 million in savings, the Company has already identified areas of optimization in early 2025. To date the Company has identified savings in patent expenses, insurance and optimization of the workforce, for a net benefit of \$2 million. The Company has targeted between \$3-5 million in cost optimization for 2025. These are recurring cost savings which will benefit the Company on a recurring annual basis. All cost optimization is done with a view to not jeopardize revenues or market competitiveness.

Enhanced Sales and Marketing

Against the backdrop of its 3-tiered strategy, the Company continues to focus on sales, marketing, and R&D efforts in-line with – and in some cases ahead of – the growth curve for industrial change related to energy transition, electrification, and greenhouse gas reduction efforts.

Macroeconomic Conditions

With some continued uncertainty in the macroeconomic environment, including ambiguity in the banking sector with regard to interest rate adjustments, the continued inflationary pressures causing shifting demand dynamics across various industries at different times, and the possibility of recessionary conditions, it may be difficult to assess the future impact these events and conditions will have on our

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

customer base, the end markets we serve, and the resulting effect on our business and operations, both in the short term and in the long term.

Despite these uncertainties, we continue to believe there is an accelerated need for PyroGenesis' solutions in the industries we serve as heavy industry continues to transition and/or electrify their energy sources, decarbonize, manufacture utilizing both lighter metals (such as aluminum) and additive manufacturing, and deal with tighter hazardous waste regulations.

While we expect these uncertainties and other macroeconomic conditions to continue to impact the variability in our quarter-to-quarter revenue, we believe our diversity in both customer base and solution set will continue to be a strong mitigating factor to these challenges. Additionally, the Company's ongoing efforts to reduce costs through various measures including the sourcing of more high quality, cost-competitive suppliers, further bolsters the Company against cost fluctuations.

The various military conflicts in the Middle East and Eastern Europe continue to create some level of global economic uncertainty, as well as supply chain disruptions that can change at any time. However, it's important to note that the Company does not have any operations, customers or supplier relationships in Russia, Belarus or Ukraine, and as such are not directly impacted at a customer level in these countries. The Company does have customer relationships and projects in Poland and will continue to monitor the situation in the region regarding challenges to the completion of current projects, which at this time are not inhibited.

As always, the Company monitors the potential impact macroeconomic events and conditions could have on the business, operations, and financial health of the Company.

Generally, the Company believes that broad-based threats to global supply chains increase awareness and interest in the many solutions the Company offers. This is particularly true within the minerals and metals industries, as manufacturers seek alternatives to offshore suppliers as well as technologies that could optimize output or recycle critical material from by-products or waste – solutions that the Company currently offers.

BUSINESS LINE DEVELOPMENTS

The upcoming milestones which are expected to confirm the validity of our strategies are outlined below. Please note that these timelines are estimates based on information provided to us by the clients/potential clients, and while we do our best to be accurate, timelines can and will shift, due to protracted negotiations, client technical and resource challenges, or other unexpected situations beyond our or the clients' control:

Business Line Developments: Near Term (0 – 3 months)

Financial

Payments for Outstanding Major Receivables:

Regarding the outstanding receivable under the Company's existing \$25 million+ Drosrite™ contract, and as previously announced, PyroGenesis had agreed to a strategic extension of the payment plan, by the customer and its end-customer, geared to better align the pressures on the end-user's operating cash flows created by increased business opportunities. The next payment(s) to PyroGenesis are expected in the near term.

Energy Transition & Emission Reduction

Plasma Torches for Cement-Related Calcination:

In the Q1 outlook, the Company stated it is in negotiations with a European entity to use plasma torches during a calcination process related to cement production, with an estimated initial project value of \$500,000 to \$1 million. These negotiations advanced considerably during Q2 and a near term announcement is expected.

Plasma Torches for Metal Manufacturing:

During Q4 2024 and Q1 2025, the Company conducted first round tests for one of the world's largest producers of metal products to design and develop a plasma-based solution for use in improving precision in the manufacturing process, using a low wattage plasma torch. Next steps were identified to conduct additional tests using progressively larger torches during Q2 and Q3 2025. Testing per this approach continued during Q2, and has so far met and surpassed expectations, with more tests planned. A first-round project may commence in the near term, with a potential value of \$100K-\$200K. Long-term potential at an enterprise-wide level for this customer has a potential approximate value of \$10 million.

Plasma-Based Glass Recycling:

During Q1 2025, the Company signed an R&D / testing contract with a global leader in glass recycling, to investigate plasma as part of the customer's energy transition initiatives. The project is related to the spheronization of recycled glass using plasma, to help establish proof of concept. The contract involves multiple tests to optimize parameters and produce high-quality spherical glass

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

particles for use in glass bed applications. Testing commenced during Q2 as planned, with early results being very promising. The full roster of tests and modifications is scheduled for completion in Q3 2025. The commercial potential is for building a reactor-based system on-site at the customer's facility.

Plasma Torches for Aluminum Remelting Furnaces / Casthouses:

An LOI for large-scale plasma remelting furnaces with Constellium, a global aluminum product manufacturer, was originally announced during Q2 2024 [news release dated April 10, 2024]. During Q4 2024, the first project under a letter of intent (LOI) previously signed with Constellium progressed to advanced negotiations, and a near-term announcement in late Q2 2025 regarding this project was anticipated. Planning and negotiations continued during Q2 and an announcement was expected in the very near term. Post-quarter end, on August 5, 2025, the Company announced the signing of a contract to mark the launch of phase 2, for industrial implementation. The contract is for the purchase of plasma torch technology and related peripheral components to be implemented in an aluminum remelting furnace. This project phase is estimated to be completed by Q1 2026.

Separately, an existing contract with one of the world's largest manufacturers of products that serve the mining and defense industries [news release dated April 17, 2024] to examine the use of plasma in decarbonizing of its casthouses, was also discussed in previous Outlooks. Successful results from the test project which used plasma torches as part of the customer's high temperature process steps, have led to ongoing discussions for potential next steps. These discussions continue at both a local and international level for this global entity, with decisions around funding and funding cycle being the primary criteria.

Discussions also remain underway with other clients for similar contracts.

Cement Production Calcination:

The Company is in discussions with a European global leader in mineral production for the cement industry, to replace gas burners in the limestone calcination process.

Aluminum Furnace Tests:

The Company has started, and will continue in the near term, live furnace tests of plasma as a process heat source in melting and holding furnaces with major aluminum companies, while also being in advanced discussions with other companies yet to be named for similar live furnace tests. Due to the nature of these tests and the increasing number of similar tests, the Company may choose not to announce every test session it engages in.

Ore Pelletization Torch Trials:

CLIENT B:

As mentioned in previous Outlooks, plasma torch tests within an iron ore pelletization furnace of a client previously identified as Client B, a major international iron ore producer, were underway. The client is conducting live furnace tests using four 1 MW PyroGenesis plasma torch systems, with the possibility of replacing fossil fuel burners across multiple pelletization furnace systems. Live trials using PyroGenesis plasma torches are ongoing and will remain as such until the customer determines they have sufficient performance data.

CLIENT C:

Client C, a global market-leading client and a significant player in both the iron ore pelletization and steel industries, has been working with PyroGenesis over the past few years on various potential initiatives related to using plasma for decarbonization. PyroGenesis was previously awarded official supplier status to Client C as part of an impending initiative that was subsequently announced during Q4 2024 [news release dated November 19, 2024], for a contract to assess the applicability of PyroGenesis' fully electric plasma torches for use in part of the customer's electric arc furnace (EAF) steelmaking and casting process. The initial project was completed during Q2 2025 as anticipated. Post-quarter end, a comprehensive report was assembled and submitted to the client in early Q3 2025. The client is now assessing next steps, with no estimated timeline.

Commodity Security & Optimization

Titanium Metal Powder:

During Q2 2025, the Company's titanium metal powder was awarded approved status by Boeing and was added to Boeing's approved supplier list for use in additive manufacturing for Boeing parts. As a result of this announcement, the Company is working with various potential clients towards metal powder contracts.

Fumed Silica Reactor ("FSR") Project:

PyroGenesis has been designing, engineering, and constructing the fumed silica reactor pilot plant (FSR) to convert quartz into fumed silica in a single and eco-friendly step, for HPQ Polvere (a wholly owned subsidiary of HPQ Silicon Inc.). The plant is operational and undergoing various tests to replicate the lab-scale test at pilot plant scale. Next steps are continued testing and modifications for improvement to the material.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Waste Remediation

Chemical Weapons Destruction (PACWADS):

The Company is in negotiations with a multinational defense contractor for the potential sale of a PyroGenesis PACWAD system for destroying chemical weapons.

Municipal Waste Destruction and Gasification System:

The Company is in negotiations with a company in India for a large waste destruction and biogas upgrading system.

Radioactive Waste Destruction:

The Company is in negotiations with a major European entity for the use of plasma in the destruction of low-level radioactive waste.

Plasma Resource Recovery System (PRRS):

As mentioned in previous Outlooks, the Company was in discussions with a European company for the Company's Plasma Resource Recovery System, for use in the pyrolysis of plastic. This project was awarded and announced in Q2 2025.

SPARC Refrigerant Waste Destruction System:

The Company previously noted in an earlier Outlook that it was in negotiations (with a mid-term 3-6 month outlook) with a large US-based distributor of refrigerants and specialty gases, regarding PyroGenesis' SPARC system for the safe destruction of hazardous end-of-life refrigerants such as CFCs, HCFCs, and HFCs, with a potential contract amount of approximately \$2-3 million. The discussions continue and are expected to be concluded in the near term.

Plasma-Based Glass Valorization:

The Company is in final negotiations with an entity in Canada, for a plasma-based furnace for use in the melting and valorization of recycled glass, with an estimated contract value of approximately \$2 million. This potential client is currently assembling funds from a consortium of international contributors, across government and private entities. The amount secured will determine a potential start and/or the scope of the project, with a current timeline for final decision estimated as near-term.

SPARC Refrigerant Waste Destruction System:

The Company is in negotiations with a Middle Eastern customer regarding PyroGenesis' SPARC system for the safe destruction of hazardous end-of-life refrigerants such as CFCs, HCFCs, and HFCs. The customer has access to a very large existing stockpile of these hazardous materials. Discussions continue as a possible co-venture, whereby PyroGenesis would receive revenue on a profit-sharing basis. PyroGenesis is conducting due diligence on key elements related to the potential business model, and a memorandum of understanding is currently being finalized.

Business Line Developments: Mid Term (3 – 6 months)

Energy Transition & Emission Reduction

Plasma Torches for Global Chemical Firm:

In the previous Q1 outlook, the Company stated that it is in discussions with an American entity for the potential sale of plasma torches to aid in the production of carbon black and potentially other materials, both carbon and silica-based, with a potential initial value of \$2-3 million and additional longer-term potential. In late Q2 and early Q3, the customer visited PyroGenesis' Montreal facilities for a site tour and for more in-depth discussions. The customer has started construction of their own pilot plant, and negotiations are underway regarding potential integration of plasma torches into that facility.

Plasma Torches for Cement Industry Calcination:

The Company is in discussions with a global leader in providing technology and services for mining, aggregates, recycling, and metal refining industries, primarily for potential sale of hyper-high temperature (10 MW and above) plasma torches for use in calcination furnaces as part of the cement production process.

Plasma Torches for Alumina Calcination:

In Q1 2025, the Company signed an initial testing contract with a large European aluminum producer with a 100+ year history. The contract is to test plasma torches as part of the calcination step for alumina, the last step of the Bayer process for refining bauxite ore into alumina, which is the raw material for producing aluminum. The project commenced in the latter part of Q2 2025. Tests were successful and the results were very positive. The customer is now evaluating what was acknowledged as very promising data to replace natural gas burners and is reviewing their capital expenditure plans for possible future implementation.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

Commodity Security & Optimization

Plasma Torch System for Pyrolysis:

The Company is in discussions with a European entity for the sale of a plasma torch system and/or plasma reactor system, which the customer would utilize in their production of carbon black and hydrogen for use in batteries and graphite production. A project quote has been submitted with a potential project value of approximately \$2 million.

Drosrite Systems:

The Company is in various stages of discussions with aluminum manufacturers to purchase Drosrite aluminum dross processing systems, including with two Middle Eastern aluminum companies for the purchase of multiple 5,000+ tonnes per year Drosrite furnaces. In addition, multiple European and American aluminum manufacturers are considering systems of various capacities. Of note, a North American company recently moved to advance negotiations for a system, with an approximate value of \$800K-\$1million.

Titanium Metal Powder:

The Company is in discussions with several companies in both North America and Europe regarding the potential sale of titanium metal powder, across both "coarse" and "fine" powder cuts.

Green Cement Additive:

PozPyro is a cement additive material produced by PyroGenesis' as a collaboration with its client Progressive Planet. The proprietary plasma process converts widely available, high-grade crystalline silica into amorphous silica that can be used to enhance the strength of concrete as a replacement for fly ash which is in diminishing supply. Previous announcements [news release dated May 2, 2024] showed compressive strength tests for PozPyro of up to 99.5% above standards for similar material such as fly ash, while surpassing even the full-strength value of the Portland Cement control by up to 49.67%. A potential contract for a future pilot plant has an estimated value of \$15-20 million. In Q1, the Company developed and delivered an advanced feasibility and technical study towards the construction of a pilot plant. Material samples are now being produced for third party evaluation at the request of Progressive Planet.

Business Line Developments: Long Term (> 6 months)

Energy Transition & Emission Reduction

Plasma Torches for Steel Manufacturing Process Steps:

The Company is in initial discussions with a European steel construction conglomerate for the use of plasma torches in various high temperature process steps.

Plasma Torches for Brickmaking:

The Company is in initial discussions with a European company for the use of plasma torches in high temperature brickmaking process steps, including brickmaking refractory furnace. This is a multi-torch application, potentially requiring 15-20 60kw-150kw torches per line.

Plasma Torches for Steelmaking:

The Company is in initial discussions with a major global engineering firm that works extensively in the steel industry, for the use of plasma torches in high temperature steelmaking furnaces, in Japanese steel plants.

Commodity Security & Optimization

Lithium Battery Material Recovery:

The Company is in early-stage discussions with a North American battery material recycler, for the potential use of plasma in the recovery of material from end-of-life lithium batteries.

Silicon, Nano-Silicon, and Silica Production:

The Company is in discussions at quotation stage with several potential customers who have expressed interest in PyroGenesis' advanced methods for producing silicon, nano-silicon, and silica. The potential customers include:

- a major global automaker (whose interest lies in both nano-silicon and silicon oxide [SiOX] for EV batteries) who is considering a lab-scale production system (approximate value of \$500,000) with a long-term potential pilot plant with an estimated contract value of \$10-15 million.
- a US battery manufacturer considering a lab-scale production system for SiOX anode material; negotiations have advanced and further cost and scope development meetings are underway.

PyroGenesis Inc.

Management's Discussion and Analysis

As at June 30, 2025 and for the three and six-month periods ended June 30, 2025 and 2024

(Unaudited)

- a raw material supplier to the construction materials industry who is considering a lab-scale production system (approximate value of \$150,000) with a long-term potential pilot plant with an estimated contract value of \$10-15 million. Negotiations continued throughout Q2 with potentially more discussions on the horizon.
- a raw material producer and manufacturer in South Asia is considering a production system for silicon-based material with an estimated contract value of \$10-15 million. Discussions continue, regarding scope of work.
- a producer of silicon carbide.
- a producer of silica fume.

Waste Remediation

Plasma Torch for Hazardous Waste Destruction:

The Company is in early-stage discussions with an operator of a large North American hazardous waste facility for the sale of a plasma torch system. The facility destroys a variety of hazardous waste, including PFAS "forever chemicals", currently using an incineration process.

Plasma Torches for Tunnel Boring:

As noted above, the Company is a party to a framework master agreement with EarthGrid, which included the payment to the Company of a non-refundable downpayment for \$667,000. Negotiations of a first substantial statement of work are ongoing and remain positive but depend in large part on the client's ability to secure funding in a timely manner. The client now anticipates proceeding with the purchase of a single plasma torch system in the near to mid term, followed by one or more larger orders in subsequent quarters, dependent upon the client's financing. While there is no guarantee this statement of work or additional ones will be completed, if successful the Company foresees the potential for a multi-phase, multi-year partnership with the client that may result in materially significant additional plasma torch orders over the next few years. EarthGrid continues to have challenges raising capital sufficient to make purchases under this agreement.

Plasma Waste-to-Energy System / Resource Recovery System (PRRS):

The Company previously announced the signing of a 2-stage contract for a land-based plasma waste-to-energy system with a European consortium. The first stage consists of a conceptual and preliminary design phase for approximately \$2 million, which commenced in Q3 and was scheduled to last no more than one year. The design of the Plasma Waste-to-Energy System is based on the Company's Plasma Resource Recovery System (PRRS), a waste-to-energy technology that eliminates toxic compounds while transforming waste into reusable products such as syngas and chemicals such as methanol. This project is currently on hold as the client lost its first stage financing. The client is looking for alternate funds. Until such time as those funds have been secured and the project restarted, \$2 million was removed from the Company's reported backlog during Q4 2024.

Plasma Torches for 3rd Party Waste-to-Energy Systems:

The Company has been in discussions over several years with a European entity, to act as a potential supplier of plasma torches for the entity's waste-to-energy initiative; the entity has at times, listed PyroGenesis as their torch supplier in various publications online. In Q3 2024, this entity announced having entered into an agreement with a German multi-Billion-dollar leading technology company to accelerate green energy transition through waste-to-energy technology. The entity announced that it aims to establish 300 plants producing 1 million tons of hydrogen over the next several years.

**** Please note that projects or potential projects previously announced, or listed in previous Outlooks, that do not appear in the above summary updates, should not be considered as at risk. Noteworthy developments can occur at any time based on project stages, and the information presented above reflects information on hand. Projects not mentioned may have simply not concluded or not passed milestones worthy of discussion. ****

FURTHER INFORMATION

Additional information relating to Company and its business, including the 2024 consolidated financial statements, the Annual Information Form and other filings that the Company has made and may make in the future with applicable securities authorities, may be found on or through SEDAR+ at www.sedarplus.ca, or the Company's website at www.pyrogenesis.com.

Additional information, including directors' and officers' remuneration, the Company's indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, is also contained in the Company's most recent management information circular for the most recent annual meeting of shareholders of the Company.