ZINC8 ENERGY SOLUTIONS INC.

Unit 1 – 8765 Ash Street
Vancouver, BC V6P 6T3

MANAGEMENT DISCUSSION AND ANALYSIS
FOR THE THREE MONTHS ENDED MARCH 31, 2023

The following Management's Discussion and Analysis ("MD&A"), prepared as of May 30, 2023, should be read in conjunction with the unaudited condensed interim consolidated financial statements of Zinc8 Energy Solutions Inc. ("Zinc8" or the "Company") for the three months ended March 31, 2023, together with the audited consolidated financial statements of the Company for the year ended December 31, 2022 and the accompanying MD&A for that fiscal year. The referenced financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board applicable to the preparation of interim financial statements, including IAS 34 Interim Financial Reporting. All financial amounts are stated in Canadian dollars unless stated otherwise.

Additional information relating to the Company and its operations, including the Company's annual information form for the year ended December 31, 2022 (the "AIF"), is available under the Company's profile on SEDAR at www.sedar.com

FORWARD-LOOKING STATEMENTS

The Company's condensed interim consolidated financial statements for the three months ended March 31, 2023, and this accompanying MD&A contain statements that constitute "forward-looking statements" within the meaning of National Instrument 51-102 - *Continuous Disclosure Obligations* of the Canadian Securities Administrators.

It is important to note that, unless otherwise indicated, forward-looking statements in this MD&A describe the Company's expectations as of May 30, 2023.

Certain statements contained in this MD&A may constitute "forward-looking statements". Such term is defined in applicable securities laws. The forward-looking statements include, without limitation, statements with respect to the success of research and development activities; the Company's new and existing technology; the Company's ability to obtain necessary financing through grants and other financings; the Company's ability to meet its obligations as they become due; and other similar statements concerning anticipated future events, conditions or results that are not historical facts. These statements reflect management's current estimates, beliefs, intentions and expectations; they are not guarantees of future performance. The Company cautions that all forward-looking information is inherently uncertain and that actual performance may be affected by a number of material factors, many of which are beyond the Company's control. Such factors include, among others, volatility in market for the Company's stock; the inability of the Company to secure financing on terms that are favorable to the Company or at all; risks relating to research and development; the Company's intellectual property applications being approved; the Company's ability to protect its proprietary rights from unauthorized use or disclosure; the ability of the Company to obtain additional financing; the Company's limited operating history; the Company's technology may not perform as expected; the market for the Company's products may be smaller than expected; the need to comply with environmental and governmental regulations; fluctuations in currency exchange rates; operating hazards and risks; competition; and other risks and uncertainties. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Accordingly, actual future events, conditions and results may differ materially from the estimates, beliefs, intentions and expectations expressed or implied in the forward-looking information. All statements are made as of the report date and, except as required by law, the Company is under no obligation to update or alter any forward-looking information.

DESCRIPTION OF BUSINESS

The Company was incorporated on December 8, 2011, pursuant to the BC Business Corporations Act and the Company's head office is located at #1 – 8765 Ash Street Vancouver, BC V6P 6T3.The Company is executing the development and commercialization of a dependable, low-cost zinc-air battery. The Company believes that this energy storage system will offer both environmental and economic benefits.

The Company's Zinc-Air Energy Storage System (the "Zinc-Air System") technology has been developed around the utilization of zinc as the anode fuel, which is expected to offer numerous advantages over other forms of metals due to its unique attributes, which include high energy density, abundant availability and low supply chain risk. The regenerative system does not require fuel replacement and offers scalable energy capacity through the simple introduction of additional fuel tanks.

On December 19, 2017, there was a change of control event whereby MGX Minerals Inc. ("MGX") acquired all of the outstanding common shares of the Company in exchange for common shares of MGX and cash considerations. On April 3, 2018, MGX announced it would pursue a reorganization, pursuant to which it would spin-out its interests in the Company, resulting in the Company becoming listed as a separate company on the Canadian Securities Exchange ("CSE") (the "Transaction"). On July 15, 2019, the Company filed a Listing Statement outlining the full details of the Transaction. Additional information is also contained in news releases of Zinc8 dated July 9, 2019, and July 22, 2019 available on Sedar.com

OVERALL PERFORMANCE

The Company's operations are not currently revenue generating and the Company will need to continue to rely on its ability to obtain the necessary financing through grants and other financing to complete the development of zinc-air flow batteries and fund its operations.

Zinc-Air Technology

The Company's zinc-air technology consists of three major components: the fuel tank where zinc particles and a potassium hydroxide (KOH) electrolyte are stored; the cell stack where the fuel is converted to electrical power; and the regenerator unit where the electrical power is converted back to fuel. In operation, electrical energy from a source is used to convert zinc oxide to zinc metal in the regenerator unit. The zinc "fuel" thus created is stored in the fuel tank until required. When stored energy is to be released, the zinc fuel is pumped into the cell stack where it reacts with atmospheric oxygen to produce electricity.

The system is designed to deliver power in the range of 20kW to 1MW and energy in the range of 160kWh to 8MWh. The system can be configured to support a wide range of discharge power, recharge power and duty cycle requirements.

The Company has engaged in the development of a zinc-air flow battery technology to participate in behind the meter (BTM), front of the meter (FTM), and microgrid markets. The system will provide various services such as peak shaving, bill management, peak demand reduction, backup power and demand response, energy arbitrage, and distribution & transmission deferral, etc. As of date, Zinc8 has 16 active patents covering its energy storage technology.

COOPERATION AGREEMENT

The Company entered into a Cooperation agreement (the "Agreement") dated December 24, 2019 with the Power Authority of the State of New York (the "Authority") for the installation of a 100kW/1MWh Zinc-Air Battery Energy Storage System in New York State.

Under the Agreement with the Authority, the Authority agreed to collaborate with the Company and contribute to a research and development project through its participation in aspects of design and fabrication of a zinc air energy storage system, then demonstration of the system and the Company agreed to collaborate with the Authority to pursue the research and development project.

The Agreement is valid for an initial period of 10 years with automatic renewals of one year periods each unless either party provides written notification to the other. The Authority, within its sole discretion and for any reason, may terminate this Agreement at any time upon 30 days' notice to the Company. Upon such termination, the parties will conduct a final payment schedule, which will include any and all final payments due to each side.

In May 2020, the Company and the Authority reached a mutual agreement to delay the timeline of the project due to COVID-19 restrictions. As such, the Company did not receive any payments after the First Contribution. A revised project timeline is pending further information.

The Authority agreed to contribute the monetary contributions to the Company at the following dates but not before actual qualified expenses and the Company's project expenses have equaled or exceeded the minimum required expenditures as follows:

1) First Contribution - $835,000 USD to be received by January 26, 2020 (CAD$ 1,109,632 received in 2020).

2) Second Contribution - $0, USD to be received after June 27, 2020 and after meeting the following expenditure requirements:
    (i) Minimum Required Qualified Expenses: $355,000 USD
    (ii) Minimum Required the Company's Project Expenses: $0

3) Third Contribution - $0, USD to be received after December 27, 2020 and after meeting the following expenditure requirements:
    (i) Minimum Required Qualified Expenses: $835,000 USD
    (ii) Minimum Required the Company's Project Expenses: 80% of $2,950,000 USD

4) Fourth Contribution - $160,000 USD, to be paid after June 27, 2021 and after meeting the following expenditure requirements:
    (i) Minimum Required Qualified Expenses: $995,000 USD
    (ii) Minimum Required the Company's Project Expenses: 80% of $4,100,000 USD

5) Fifth Contribution - $380,000 USD, to be paid after December 27, 2021 and after meeting the following expenditure requirements:
    (i) Minimum Required Qualified Expenses: $1,375,000 USD
    (ii) Required the Company's Project Expenses: 80% of $5,400,000 USD

6) Sixth Contribution - $20,000 USD, to be paid after June 27, 2022 and after meeting the following expenditure requirements:
    (i) Minimum Required Qualified Expenses: $1,395,000 USD
    (ii) Minimum Required the Company's Project Expenses: 80% of $6,450,000 USD

7) Final Contribution – $155,000 will be paid after meeting the following expenditure requirements:
    (i) Minimum Required Qualified Expenses: $1,550,000 USD
    (ii) Minimum Required the Company's Project Expenses: 80% of $6,450,000 USD

DISCUSSION OF OPERATIONS

Three Months Ended March 31, 2023

The Company recorded net loss of $2,974,698 ($0.02 per share) for the three months ended March 31, 2023 as compared to net loss of $2,366,593 ($0.02 per share) for the three months ended March 31, 2022.

The change is due to the following:

- Management fees increased to $196,784 (2022 - $182,398) and include compensation to the CEO, VP Business Development and the Board of Directors. Included in management fees were the grant of DSUs valued at $84,000.
- Research and development increased to $1,450,022 (2022 - $1,340,961) as the Company continues to advance the Zinc-Air technology.
- Share-based compensation increased to $451,978 (2022 - $nil) related to the vesting of RSU's
- During the three months ended March 31, 2022 the Company recorded a loss of $134,371 related to the disposal of assets.

RESEARCH AND DEVELOPMENT

In order to execute the Company's business strategy, Zinc8 focusses heavily on research and development. During the three months ended March 31, 2023, the Company incurred $1,450,022 (2022 - $1,340,961) of research and development expense. A breakdown of research and development expenditures during the periods ended March 31, 2023 and 2022 are as follows:

	March 31, 2023 $	March 31, 2022 $
Materials	374,960	221,957
Operations	122,329	130,262
Personnel	1,054,287	996,591
Testing	13,922	26,902
Government grants	(115,476)	(34,751)
	1,450,022	**1,340,961**

SUMMARY OF QUARTERLY RESULTS

The following table sets out selected interim financial information, in Canadian dollars, in accordance with IFRS for each of the eight most recently completed quarters:

	Three Months Ended ($)			
	March 31, 2023	**December 31, 2022**	**September 30, 2022**	**June 30, 2022**
Net and comprehensive income (loss)	(2,974,698)	(3,609,808)	(3,011,489)	(2,949,443)
Basic and diluted loss per share*	(0.02)	(0.02)	(0.02)	(0.02)
Total assets	6,005,828	8,311,681	8,096,497	8,725,462
Working capital	2,006,011	4,435,916	3,977,360	4,544,382

	Three Months Ended ($)			
	March 31, 2022	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**
Net and comprehensive income (loss)	(2,366,593)	(7,655,688)	(1,651,389)	(5,113,523)
Basic and diluted loss per share*	(0.02)	(0.05)	(0.01)	(0.04)
Total assets	10,506,782	12,890,408	20,424,952	21,212,639
Working capital	7,515,385	9,909,820	11,552,367	13,491,845

* No exercise or conversion is assumed during the periods in which a loss is incurred, as the effect is anti-dilutive.

The increase in loss for the quarter ended December 31, 2021, was primarily due to an impairment of intangible expense of $4,950,134.

The increase in loss for the quarter ended June 30, 2021, was primarily related to $3,719,100 in share-based compensation expense related to the grant of 7,250,000 options.

OUTSTANDING SHARE DATA

The Company has authorized unlimited common shares without par value.

All share information is reported as of May 30, 2023, in the following table:

Type of Security	Number
Issued and outstanding common shares	181,294,151
Stock options with a weighted average exercise price of $0.44	12,075,814
Warrants with a weighted average exercise price of $0.30	14,145,200
RSUs	5,691,224
DSUs	1,609,804
Total	214,816,193

TRANSACTIONS WITH RELATED PARTIES

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management includes the CFO, CEO, CTO, VP of Engineering and the Board of Directors. Compensation paid to key management for the three months ended March 31, 2023 and 2022 was as follows:

	2023 $	2022 $
Management fees[1]	193,500	173,500
Payroll expense[2]	114,750	112,500
Share-based compensation	292,875	-
	601,126	**286,000**

[1]Includes fees paid to CEO Ron MacDonald and Directors: Charn Deol, Storm Boswick, Bernard Pinsky and David Hodge
[2]Includes fees paid to VP of Engineering Tristan Sloan, the CFO Sorin Spinu and CTO Simon Fan

Zimtu Capital Corp., a company related by common directors (David Hodge) rent of $2,000 (2022 - $3,000) during the three months ended March 31, 2023.

As at March 31, 2023, the Company had $nil (2022 - $1,130) owing to Zimtu Capital Corp., included in accounts payable and accrued liabilities.

As at March 31, 2023, the Company had recorded $80,177 loan receivable from the CTO Simon Fan, included in accounts receivable

All related party transactions are in the normal course of operations and have been measured at the agreed to amounts, which is the amount of consideration established and agreed to by the related parties.

LIQUIDITY AND CAPITAL RESOURCES

As at March 31, 2023, the Company had working capital of $2,006,011 (December 31, 2022 – $4,435,916), has not generated any revenue from operations and has an accumulated deficit of $49,007,901 (December 31, 2022 - $46,033,203).

To date the Company has been funded through government grants and shareholder funding for research and development. As at March 31, 2023, the Company did not have sufficient funds to cover working capital expenditures at current levels for the next 12 months. The Company will need additional funding to continue the development of its zinc-air technology and fund operating expenditures, and will need to consider reduction in operating expenses as necessary. In order to execute the Company's business strategy the Company will need to continue capital development through research and development.

The Company expects to fund its future capital requirements through additional government grants and equity or debt funding from investors, although there can be no guarantee that such funding will be received on terms that are favorable to the Company or at all. The circumstances that could affect such sources of financing include those set out under "*Risk Factors*" in the AIF. See also the "*Financial Instruments*" section of this MD&A.

The Company's ability to continue as a going concern is dependent upon its ability to raise the necessary funds and/or to obtain the necessary financing to meet its obligations and repay its liabilities arising from normal business operations when they come due. General market conditions may have an impact on the Company's ability to raise funds in the future. The Company may need to reduce its expenditures if necessary and such reductions may have an adverse impact on the ability of the Company to execute its business plan as previously described in the AIF. If the Company is not able to continue as a going concern, the Company may be required to realize its assets and discharge its liabilities other than in the normal course of business and at amounts different from those reflected in the accompanying condensed interim consolidated financial statements.

FINANCING ACTIVITIES AND CAPITAL EXPENDITURES

During the three months ended March 31, 2023:

- The Company issued 1,180,834 common shares pursuant to the exercise of RSUs.

There were no share issuances during the three months ended March 31, 2022.

During the three months ended March 31, 2023, the Company incurred $34,371 (March 31, 2022 - $271,845) of equipment acquisition costs.

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not utilize off-balance sheet transactions.

PROPOSED TRANSACTIONS

The Company has no proposed transactions that will materially affect the performance of the Company. The Company continues to explore opportunities with respect to various contracts for potential demonstrations, product sales, joint ventures, strategic investments, business combinations and other transactions.

ACCOUNTING POLICIES

The Company uses the same accounting policies and methods of computation as in the consolidated financial statements for the year ended December 31, 2022.

FINANCIAL INSTRUMENTS

Fair Values

The Company has classified fair value measurements of its financial instruments using a fair value hierarchy that reflects the significance of inputs used in making the measurements as follows:

- Level 1: Valuation based on quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: Valuation based on directly or indirectly observable inputs in active markets for similar assets or liabilities, other than Level 1 prices, such as quoted interest or currency exchange rates; and
- Level 3: Valuation based on significant inputs that are not derived from observable market data, such as discounted cash flow methodologies based on internal cash flow forecasts.

As at March 31, 2023, the fair values of cash, restricted cash, amounts receivable, accounts payable and accrued liabilities, and deferred share unit liability approximate their carrying value due to the short-term maturity of these instruments. Lease liabilities are measured at amortized costs using effective interest rate. Cash, restricted cash and deferred share unit liability is carried at level 1 fair value measurement.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company currently settles its financial obligations out of cash. The ability to do this relies on the Company raising equity financing in a timely manner and by maintaining sufficient cash in excess of anticipated needs. As at March 31, 2023, the Company had working capital of $2,006,011.

Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, investment fluctuations, and equity prices. Market conditions will cause fluctuations in the fair values of financial assets classified as fair value through profit or loss, and cause fluctuations in the fair value of future cash flows for assets or liabilities measured at fair value. Currently, the Company is not exposed to significant market risk.

Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company's cash is largely held in large Canadian financial institutions. The Company does not have any asset-backed commercial paper. The Company's receivables consist of GST receivable due from the Federal Government of Canada, and a loan to the CTO (Simon Fan). The Company has not experienced any significant credit losses and believes it is not exposed to any significant credit risk.

Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Financial assets and liabilities with variable interest rates expose the Company to cash flow interest rate risk. The Company does not hold any financial liabilities with variable interest rates. The Company does maintain bank accounts which earn interest at variable rates but it does not believe it is currently subject to any significant interest rate risk.

Foreign Currency Exchange Rate Risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in the foreign currency exchange rates. A significant change in the currency exchange rates between the US dollar and the Canadian dollar could have an effect on the Company's results of operations, financial position or cash flows. However, because most of the Company's financial instruments are denominated in Canadian dollars, the Company does not believe it is subject to any significant foreign exchange risk at this time. This may change in the future if the Company pursues its plans to operate in the US.

RISKS AND UNCERTAINTIES

Risk is inherent in all business activities and cannot be entirely eliminated. The Company's goal is to mitigate the risks arising from business activities, the markets and political environments in order to sustain and develop the Company's operations. The risks and uncertainties described in the AIF under "*Risk Factors*" are considered by management to be the most important in the context of the Company's business. Such risks and uncertainties are not inclusive of all risks and uncertainties the Company may be subject to and other risks may apply.

Going Concern

Certain conditions may cast doubt upon the ability of Zinc8 to continue as a going concern: Zinc8 has a limited commercial operating history, and no revenues to provide ongoing operating capital; and until sufficient cash flows from operations are generated on a consistent basis, Zinc8 will be reliant on debt and equity financing and government funding to sustain operations.

Zinc8's ability to generate sufficient cash flows to maintain normal operations, if unsuccessful, will result in it not being able to continue as a going concern. Zinc8 has incurred significant losses to date and there is uncertainty about Zinc8's ability to continue as a going concern. Management has been able, thus far, to finance operations through debt and equity financings and government funding and will continue, as appropriate, to seek financing from these and other sources; however, there are no assurances that any such financings can be obtained on favorable terms, if at all. In addition, Zinc8 may be required to reduce operating expenditures which could have an adverse impact on the ability of Zinc8 to execute on its business plan. In view of these conditions, the ability of Zinc8 to continue as a going concern is dependent upon its continued ability to obtain financing, generate sufficient cash flows, reduce expenditures and, ultimately, achieve profitable operations.

Liquidity

Shareholders may be unable to sell significant quantities of common shares into the public trading markets without a significant reduction in the price of their common shares, or at all. There can be no assurance that there will be sufficient liquidity of the common shares on the trading market, and that the Company will continue to meet the listing requirements of the CSE or other public listing exchanges.

Market Price of common shares

The market price of the common shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond the Company's control. This volatility may affect the ability of holders of common shares to sell their securities at an advantageous price. Market price fluctuations in the common shares may be due to the Company's operating results failing to meet expectations of securities analysts or investors in any period, downward revision in securities analysts' estimates, adverse changes in general market conditions or economic trends, acquisitions, dispositions or other material public announcements by the Company or its competitors, along with a variety of additional factors. These broad market fluctuations may adversely affect the market price of the common shares.

Market for common shares

A broad market for our common shares may not sustainably develop in the future. If a broad market for our common shares does not sustainably develop, Zinc8's shareholders may have difficulty selling their common shares and the market price for our common shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond Zinc8's control. This may also impact Zinc8's ability to obtain equity financing.

Dilution

The Company will need to raise additional funding in order to complete the development of, create additional manufacturing capacity for, and to commercialize its products and to conduct the research and development and regulatory activities necessary to bring its products to market. To the extent that the Company raises additional capital by issuing equity securities, the share ownership of existing stockholders will be diluted. Any future debt financing may involve covenants that restrict the Company's operations, including limitations on the Company's ability to incur liens or additional debt, pay dividends, redeem its stock, make certain investments and engage in certain merger, consolidation or asset sale transactions. In addition, if the Company must seek funds through arrangements with collaborative partners, these arrangements may require the Company to relinquish rights to some of its technologies or product candidates or otherwise agree to terms that are unfavorable to the Company.

Volatility in Capital Markets

Under present market conditions, publicly traded securities in the industrial technology industry are subject to price volatility. The market for securities of industrial technology companies may be subject to market trends regardless of the success of Zinc8. A volatile capital market may impede the ability to undertake future financings, strategic alliances and acquisitions.

No Dividends

The Company has never paid cash dividends on any of its share capital, and the Company currently intends to retain future earnings, if any, to fund the development and growth of the business. Therefore, holders of common shares are not likely to receive any dividends on such shares for the foreseeable future or at all. Since the Company does not intend to pay dividends, any ability of a holder of common shares to receive a return on its investment will depend on any future appreciation in the market value of such shares. There is no guarantee that the common shares will appreciate or ever maintain the current price.

FINANCIAL AND DISCLOSURE CONTROLS AND PROCEDURES

In connection with National Instrument 52-109 (Certification of Disclosure in Issuer's Annual and Interim Filings) ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company have filed a Venture Issuer Basic Certificate with respect to the financial information contained in the condensed interim consolidated financial statements for the three months ended March 31, 2023, and this accompanying MD&A (together the "Interim Filings").

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information the reader should refer to the Venture Issuer Basic Certificates filed by the Company with the Interim Filings on SEDAR at www.sedar.com. Additional information related to the Company, including the Company's annual information form for the year ended December 31, 2022, is available on SEDAR at www.sedar.com.