

51-102F3
MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Zinc8 Energy Solutions Inc. (the "Company")
#1 - 8765 Ash Street
Vancouver, BC V6P 6T3

Item 2 Date of Material Change

December 22, 2022

Item 3 News Release

The news release was disseminated on December 22, 2022 through ACCESSWIRE.

Item 4 Summary of Material Change

The Company announced that, it has completed a non-brokered private placement (the "**Private Placement**") pursuant to which it has issued an aggregate of 14,123,500 units (each, a "**Unit**") at a price of \$0.20 per Unit for gross proceeds of \$2,824,700.

Item 5 Full Description of Material Change

5.1 Full Description of Material Change

The Company announced that, it has completed the Private Placement pursuant to which it has issued an aggregate of 14,123,500 Units at a price of \$0.20 per Unit for gross proceeds of \$2,824,700.

Each Unit issued is comprised of one common share in the capital of the Company (each, a "**Share**") and one non-transferable share purchase warrant (each, a "**Warrant**"). The Warrants are exercisable for a period of two (2) years at a price of \$0.30 in the first year from the date of issuance and at a price of \$0.40 for the balance of the term. The Company paid finder's fees of \$6,740 and issued 21,700 share purchase warrants (the "**Broker's Warrants**") to certain finders in connection with the Private Placement. The Broker's Warrants were issued on the same terms as the Warrants.

The proceeds of the Private Placement will be used for working capital expenditures including operating expenses, research and development, pursuing advancement of the Company's business plan, salaries and wages, investor relations and marketing fees, and professional fees.

All securities issued pursuant to the Private Placement are subject to a hold period of four (4) months and a day from closing of the Private Placement in accordance with securities laws.

Disclosure Required by MI 61-101

Pursuant to Multilateral Instrument 61-101 - *Protection of Minority Security Holders in Special Transactions* ("MI 61-101"), the Offering constitutes a "related party transaction" as related parties of the Company participated in the Offering.

The following supplementary information is provided in accordance with Section 5.2 of MI 61-101.

(a) a description of the transaction and its material terms:

The Company entered into a subscription agreement with Sorin Spinu, the Chief Financial Officer of the Company, whereby Mr. Spinu agreed to purchase 100,000 Units of the Company at a price of \$0.20 per Share for proceeds of \$20,000.

(b) the purpose and business reasons for the transaction:

Proceeds of the Offering are anticipated to be used for working capital expenditures including operating expenses, research and development, pursuing advancement of the Company's business plan, salaries and wages, investor relations and marketing fees, and professional fees.

(c) the anticipated effect of the transaction on the issuer's business and affairs:

The Offering will be used for working capital expenditures including operating expenses, research and development, pursuing advancement of the Company's business plan, salaries and wages, investor relations and marketing fees, and professional fees.

(d) a description of:

(i) the interest in the transaction of every interested party and of the related parties and associated entities of the interested parties:

See item (a).

(ii) the anticipated effect of the transaction on the percentage of securities of the issuer, or of an affiliated entity of the issuer, beneficially owned or controlled by each person or company referred to in subparagraph (i) for which there would be a material change in that percentage:

The following table sets out the effect of the Offering on the percentage of securities of the Company beneficially owned or controlled by Mr. Spinu:

Name and Position	Dollar Amount of Shares Purchased	Number of Securities Purchased	No. of Shares Held prior to Closing of the Offering	Percentage of Issued and Outstanding Shares prior to Closing of the Offering	No. of Shares Held After Closing of the Offering	Percentage of Issued and Outstanding Shares After Closing of the Offering
Sorin Spinu Chief Financial Officer	\$20,000	100,000 Shares	Undiluted: 1,016,811 ⁽¹⁾	Undiluted: 0.62% ⁽³⁾	Undiluted: 1,116,811 ⁽⁵⁾	Undiluted: 0.63% ⁽⁷⁾
			Diluted: 1,780,916 ⁽²⁾	Diluted: 1.09% ⁽⁴⁾	Diluted: 1,980,916 ⁽⁶⁾	Diluted: 1.11% ⁽⁸⁾

⁽¹⁾ Comprised of: (i) 1,016,811 Shares held directly;

⁽²⁾ Comprised of: (i) 1,016,811 Shares held directly, (ii) 100,000 warrants held directly, each of which is exercisable into one Share at a price of \$0.30 per Share, (iii) 33,565 stock options held directly, each of which is exercisable in to one Share at a price of \$0.32 per Share, (iv) 68,040 stock options held directly, each of which is exercisable in to one Share at a price of \$0.21 per Share, and (v) 562,500 restricted stock units (each, an "RSU") held directly, each of which is convertible into one Share upon release.

⁽³⁾ Based on 162,577,317 Shares outstanding prior to the completion of the Offering.

- (4) Based on 163,341,422 Shares outstanding on a partially-diluted basis prior to the completion of the Offering, comprised of: (i) 162,577,317 outstanding prior to the completion of the Offering, (ii) 100,000 Shares that may be issued on exercise of warrants held directly, (iii) 101,605 Shares that may be issued on exercise of stock options held directly, and (iv) 562,500 RSUs.
- (5) Based on 176,450,817 Shares outstanding following the completion of the Offering.
- (6) Comprised of: (i) 1,116,811 Shares held directly.
- (7) Comprised of: (i) 1,116,811 Shares held directly, (ii) all of the convertible securities of the Company set out in footnote (2) above, and (iii) 100,000 warrants that held directly, each of which is exercisable into one Share at a price of \$0.30 for the first year and \$0.40 for the second year.
- (8) Based on 177,314,922 Shares outstanding on a partially diluted-bases following the completion of the Offering, comprised of: (i) 176,450,817 Shares outstanding following the completion of the Offering, (ii) 200,000 Shares that may be issuable on exercise of warrants held directly, (iii) 101,605 Shares that may be issuable on exercise of stock options held directly, and (iv) 562,500 RSUs which has the right to receive one common share.

(d) unless this information will be included in another disclosure document for the transaction, a discussion of the review and approval process adopted by the board of directors and the special committee, if any, of the issuer for the transaction, including a discussion of any materially contrary view or abstention by a director and any material disagreement between the board and the special committee:

(e) unless this information will be included in another disclosure document for the transaction, a discussion of the review and approval process adopted by the board of directors and the special committee, if any, of the issuer for the transaction, including a discussion of any materially contrary view or abstention by a director and any material disagreement between the board and the special committee.

A resolution of the board of directors was passed on December 22, 2022 which approved the Offering. No special committee was established in connection with the transaction, and no materially contrary view or abstention was expressed or made by any director.

(f) a summary in accordance with section 6.5 of MI 61-101, of the formal valuation, if any, obtained for the transaction, unless the formal valuation is included in its entirety in the material change report or will be included in its entirety in another disclosure document for the transaction:

Not applicable.

(g) disclosure, in accordance with section 6.8 of MI 61-101, of every prior valuation in respect of the issuer that related to the subject matter of or is otherwise relevant to the transaction:

(i) that has been made in the 24 months before the date of the material change report:

Not applicable.

(ii) the existence of which is known, after reasonable enquiry, to the issuer or to any director or officer of the issuer:

Not applicable.

(h) the general nature and material terms of any agreement entered into by the issuer, or a related party of the issuer, with an interested party or a joint actor with an interested party, in connection with the transaction:

See item (a).

(i) disclosure of the formal valuation and minority approval exemptions, if any, on which the issuer is relying under sections 5.5 and 5.7 of MI 61-101 respectively, and the facts supporting reliance on the exemptions:

The Company did not file a material change report 21 days prior to closing of the Offering as the Company was not aware of all details of the insider participation in the Offering until just before closing.

See attached new release with respect to the matter described above.

5.2 *Disclosure for Restructuring Transactions*

N/A

Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102

N/A

Item 7 Omitted Information

None

Item 8 Executive Officer

Contact: Ron MacDonald, Chief Executive Officer
Telephone: 604.366.5918

Item 9 Date of Report

December 29, 2022

Zinc8 Energy Solutions Announces Closing of Private Placement

/THIS NEWS RELEASE IS INTENDED FOR DISTRIBUTION IN CANADA ONLY AND IS NOT FOR DISTRIBUTION, DIRECTLY OR INDIRECTLY, IN OR INTO THE UNITED STATES (INCLUDING ITS TERRITORIES AND POSSESSIONS, ANY STATE OF THE UNITED STATES OR THE DISTRICT OF COLUMBIA), OR ANY JURISDICTION WHERE TO DO SO WOULD CONSTITUTE A VIOLATION OF THE RELEVANT LAWS OF SUCH JURISDICTION/

VANCOUVER, BC, Dec. 22, 2022 /CNW/ - Zinc8 Energy Solutions Inc. ("**Zinc8**" or the "**Company**") (CSE: ZAIR) (OTC: ZAIRF) (FSE: 0E9) is pleased to announce that it has completed a non-brokered private placement (the "**Private Placement**") pursuant to which it has issued an aggregate of 14,123,500 units (each, a "**Unit**") at a price of \$0.20 per Unit for gross proceeds of \$2,824,700.

The proceeds of the Private Placement will be used for working capital expenditures including operating expenses, research and development, pursuing advancement of the Company's business plan, salaries and wages, investor relations and marketing fees, and professional fees.

Each Unit issued is comprised of one common share in the capital of the Company (each, a "**Share**") and one non-transferable share purchase warrant (each, a "**Warrant**"). The Warrants are exercisable for a period of two (2) years at a price of \$0.30 in the first year from the date of issuance and at a price of \$0.40 for the balance of the term. The Company paid finder's fees of \$6,740 and issued 21,700 share purchase warrants (the "**Broker's Warrants**") to certain finders in connection with the Private Placement. The Broker's Warrants were issued on the same terms as the Warrants. Certain insiders of the Company purchased a total of 5,100,000 Units under the Private Placement, which is a "related party transaction" within the meaning of Multilateral Instrument 61-101 Protection of Minority Security Holders in Special Transactions ("MI 61-101"). The issuances to the insiders are exempt from the valuation requirement of MI 61-101 by virtue of the exemption contained in section 5.5(b) as the Company's shares are not listed on a specified market and from the minority shareholder approval requirements of MI 61-101 by virtue of the exemption contained in section 5.7(a) of MI 61-101 in that the fair market value of the consideration of the securities issued to the related parties did not exceed 25% of the Company's market capitalization.

All securities issued pursuant to the Private Placement are subject to a hold period of four (4) months and a day from closing of the Private Placement in accordance with securities laws.

The securities offered have not been, and will not be, registered under the United States Securities Act of 1933, as amended, or any state securities laws, and may not be offered, sold or delivered, directly or indirectly, in the United States, its possessions and other areas subject to its jurisdiction or to, or for the account or for the benefit of a U.S. person, unless an exemption from registration is available. This news release is for information purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any securities of the Company in any jurisdiction.

Zinc8 Energy Solutions focuses on developing and commercializing its low-cost, long duration ZESS for utilities, microgrid, and Commercial & Industrial markets. By using the patented ZESS as a standalone or an enabling technology, it allows opportunities for peak demand reduction, time-of-use arbitrage, and participation in both the value stacking programs and the distributed long-duration energy storage space, all in conjunction with the opportunity for a significant reduction in carbon footprint. The long duration (8-100+ hours) ZESS has no fire and explosion risk, has no capacity

About Zinc8 Energy Solutions Inc. Zinc8 has assembled an experienced team to execute the development and commercialization of a dependable low-cost zinc-air battery. This mass storage system offers both environmental and efficiency benefits. Zinc8 strives to meet the growing need for secure and reliable power. To learn more about Zinc8's technology, please visit: <https://zinc8energy.com>



The Zinc8 ESS is a modular Energy Storage System designed to deliver power in the range 20kW - 50MW with capacity of 8 hours of storage duration or higher. (CNW Group/Zinc8 Energy Solutions Inc.)

More about the Zinc8 Energy Storage System (ESS)

The *Zinc8* ESS is a modular Energy Storage System designed to deliver power in the range 20kW - 50MW with capacity of 8 hours of storage duration or higher. With the advantage of rechargeable zinc-air flow battery technology, the system can be configured to support a wide range of long-duration applications for microgrids and utilities. Since the energy storage capacity of the system is determined only by the size of the zinc storage tank, a very cost-effective and scalable solution now exists as an alternative to the fixed power/energy ratio of the lithium-ion battery.

Technology

The *Zinc8* ESS is based upon unique patented zinc-air battery technology. Energy is stored in the form of zinc particles, similar in size to grains of sand. When the system is delivering power, the zinc particles are combined with oxygen drawn from the surrounding air. When the system is recharging, zinc particles are regenerated, and oxygen is returned to the surrounding air.

Applications

The flexibility of the *Zinc8* ESS enables it to service a wide range of applications. Typical examples include:

- Smoothing energy derived from renewable sources such as wind and solar
- Commercial/Industrial backup replacing diesel generators
- Industrial and grid scale, on-demand power for peak shaving and standby reserves
- Grid-scale services such as alleviating grid congestion, deferring transmission/distribution upgrades, energy trading and arbitrage, and increasing renewable energy penetration.

Architecture

The *Zinc8* ESS is designed according to a modular architecture that enables a wide variety of

implements a single element of the technology:

- The Zinc Regeneration Subsystem (ZRS) provides the recharging function
- The Fuel Storage Subsystem (FSS) provides the energy storage function
- The Power Generation Subsystem (PGS) provides the discharging function

Notice Regarding Forward Looking Statements

All statements and disclosures, other than those of historical fact, which address activities, events, outcomes, results or developments that Zinc8 Storage anticipates or expects may or will occur in the future (in whole or in part) should be considered forward-looking statements.

Forward looking statements in this press release include that the proceeds of the Private Placement will be used as described herein, that we can execute the development and commercialization of a dependable low cost zinc-air battery; that our mass storage system offers both environmental and efficiency benefits; that we can help meet the needs for secure and reliable power, that the support of Senator Schumer will weigh heavily on Zinc8's decisions relating to location of its first manufacturing facility, and that federal funding will be available in the United States for U.S. based battery research, development and production. Zinc8 Energy Solutions believes the material factors, expectations and assumptions reflected in the forward-looking statements are reasonable at this time, but no assurance can be given that these factors, expectations and assumptions will prove to be correct. The forward-looking statements included in this news release are not guarantees of future performance. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements including, without limitation: that the Company may not use the proceeds of the Private Placement as described herein, that we are not able to raise additional funds as expected on terms that are favourable to the Company or at all; that our technology fails to work as expected or at all; that our technology proves to be too expensive to implement broadly; that customers do not adapt our products for being too complex, costly, or not fitting with their current products or plans; our competitors may offer better or cheaper solutions for battery storage; general economic, market and business conditions; increased costs and expenses; inability to retain qualified employees; our patents may not provide protection as expected and we may infringe on the patents of others; the completion of our planned private placement or are unable to raise all of the funds we are seeking to raise; that Senator Schumer may not continue to support Zinc8; that Zinc8 may not open a manufacturing facility; that federal funding in the United States may not be available to Zinc8 on favourable terms or at all; and certain other risks detailed from time to time in Zinc8 Energy Solution's public disclosure documents, copies of which are available on the Company's SEDAR profile at www.sedar.com. Readers are cautioned that the foregoing list of factors is not exhaustive and are cautioned not to place undue reliance on these forward-looking statements.

The forward-looking statements contained in this news release are made as of the date hereof and the Company undertakes no obligations to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.

Neither the CSE nor any Market Regulator (as that term is defined in the policies of the CSE) accepts responsibility for the adequacy or accuracy of this release.

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