

REDEFINING LONG-DURATION STORAGE CORPORATE PRESENTATION MARCH 2023

CSE: ZAIR - OTC: ZAIRF - FSE: 0E9

IMPORTANT DISCLOSURES



- Certain information in this presentation constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this presentation that are not statements of historical fact are forward-looking statements. Forward looking statements are often identified by terms such as "may", "should", "anticipate", "expect", "potential", "believe", "intend", "estimate" or the negative of these terms and similar expressions. All statements, other than statements of historical fact, included herein are forward-looking statements and are based upon assumptions regarding expected growth, results of operations, performance, industry trends and expansion opportunities as of the date of this presentation. Forward-looking statements in this presentation include, among other things, statements regarding: the Company's ability to execute the development and commercialization of a dependable low-cost zinc-air battery; the Company's mass storage system's ability to offer both environmental and efficiency benefits; the Company's ability to meet the needs for secure and reliable power; that the Company's technology will work as described herein; that there will be market adoption of the Company's technology; that the Company's technology will be scalable; that there are cost savings for longer duration storage systems; that there is an abundance of the raw materials required for the production of the Company's products; that the Company's products; that there is a large and growing market for the Company's products and that the Company will be able to address market demands for its products; the projected market data for behind the meter and front of meter technology; that government regulation will continue to drive adoption of battery storage solutions; that the company will company will be able to scale production if required; that the Company will be able to scale production if required; that the Company's business; that the Company will be at the rate and on the timeline described in this presenta
- By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements, or other future events, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, but are not limited to: adverse market conditions; risks regarding protection of proprietary technology; the ability of the Company to complete financings on terms favourable to the Company, or at all; the ability of the Company to develop and market its future product; the ability of the Company to commence manufacturing of its product at a commercial scale; risks related to government regulation; the risk that their competitors may develop a superior product that is more widely accepted by the market; that the size of the market for the Company; that the Company's technology will not perform as expected; the risk that the size of the market and business conditions; increased costs and expenses; and certain other risks detailed from time to time in the Company'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 is not exhaustive. Readers are further cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results to differ materially from those anticipated. For more information on the risk, uncertainties and assumptions that could cause anticipated opportunities and actual results to differ materially, please refer to the public filings of the Company which are available on SEDAR at www.sedar.com. Forward-looking statements contained in this presentation are expressly qualified by this cautionary statement and re
- This presentation contains future-oriented financial information and financial outlook information (collectively, "**FOFI**") about the Company's prospective results of operations, including revenue from sales, tax credits and other sources, size of a prospective market for the Company's product, and potential value of tax credits that may be available to the Company and the timeline for their availability, all of which are subject to the same assumptions, risk factors, limitations, and qualifications as set forth in the above paragraphs. FOFI in this presentation may not prove to be accurate and actual financial results could be materially different than the estimates herein for a variety of reasons. FOFI contained in this presentation was made as of the date of this presentation and was provided for the purpose of providing further information about the Company's future business operations. The Company disclaims any intention or obligation to update or revise any FOFI contained in this presentation, whether as a result of new information, future events or otherwise, except as required by securities law. Investors are cautioned that the FOFI contained in this presentation should not be used for purposes other than for which it is disclosed herein. The FOFI and financial outlook in this presentation were approved by management of the Company

ZINC8 IS A TECHNOLOGY-FIRST LEADER IN THE LONG-TERM ENERGY STORAGE INDUSTRY

Zinc8 Energy Solutions has developed innovative battery technology that uses zinc and air as fuel. Our technology resolves the intermittent and unpredictable nature of renewable energy sources such as wind and solar.

With a cost-effective solution for energy storage, clean energy is made reliable and available as and when required.

> 21 5 PATENTS ISSUED* PATENTS PENDING**



SOLUTIONS TO ADDRESS INDUSTRY CHALLENGES





Solutions and Services Provided By Zinc8

- Peak management, demand reduction
- Demand response
- Bill management
- Backup power
- Energy arbitrage
- Increase Renewable Energy Penetration & make them dispatchable
- Spin/non-spin reserve
- Frequency regulation
- Voltage support
- Distribution & Transmission deferral
- RE curtailment avoidance

HOW OUR TECHNOLOGY WORKS







1. Power from the grid or renewable source is used to generate zinc particles in the **Zinc Regenerator**. Oxygen is released to the atmosphere as a by-product.

2. The zinc particles are flowed to the **Storage Tank** and maintained in potassium hydroxide (KOH) electrolyte until required.

3. Whenever power is needed, the zinc particles are delivered to the **Power Stack**, recombining them with oxygen to generate electricity. The zinc oxide (ZnO) by-product is returned to the storage tank for later regeneration.

* Includes 12 patents issued by U.S. Patent and Trademark Office ** Includes 1 patent application post December 31, 2021

WHY OUR TECHNOLOGY IS SUPERIOR



DURABLE ROBUST SAFE 20,000 Operating Zero capacity fade over Full discharge cycles. Non-flammable and life hours Same performance extensive lifetime non-toxic LOW COST SCALABLE **SUSTAINABLE Scalable** 100+hrs **Energy storage** Stable supply chains for **Longer duration Energy capacity easily** requirements, lower extended by adding larger mass manufacturing cost per kWh fuel tank

OUR TECH ENABLES DECOUPLING OF ENERGY AND POWER





💼 🔹 Lithium Ion Power & Energy Are Coupled 🖊



Unlike lithium-ion technology, which requires new stacks in order to scale, Zinc8 has completely decoupled the linkage between energy and power. This means that scaling Zinc8's technology can be accomplished by simply increasing the size of the fuel tank and quantity of recharged zinc fuel.

Other technologies like Metal-based hybrid/flow batteries and Li-ion are coupled.

DECOUPLING DRIVES SCALABILITY



Zinc8 battery can be scalable and customizable for different applications with various power/energy requirements from 5 kW to MW-scale



High Charge Power

More Charge Power (kW) Capture more clean energy (wind & solar) for faster charging

Application: Solar-PV + Storage



Longer Discharge Duration

More Energy (kWh) Provide energy for 6+ - 96+ Hours

Application: Off-grid areas, 100% Renewable Energies integrated grids, Microgrids



High Discharge Power

More Discharge Power (kW) Provide more power & cover higher load demands (e.g., large buildings' load demand)

Application: Utilities, Industrial

DECOUPLING DRIVES SCALABILITY



Comparison of different technologies for a 100 kW battery system



By decoupling the linkage between power and energy, and using low-cost, abundant materials, our system is capable of reducing its capital cost dramatically for longer-duration applications.

References:

[1] Wentker M, Greenwood M, Leker J. "A Bottom-Up Approach to Lithium-Ion Battery Cost Modeling with a Focus on Cathode Active Materials". Energies. 2019; 12(3):504. https://doi.org/10.3390/en12030504
[2] Christine Minke, Ulrich Kunz, Thomas Turek, "Techno-economic assessment of novel vanadium redox flow batteries with large-area cells", Journal of Power Sources, Volume 361, 2017, Pages 105-114, ISSN 0378-7753, https://doi.org/10.1016/j.jpowsour.2017.06.066.



MARKET VALIDATION OF ZINC8'S TECHNOLOGY



Winner of NYC DOB's 2020 Innovation Challenge



New York City Department of Building regulates more than 1M buildings

Only storage solution in the winning group

- Government support
- Speed up permitting process
- Increase energy efficiency score



Winner of Real Estate Board of NY

2022 PropTech Challenge

REBNY is New York City's leading real estate trade association

Selected as a best-in-class solution for the energy storage category

- REBNY, the leading real estate trade association in NYC
- Increase Zinc8's brand visibility across the target markets
- Promote awareness of an upcoming energy solution to comply with the government mandate (Local Law 97)



Accepted into Accelerator

Third Derivative

Finds, funds, hones, and scales the most promising energy technologies globally

- Pool of investors with over \$800M of committed capital
- Global corporate partners with over \$3T of market cap





Accepted into Accelerator

for ClimateTech

De-risking critical decisions throughout our manufacturing scale-up process

For ClimateTech will support Zinc8 with:

- Early design for manufacturing
- Refining a prototype
- Negotiating partner and supplier agreements
- Logistics and sourcing management

Secured Supply Chain with Abundant Raw Materials





Zinc costs remain reasonable versus industry comparatives



A LARGE AND GROWING ADDRESSABLE MARKET (By 2027)





GOVERNMENT REGULATION IS DRIVING ADOPTION



State	GHG Emission Reduction	Timeline		
Washington	95% (of 1990 levels)	2050		
Oregon	80% (of 1990 levels)	2050		
California	80% (net-zero by 2045)	2050		
Nevada	Net-zero	2050		
Montana	Net-zero	2045-2050		
Colorado	90% (of 2005 levels)	2050		
New Mexico	45% (of 2005 levels)	2030		
Minnesota	80% (of 2005 levels)	2050		
Louisiana	40-50% (of 2005 levels) and net-zero by 2050	2030		
Michigan	26-28% (of 2005 levels) and net zero by 2050	2025		
North Carolina	40% (of 2005 levels)	2025		
Virginia	Net-zero	2045		
Maryland	40% (of 2006 levels)	2030		
Delaware	30% (Of 2008 levels)	2030		
New Jersey	80% (of 2006 levels)	2050		
New York	85% (of 1990 levels) and net-zero	2050		
Connecticut	80% (of 2001 levels)	2050		
Rhode Island	80% (of 1990 levels)	2050		
Massachusetts	85% (of 1990 levels) and net-zero	2050		
Vermont	80% (of 1990 levels)	2050		
New Hampshire	80% (of 1990 levels)	2050		
Maine	80% (of 1990 levels)	2050		
Hawaii	Net-zero	2050		
District of Columbia	80% (of 2006 levels) and net-zero	2050		
Wisconsin	26–28% (of 2005 levels)	2025		
Illinois	26–28% (of 2005 levels)	2025		



25 states and the District of Columbia have GHG targets



ZINC8'S BUSINESS MODEL & STRATEGY



Before Commercializing (Demonstrations)



Target Production After Commercialization



BUSINESS STRATEGY

Collaboration and partnership with large project developers

BUSINESS MODEL

- I. Channel Sales Through Partnerships
- II. Build-Own-Operate

PARTNERS & COLLABORATORS



NUMEROUS DEMONSTRATION PROJECTS UNDERWAY



Data Centers Demo with Global Cloud Provider	Queens, NYC	Univ. at Buffalo (UB), NY					
STAGE: COMPLETED	STAGE: ENG. DESIGN	STAGE: ENG. DESIGN					
10kW / 80kWh (8-hr duration)	100kW / 1.5MWh (15-hr duration)	100kW / 1MWh (10-hr duration)					
 \$200,000 contract signed 11 month project 	 DE operates 100+ CHP sites for future pipeline in New York and California Recognized developer within the industry Partners and Collaborators: 	 Winner of NYPA's Innovation Challenge Largest state public utility in the US Leads the state in accelerating new technologies Access to an exclusive network Collaborators: 					
Testing for resilient backup application Testing combination of UPS and Zinc8's zinc-air system	DIGITAL ENERGY CORP	URBAN FUTURE LAB					
See Press Release	See Press Release	See Press Release					

EXPANSION OF MANUFACTURING CAPACITY UNDERWAY



Consulting Firms Engaged for Commercial Development Plan



Ramboll Engineering Site reviews, permits/approvals, code review, critical issues analysis, Site selection report. 3 sites under analysis.



Deloitte

Federal and State tax incentives, research & development tax credits, sales and use tax benefits, property tax reductions, cash grants, training benefits, infrastructure incentives etc.

ROADMAP

		2023		2024		2025		2026		2027		2028		2029		2030
Application	Behind Meter	d-The-			Front of the Meter Distributed Renewables											
Markets	• C&I • Buil	l ding	• C8 • Bu	kl ilding	• Mi	crogrids	• Ut	ilities	• GI	obal	• G	lobal	• G	lobal	• GI	obal
Projects	Demo Univer Buffal	o: NYPA / rsity of lo	Dem Mead (NYS more	o: Fresh dows ERDA) +	Large Indus Comp	e trial panies	To b anno	e ounced	To be anno	e ounced	To b ann	e To be ounced announced		e ounced	To be announced	
Corporate Milestone			 Re Init Pro 	venue tial oduction	• Pro Sco	oduction ale-up										



EXPERIENCED MANAGEMENT TEAM





Ron MacDonald

Over 35 years of both public and private sector experience, ranging from significant roles within the Parliament of Canada to president & CEO and serving on the boards of numerous publicly listed resource companies.



Dr. Simon Fan Ph.D, P.Eng CTO, VP of Product Management

Zinc8's Founding Engineer; PhD in Chemical Engineering & M.Eng., specialized in Engineering Management; over 17 years' experience in R&D specializing in electrochemistry, fuel cells, and batteries; Authored approximately 15 peer-reviewed publications and over 10 patents and patent applications.



Sorin Spinu CFO

> Over 19 years' experience in financial accounting, analysis and reporting, & financial analytics and controls. Accounting Manager at Fabricana Imports Ltd. Assistant Controller at C&C Packing Group of Companies Accountant at Ace Style Group.



Mark Baggio VP of Business Development

Over 20 years' experience working globally and building new markets for companies in the renewable energy, energy storage and energy minerals sectors. VP at NRStor Remotes Communities & Mines Inc., Director, Global Markets & Business Development at American Vanadium Corp., Board Member & Market Development at Critical Elements Lithium Corp.



Tristan Sloan VP of Engineering

Zinc8's Founding Engineer; over 15 years' experience in Product Design & Development Mechanical Engineer at IMW Industries, Fuelling Research Engineer at Angstrom Power Inc., Mechanical Designer at Greenlight Power Technologies Inc.

CORPORATION STRENGTHENED BY NEW BOARD MEMBERS





Bernard Pinsky Q.C.

Chair of the board and a founding director of one of British Columbia's largest philanthropic foundations by assets. Senior partner and co-head of the Corporate Finance and Securities group at the law firm of Clark Wilson LLP. Practiced law for over 34 years and has advised a variety of public

and private companies and securities brokerage firms on legal matters related to acquisitions, mergers, takeovers, initial public offerings, financings, cross-border transactions, public and private company regulatory compliance and stock exchange practice.

- Chair of the board and a founding director at Ronald S. Roadburg Foundation
- senior partner and co-head of the Corporate Finance and Securities group at Clark Wilson LLP
- Advisor at various public and private companies and securities brokerage firms on legal matters related to acquisitions, mergers, takeovers, initial public offerings, financings, cross-border transactions, public and private company regulatory compliance and stock exchange practice
- Leader and member of charitable and not for profit organizations since 1981
- Best Lawyers in Canada recognition as Best Lawyer for Securities Law annually 2014 to 2021, inclusive.
- Appointment as British Columbia Queen's Counsel (Q.C. designation) in recognition of exceptional merit and contribution to the legal profession 2014.
- Queen Elizabeth II Diamond Jubilee Medal in recognition of long community service 2012



Storm Boswick

An experienced Founder, Partner, Portfolio Manager(PM), and Sr Managing Director(MD) in Asset Mgt & Inv Banking. Also a Venture Capitalist, Long/Short PM, and skilled Investor and Advisor in Public & Private Equity and Public & Private Debt. As a Strategic Advisor he

works on mandates including Governance & Corporate Advisory, Mergers & Acquisitions, Public-Private Partnerships, Capital Formation & Introduction, and Commercial Introductions. He's a strong business development professional with extensive experience as an investment/industry conference presenter, panelist, media contributor, and lecturer.

- Inv Research Goldman Sachs
- Partner/PM J&W Seligman
- PM Sigma Capital (SAC)
- Founder/PM Brompton Cross
- Partner/SrMD Brock Capital (MD Medley; MD Brightwood; SrAdv MC Credit)
- Founder/MD TRE Advisors
- VC Investor: Stamps.com; Howstuffworks.com; Inktom; iVillage; Interwoven; Capstone; ONI Systems; iBiquity; TruSecure; USTowerCo; AutoWeb; ThinkBurger
- Debt Investor: WheelsUp; IRDM; Aderant; BeyondTrust; DDC; HooverContainer; BattleFin; Drylce; AmApp; Shea
- StrAdvisor/InvBanker: USARareEarth; EVR Motors; blueflite; Amrita; Chakratec; Ramon.Space; CST/GuardianSpace; Moonscape; LithiumAmericas; GreatPoint; GRI/PureFonte; Dundee/Redecam; Sherbet; KOD; HeartPoint; Geenee; EGG; CBGB

AS OF FEBRUARY 28, 2022



Shares outstanding	179,094,151	
Warrants outstanding	14,145,200 @ \$0.30	-
Options outstanding	200,000 @ \$0.20 2,571,929 @ \$0.21 1,000,000 @ \$0.22 2,188,885 @ \$0.32 6,115,000 @ \$0.62	
Restricted share units	7,744,166	T a
Deferred share units	1,002,904	
Fully diluted	205,315,165	
Market capitalization	\$28,655,000 (at \$0.16)	
Tickers	CSE: ZAIR, OTC: ZAIRF, FSE: 0E9	





THANK YOU

Contact

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