

# Zinc8 Energy Solutions Announces First Commercial Production Site to Be Based in The United States

*~Zinc8's US manufacturing and production plans to benefit from Inflation Reduction Act~*

VANCOUVER, BC, Sept. 1, 2022 /CNW/ - Zinc8 Energy Solutions Inc. ("**Zinc8**" or the "**Company**") (CSE: ZAIR) (OTC: ZAIRF) (FSE: 0E9) today announces that the company's inaugural commercial production facility will be based in the United States. Based upon comprehensive analysis done by the company, the recently announced Inflation Reduction Act ("IRA")'s manufacturing production credits contained within Section 45X provide distinct and direct benefits to Zinc8 and its production plans in the United States ("US").

"Senate Majority Leader Chuck Schumer was instrumental in drafting the IRA, which is a historic measure taken by the United States to reach ambitious goals of carbon neutrality, while inspiring other countries around the world," said Ron MacDonald, President & CEO, Zinc8 Energy Solutions.

In July 2022, Senator Schumer personally called the CEO of Zinc8, Ron MacDonald, to urge the company to expand their operations in New York state and particularly to Ulster County. The company said the support of the Senator would play a major role in their decision of where to locate their first major production facility. "Zinc8 is the jolt of electricity the Hudson Valley needs, and is proof positive that when you invest in fighting climate change you are investing in creating good-paying jobs, new economic growth, and a brighter future for our communities," said Senator Schumer in a [press release](#).

In addition, Senator Schumer has worked relentlessly to increase federal incentives to bring manufacturing back from overseas, including in tech and clean energy industries, and shepherded the IRA to passage in the Senate, the largest climate package to ever pass the chamber at \$369 billion, and fought to include targeted incentives to help clean battery companies like Zinc8 reach commercialization by expanding their manufacturing operations in the United States. The legislation was signed into law by President Joe Biden on August 16<sup>th</sup>, 2022.

Zinc8 Energy Solutions makes a zinc-air battery that can store and discharge energy durations from 4 to 100 hours, scalability and higher capacity is achieved with an increase in the size of storage tanks that hold zinc particles. The technology will be trialed at a New York City housing complex by the New York State Energy Research and Development Agency (NYSERDA) where a 100kW/1.5MWh zinc BESS is combined with onsite CHP generation.

The Section 45X Advanced Manufacturing Tax Credit included in the IRA provides incentives to battery manufacturers as well as to critical mineral processing companies. Every eligible battery cell will receive a US\$35 credit, scaling with the capacity of the battery, with incentives to last at their initial level until 2029, before phasing down from 2030 to a phase out stage beginning in 2032.

Specific to Zinc8, eligible components include electrode active materials, battery cells and battery modules. Electrode active materials include cathode materials, anode materials, anode foils, and electrochemically active materials, including solvents, additives, and electrolyte salts that contribute to the electrochemical processes necessary for energy storage. With respect to the production of these materials, the US taxpayer producing these materials would be eligible for a credit amount of 10% of the costs incurred.

There is also US\$10 billion support available for construction of clean energy tech factories, or for retrofitting existing factories with tools and production lines to make clean energy equipment and components. President Biden's Bipartisan Infrastructure Law includes US\$6 billion incentives to support R&D and production of batteries in the US as well as supporting the creation of a domestic supply chain.

"This represents some direct and beneficial credit opportunities for Zinc8," adds MacDonald. "It is abundantly clear that with the introduction of the IRA, US policymakers, led by Senator Schumer, are taking real action by introducing incentives that benefit both the climate and the economy. We have received tremendous support both at the federal and state level as we continue to analyze possible sites for our first manufacturing facility."

**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 fade over extensive lifetime, and offers complete charge operational flexibility.

**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>



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## 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 system configurations to be created from a small number of common subsystems. Each subsystem 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 Company will establish a production facility in the United States, that there are tax credits and other benefits available and that the Company could be the beneficiary of such credits and incentives, that the Company will create jobs in the United States, 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; and that we can help meet the needs for secure and reliable power. 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: the risk that the Company will not be able to establish a production facility in the United States, that the credits and incentives in this news release may not be available to the Company and that if they are available the benefit to the Company may be limited, that Senator Schumer may withdraw his support for the Company, that there may be changes to the legislative landscape which negatively impact the Company, that we are not able to raise funds as expected; 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; 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](http://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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