# Enert opia Corporation

## **Enertopia Announces Filing of First Provisional Patent**

Kelowna, British Columbia, May 25th, 2021 - **Enertopia Corporation** ("Enertopia" or the "Company") a company focused on building shareholder value through a combination of our Nevada Lithium claims, intellectual property, & patents in the green technology space, is pleased to provide the following update.

Our Patent Attorneys have informed us our first provisional patent has been filed with the USPTO. This filing is the result of our continued diligence in striving for a more economically and environmentally friendly way to extract lithium from the Claystone at our Nevada Lithium claims.

This technology will allow us to create a closed system loop where only solar energy is used to both start and complete the Li solutions processing. This will be done by taking the excess heat from solar panels and using it to heat our created Li brine solution to the desired ambient temperature of 122F to 140F during the 3 - 4 hour processing cycle. Any excess process water will be kept in insulated storage tanks for use as new batches of Li solution begin processing. Additionally, excess PV production will be stored by batteries and controlled by a BMS (Battery Management System).

As Enertopia moves forward towards our goal of creating a low carbon pilot plant, we realized that there were certain inefficiencies associated with PV panels that could be used to our advantage while processing the lithium claystone found on our claim. In particular, we found that the PV panels are subject to significant heat stress as temperatures rise. Manufacturers generally rate PV panels at a temperature of 77F, while fieldwork in the desert of Nevada showed temperatures on the back of the panels regularly exceeding 140F, damaging the PV panels (resulting in a shorter life span) while also losing significant output. Our provisional patent directly addresses this issue.

### The effect of temperature on solar panel efficiency

Another goal of this project will soon be put through beta testing and monitoring verification. Upon completion of this testing phase, an unnamed 3rd party that has a three-megawatt solar array has agreed for us to do real-time comparative testing on their PV sub-arrays. The goal will be to increase their PV production while simultaneously removing the heat stress, which will, in turn, prolong the life of their PV panels, a common problem associated with running solar arrays in hot, arid regions.

As with most electronic equipment, excess heat can be a killer and solar panel arrays are no different. The performance of solar panels decline as they heat up, and decreased power output is the result. The industry manufacturers rate their products' susceptibility to increasing panel temperature, where It is standard practice to test solar panels for power output at 77 °F. So, if a panel is rated to have a temperature coefficient of -0.50% per 1.8°F above 77 °F, that panel's output power will decrease by half of a percent for every 1.8F degrees the temperature rises above (77

°F). With it being common for PV panels to reach temperatures of 137F, a solar array being 60F into the heat stress zone would equal a decrease of 15% or more on the solar array output.

Other aspects of heat stress include heat fatigue causing permanent PV cell failure, string loss downtime, and 100% production loss.

With over 1.2TW (Terawatts) of worldwide PV installed capacity, and another 100 Gigawatts of PV capacity coming online per year, the inefficiencies that are currently experienced due to overheating are quite extensive and expensive. As the world transitions to a low carbon-based energy system, we feel that there is a large untapped market for the Enertopia technology beyond just the processing of lithium claystone. Our technology has been designed so that it can be retrofitted onto existing PV panels, and we are confident that our upcoming trial run at the 3-megawatt solar array will validate the results we have seen in our own field experiments.

Expected benefits of using the Enertopia Technology:

- A Potential increase of >10% or greater on an annual basis in electrical PV system output
- Removal of panel heat stress, which is a major contributor to below nameplate output and panel failure.
- Substantial Increase in PV System lifetime, thus improving the ROI for all users from home use to utility-scale solar projects.

"Our technical team continues to evaluate synergistic opportunities." Stated CEO Robert McAllister "Enertopia has made great strides forward in the last year by continuing to develop our Nevada lithium property, expanding into Green Technology has resulted in several opportunities that we continue to investigate in improving mining and society at the same time."

#### Conclusion:

We continue to believe that the Lithium hosted claystone deposits in Nevada will become major sources of Lithium production in the 2020s while offering the United States a secure domestic supply of battery-grade Lithium products. We are also excited to see and witness the convergence of several technologies that are changing the very way we produce and consume electrical energy amidst the growing opportunities for a better world.

The Company thanks the shareholders for their questions. We continue to work diligently and methodically along our path that we believe over time will benefit all current stakeholders the most.

### About Enertopia:

A Company focused on using modern technology on extracting lithium and verifying or sourcing other intellectual property in the EV & green technologies to build shareholder value.

Enertopia shares are quoted in the United States under the ticker symbol ENRT. For additional information, please visit www.enertopia.com or call Robert McAllister, the President at 1-888-ENRT201.

This release includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Statements which are not historical facts are forward-looking statements. The Company makes forward-looking public statements concerning its expected future financial position, results of operations, cash flows, financing plans, business strategy, products and services, potential and financing of its mining or technology projects, growth opportunities, plans, and objectives of management for future operations, including statements that include words such as "anticipate," "if," "believe," "plan," "estimate," "expect," "intend," "may," "could," "should," "will," and other similar expressions that are forward-looking statements. Such forward-looking statements are estimates reflecting the Company's best judgment based upon current information and involve a number of risks and uncertainties, and there can be no assurance that other factors will not affect the accuracy of such forward-looking statements., foreign exchange and other financial markets; changes in the interest rates on borrowings; hedging activities; changes in commodity prices; changes in the investments and expenditure levels; litigation; legislation; environmental, judicial, regulatory, political and competitive developments in areas in which Enertopia Corporation operates. There can be no assurance that the testing for the brine recovery system will be effective for the recovery of Lithium and if effective will be economic or have any positive impact on Enertopia, or that current talks with respect to potential joint ventures or partnerships will result in definitive agreements. There can be no assurance that patent #6,024,086 will have a positive impact on Enertopia. There can be no assurance that provisional patents will become patents. The User should refer to the risk disclosures set out in the periodic reports and other disclosure documents filed by Enertopia Corporation from time to time with regulatory authorities.

The OTC has not reviewed and does not accept responsibility for the adequacy or accuracy of this release.