Enertopia Announces Water Producing System for PV Panel Patent Issuance from USPTO

Kelowna, British Columbia--(Newsfile Corp. - February 18, 2025) - **Enertopia Corporation** (OTCQB: ENRT) (CSE: ENRT) ("Enertopia" or the "Company") an energy company focused on building shareholder value through a combination of our intellectual property patents in the green technology space, along with our Nevada lithium claims, is very pleased to provide the following Patent update.

Water Producing System Patent Issued - #12231085

The United States Patent Trademark Office (USPTO) has notified the Company that patent number 12231085 was issued today, February 18, 2025. This system has also been Trademarked as the "ENERTOPIA RAINMAKER".

The ENERTOPIA RAINMAKER can be used during different times of day and atmospheric conditions to capture the moisture (water vapor) in the atmosphere.

Our analysis shows that depending on time and place during the year, key locations in the world are potentially capable of producing 2.45 gallons to over 4 gallons of water per hour for every 80" x 40" PV panel, during peak atmospheric conditions as seen in Table 1 below.

The Current Problem:

In many arid regions of the world desalination plants are a major source of freshwater. Abu Dhabi, U.A.E. for example, uses them to produce approximately 42% of its freshwater, and the majority of its drinking water. Due to lack of freshwater sources, it is important for the UAE, and other similarly arid regions, to identify a sustainable desalination solution to meet long-term water needs.

While desalination plants are effective, they are extremely expensive to build with capital expenditures (CAPEX) running between $1,000 to $2,500 per one cubic meter of water per day m^3/d, which equals 264 gallons of capacity. (OPEX) cost depending on the size of the desalination plant can run from 50 cents for a large 2,500 per m^2/d to a 500 per m^2/d $2.50 cents. And these costs do not include the cost of fuel running many of the bigger projects in the world. Thus desalination plants are only for the few locations that have the capital and source of cheap fuel and can afford to spend billions of dollars to build the plants. Thus thousands of locations and millions of people have had no opportunity for reliable water.

Enertopia's Patented Solution:

Desalination plants use a tremendous amount of energy to produce freshwater, 1,510 Mega Watts (MW) of electricity to produce 100 Million Imperial Gallons (MIGD) of water per day. This energy demand is equivalent to nearly two large scale nuclear plants. Most world governments simply cannot afford to spend billions of dollars and take a decade to build projects that are needed now for a better quality of life. The Enertopia Rainmaker could be coupled with solar arrays where efficient PV power will be produced by day, and water produced by night, and seasonally even during the day.

Enertopia believes that this approach will significantly increase the ROI of any power project where water shortages exist. Arid coastal and seasonally monsoonal areas are particularly favorable for water production as the dew point can be close to the ambient air temperature making it easier to cool down the PV panel and capture the moisture. Due to the scalability of this system it could also work for smaller projects in remote locations with no water or power, and who rely on the trucking or flying in supplies.

Worldwide Potential

Table 1 below uses the data from four locations. Tonopah, NV which is the location of our West Tonopah

Lithium project, is where the data for the first row of column 1 is generated. We were able to show that at maximum production, there is the ability to extract as many as 5,466 gallons of water per hour/MW of solar array. The varying factors in the data are; humidity levels, ambient air temperature, and dew point. Column 2 shows the average water extraction per hour/MW of solar array.

The raw data (humidity levels, air temperature, & dew point) used for each location in the table can be found below in the notes.

LOCATION	Max Production per one MW PV gallons of water per hour[1,2,4]	Average Production per one MW PV gallons of water per hour[3,4]
TONOPAH, NV	5,466	1,622
CENTRAL VALLEY, CA	5,288	2,799
ABU DHABI, UAE	10,376	5,688
ANTOFAGASTA, CHILE	5,355	4,221

Table 1

Note:
1) Tonopah based on 3AM local time air temperature 59F, dew point 54F and humidity 83%. Central Valley based on 3AM local time air temperature 65F, dew point 60F and humidity 82%. Abu Dhabi based on 3AM local time air temperature 91F, dew point 86F and humidity 84%. Antofagasta based on 3AM local time air temperature 64F, dew point 59F and humidity 83%.
2) Estimated net water production per panel 2.46 gal per hour Tonopah, 2.38 gal per hour Central Valley, 4.67 gal per hour Abu Dhabi and 2.41 gal per hour Antofagasta.
3) Based on yearly average 3 AM air temperatures, dew points and humidity levels for and water production per panel from each location mentioned above.
4) PV panel size used 80"x 40" 2,222 panels = 1 MW PV, wind speed assumed 4 mph.

Generally, moisture that exists in air is measured as grains of moisture per pound of dry air. At the point of saturation (e.g., dew point), water forms on cool surfaces. This process generally occurs at night. During the heat of the day, as ambient hot air pulls moisture from surrounding environments, moisture will also form on cool surfaces, with our heat recovery system taking advantage of these conditions to collect and retain the moisture formed at dew point temperatures.

The moisture collection layer is positioned between the photovoltaic panel and the liquid transfer system to facilitate the rapid transfer of heat from the photovoltaic panel to the liquid transfer system. In some instances, during periods when, due to surrounding ambient conditions, moisture will not naturally form, the heat recovery system described herein may employ a controlled water emitting means to ensure saturation of the moisture collection layer.

"We look forward to the next steps of solving real world energy and water problems," states President Robert McAllister

For additional project details please visit our website at https://enertopia.com/technology

About Enertopia

Defines itself as an Energy Solutions Company focused on modern technology through a combination of our intellectual property patents in green technologies to build shareholder value.

Enertopia shares are quoted in the United States and Canada under 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 mineral exploration 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 solution testing will result in an economic deposit or have any positive impact on Enertopia. There can be no assurance that the Rainmaker patent and the Energy Management System patent or Heat Extractor patent will have a positive impact on Enertopia. 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 Markets and the CSE have not reviewed and does not accept responsibility for the adequacy or accuracy of this release.

Enertopia Corporation

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