ASU-Developed Hydropanels Use The Sun To Make Drinking Water



An on-duty nurse drinks water in the pediatric ward of the University Hospital of the West Indies in Jamaica.

Having grown up in Arizona's Sonoran Desert, Cody Friesen knows a thing or two about water scarcity.

With more than 2 billion people around the world struggling to find clean drinking water, Friesen, an Arizona State University (ASU) alumnus and associate engineering professor, made it his mission to change that. Through ASU's technology transfer arm, Skysong Innovations, Friesen founded in 2014 Scottsdale, Arizona-based Zero Mass Water. Three years later, the ASU spin-out launched its proprietary SOURCE hydropanel, which makes clean drinking water out of only sunlight and the water vapor in the air.

> *With Zero Mass Water's technology, communities, individuals, and businesses make their drinking water with SOURCE arrays ranging from 2 Hydropanels for homes to SOURCE Fields of many hundreds or thousands capable of providing any volume of water needed.*

Recently, Zero Mass Water partnered with Patty Mills of the San Antonio Spurs to bring renewable water to indigenous

communities in Australia and saw the completion of an array at the University Hospital of the West Indies pediatric ward in Jamaica. Today, SOURCE Hydropanels can be found on six continents in more than 30 countries.

“Inaccessible drinking water is one of our world’s greatest issues,” says Friesen, whose company has gone on to raise more than $50 million in outside funding. “Thankfully, modern technology has allowed us to tap into renewable resources and identify a solution to this crisis.”



In even the most dry environments, SOURCE is able to use solar power – plus thermodynamics, controls technology and materials science – to generate heat and extract, sterilize with ozone and transform water vapor into a liquid that is stored in a 30-liter reservoir. Without wasting any water, the array then adds magnesium and calcium, not only to provide consumers with more electrolytes, but to mimic the taste of the world’s most premium water brands. This helps SOURCE solve another one of our world’s problems – plastic production – with each Hydropanel offsetting more than 50,000 single-use plastic water bottles over the course of 15 years.

“People have been using solar panels to power their homes for years,” Friesen said. “Now anyone – whether they are on or off the grid – can not only harness the sun’s energy to make their drinking water, but also know beyond reasonable doubt that their drinking water is of optimum quality and taste.”

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