Green School's installation of SOURCE Hydropanels in Bali, Indonesia



The Challenge

- 1. Green School's Innovation Hub is looking for user-friendly technologies that require low maintenance to generate drinking water in drought-prone areas.
- 2. Green School is keen to showcase and promote innovative technologies using renewable energy to produce water.

The Match

Green School is a leading international school based in Bali, Indonesia that focuses on green technologies and innovations. It strives to inspire and empower its students to become green changemakers.

Zero Mass Water's hydropanel, called "SOURCE," produces drinking water from sunlight and air, thus providing an alternative and sustainable supply of water to homes, schools, offices and more.

The Impact

Green School collaborated with Zero Mass Water in bringing SOURCE Hydropanels to supply Green School's Bali campus with drinking water. The installation of hydropanels at the school also serves to educate students, parents and visitors about green technology and innovation.

Educating changemakers

Founded in 2008, Green School was named the 'Greenest School on Earth' by the USbased Center for Green Schools. It also won the prestigious Zayed Future Energy Prize and reached the finals of the Aga Khan Award for Architecture. Green School believes in educating young changemakers to help create a more sustainable future. The education process starts with building an appreciation of sustainability within the student body. As part of its effort to create a sustainable learning environment for students, Green School has installed a number of green technologies, including a dew harvester for drinking water.

WIPO GREEN's matchmaking event at ACEF, Manila

In June 2018, Green School attended the Green Technology Matchmaking Event in Southeast Asia at the Asia Clean Energy Forum (ACEF) in Manila, Philippines. The event, organized by WIPO GREEN in partnership with Kopernik, aimed to bring together clean technology seekers and providers in the Asia-Pacific region. At the event, Green School's Innovation Hub Project Manager, Baxter Smith, met with Zero Mass Water's Regional Technical Director, Benjamin Lim. During the event, both parties were able to connect, and advanced plans to form a more concrete collaboration.

Zero Mass Water's SOURCE Hydropanel was judged to be the ideal answer to Green School's need for a water harvesting technology.

Hydropanel installation

Green School and Zero Mass Water began preparing for the installation of six panels in early October 2018, four months after the WIPO GREEN matchmaking event. Benjamin Lim led the installation process, accompanied by Kenny Phang and Iqbal Yuze from Sedayu, Zero Mass Water's local partner in Indonesia. Sedayu handles procurement, logistics, installation and maintenance of SOURCE Hydropanels in Indonesia.

Each hydropanel produces up to 150 liters of water per month.



Green School installed six SOURCE Hydropanels as a result of collaboration with Zero Mass Water



Drinking water produced from sunlight and air

SOURCE as an inspirational learning tool

In addition to providing an alternative solution for supplying drinking water to the school campus, the SOURCE Hydropanels serve as an inspirational learning tool for students, who enjoy learning about how the panels work. The hydropanels extract moisture from the air by drawing ambient air through a fan into a set of hygroscopic engineered by Zero Mass Water. A condenser then converts the moisture into water, which flows into a reservoir and runs through a mineral block that infuses it with magnesium and calcium, turning it into excellent drinking water. Over its lifetime, SOURCE removes over 50,000 plastic bottles from circulation.

Green School is committed to providing opportunities for students to understand environmental challenges and to work on real solutions. To date, the school has incorporated various clean technologies into its day-to-day



Green School strives to create a carbon-neutral educational environment

operations, including 85% renewable energy (11% solar photovoltaic and 74% mini-hydro vortex) to supply the school's power needs, a water filtration system, a waste management center, a composting station, aquaponics, and biodiesel buses. As the latest addition to the school's set of clean technologies used in its day-to-day operations, the SOURCE Hydropanels represent another step forward in the realization of a unique, carbon-neutral educational environment.



green school

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