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14.12.22

**Ceramic Water Purifiers**  
Cambodia



# Cleaner, Safer Water for Cambodia

*How ceramic water purifiers benefit public health and the environment in Cambodia - Michael Cipresso, Nexus for development*



# Production and Dissemination of Ceramic Water Purifiers by Hydrologic, in the Kingdom of Cambodia

**GS 8** SDG's  
**Energy Efficiency** - Domestic

**85,000 - 100,000** VERs/year  
*(expected)*

**Location:**  
Cambodia

## Description:

In Cambodia, 80% of people lack access to clean water. Untreated water and poor sanitation cause up to 10,000 deaths each year, mostly among children under the age of five.

Hydrologic sells clean water filters that enable families to disinfect and safely store drinking water at home.

## Project History:

Way back in 2001, iDE introduced ceramic water filters as an affordable water treatment option to benefit public health and environment in Cambodia. In 2009, iDE spun off Hydrologic Social Enterprise Co. Ltd. as a wholly owned subsidiary to scale up filter production and distribution.

Hydrologic's core business is the production and sale of ceramic drinking water filters. To date, more than half a million of these filters have been sold across Cambodia. Their mission is to make sure that every household in Cambodia is equipped with a filter. Gold Standard carbon credits enables Hydrologic to continue researching and developing purifier technology and to train local producers and distributors, thus scaling up its positive impact.



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## Credits offered on Emsurge:

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## Community Gain:

With a filter in their homes, families can drink safely. By no longer needing to boil water, indoor air pollution from wood burning is reduced, household fuel costs are slashed, time is saved for women and children, and Cambodia's vulnerable forests are protected.

To date, Hydrologic has reached nearly two million Cambodians with its ceramic water purifiers.

## Local Involvement:

A last mile selling strategy creates opportunities for our sale team to educate people how crucial it is to have a filter in their home. Working closely with Village Chief doing group presentations and door-to-door sales. A dedicated customer service after sales is provided through a 2 year warranty program on the filters.

The project also creates rural employment opportunities in filter manufacturing and distribution. Women make up 47% of Hydrologic's staff, including 60% of top-level managers and 60% of the rural sales force. Hydrologic also offer an installment plan to customers, making them affordable for more Cambodians.





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## The role of **Nexus**:

Nexus for Development is an international NGO headquartered in Singapore. In addition to supporting carbon finance projects in Southeast Asia for over a decade, we also make loans to socially minded enterprises in the region.

Most of our staff work from our Cambodia office; we have a number of carbon projects throughout the region and have supported the issuance of over 5 million credits to date.

Our primary role is to lead the technical certification process to issue carbon credits for our partners in the field. Further, we help our partners arrange advantageous financing, whether that be through pre-financing deals or by orchestrating the sale of their credits at the highest possible price.

We focus on ensuring the maximum amount of a buyer's funds are redirected into the field where the outcomes for our climate and communities occur.



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### Quality assurance:

All of Nexus' projects are currently certified under the Gold Standard. We strictly adhere to the methodologies designed to ensure both additionality and durability.

Each project faces ever increasing stringency as crediting periods renew, with Gold Standard frequently adjusting the standard to capture any new information that would potentially lead to any risks to permanence.

### The Role of Technology in delivering higher quality credits:

We believe there are various technologies that can be inserted into the monitoring and verification processes to augment quality standards across the industry. We are even

more excited about the way that technology might enable a timelier matching of credit issuance/sales with the carbon finance project costs.

This should further enable sharing carbon credit revenue more seamlessly with project implementers and the communities they serve.

### Why did you choose Emstream and their Emsurge platform as a route to market?

Emsurge allows Nexus to see real-time pricing in the market, helping with transparency for our partners. Pricing in a vacuum often leads to unfair outcomes where some unscrupulous buyers tend to underpay

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for credits and turnaround to sell them at unreasonable mark-ups to others.

We earnestly believe that maximum value should transfer from the retirees of credits to those in the field making these challenging interventions a reality.

### What's next for Nexus?

We have been actively building a pipeline of new projects.

We registered two new Gold Standard projects this year and intend to grow that number substantially in the coming year.



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**Gold Standard**<sup>®</sup>

8 SDG's, 1/3/5/6/7/8/13/15



**1. No Poverty:**  
Livelihood of the poor – Amount of fuel saved after using project technology, percentage of household noted on money save and percentage of household noted on time save after using the project technology.

**3. Good health and well-being:**  
Less illness related untreated water consumption especially in the rural areas.

**5. Gender Equality:**  
Achieve gender equality and empower all women and girls- Number of women and girls benefiting from stop/reduce boiling water and collecting/purchasing cooking fuel.

**6. Clean water and sanitation:**  
With a filter in their homes, families can drink safely.

**7. Affordable and Clean Energy:**  
Access to affordable and clean energy services – Amount of energy saved from avoiding boiling water in the project activity.

**8. Decent work and economic growth:**  
Household fuel costs are slashed, time is saved for women and children, and instalment plan to our customers, making them affordable for more Cambodians. Women have more time to spend doing something else (as a part of women empowerment) from working on the kitchen.

**13. Climate action:**  
Cambodia's vulnerable forests are protected as we help reduce the woods requires to boil water.

**15. Life on land:**  
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Information correct as of **14.12.22**  
for the most up to date info log into **emsurge**  
or contact us at

[carbon@emstream.co.uk](mailto:carbon@emstream.co.uk)



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