



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

ECOSTP

Region	Asia and the Pacific
Award Scheme	Habitat for Humanity
Start Year	2019
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Summary

Untreated wastewater is a leading contributor to child illness and deaths in India, and causes significant environmental damage as exemplified by the repeated burning of Lake Bellandur in Bangalore¹. In India today, nearly 80% of all waste water goes untreated before it is released back into the environment. At best, most treatment is handled by traditional energy-intensive aerobic bacteria based sewage treatment plants (STPs).

Background and Objective

ECOSTP offers an entirely sustainable treatment solution for India's residential wastewater in cities across India. ECOSTP has 28 customers and four fully operational treatment installations. Currently ECOSTP targets the B2B market with builders of residential properties. The company has been featured at the ANGi Innovation Showcase and participated in ShelterTech Accelerator India in 2019.

Actions and Implementation

The process involves adding an anaerobic bacteria catalyst seed from cow dung substrate to break down water pollutants, followed by bio-filtration and disinfectant stages, with end products of water, gas, and remnant sludge. ECOSTP has already delivered 35,000 KL of clean water and saved 35 MW of power. The solution has 20% lower capital expenditure and over 90% lower operating cost for the owner.

Innovative Initiative

The technology was discussed in the 8th World Water Forum in Brasilia, 2018 and has been selected as a Best Practice case study for United Nations ESCAP.

Resources devoted to delivery

¹ Mary-Rose Abraham, 2018, Why this lake keeps catching on fire, National Geographic, accessed 7 September 2019, ² "Biomimetics", 2019 Wikipedia. Available at <https://en.wikipedia.org/wiki/Biomimetics>. Accessed 7 September 2019.

Conclusion

ECOSTP offers a sustainable treatment solution, reducing low-income households' exposure to untreated water and enabling a cleaner environment, all while contributing to reducing India's greenhouse gas emissions problem.