



NAKHON BIOGAS THAILAND



Electricity from wastewater biogas

This project mitigates greenhouse gas emissions and prevents local air pollution from a Thai starch plant by capturing methane and generating sustainable energy which also benefits local communities.



Using methane from wastewater generates electricity and avoids burning of thousands of tons of fossil fuel.

Prior to installing the new system, the wastewater was treated through cascading open lagoons, resulting in methane generation from the organic content of the wastewater that was steadily released into the atmosphere. Methane is a greenhouse gas 21 times more potent than CO₂. Today, the captured methane can be used for clean energy production, replacing fossil fuels that were used to dry the starch.

The project has significantly improved the local air and water quality; at the same time the fossil fuel use of the starch plant has been significantly reduced. The project and the resulting carbon revenues generate jobs for locals and support social and educational activities in the community to enable sustainable development. The clean wastewater is used to irrigate nearby fields and allows fish farming, enabling local communities to increase their income.



14

Permanent jobs created



840,000

m³ of water treated/year



17,383

MWh electricity generated per year



100,000

GHG emissions mitigated per year (tCO₂e)

PROJECT HIGHLIGHTS



Gold Standard

For more information on the UN Sustainable Development Goals please visit: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>