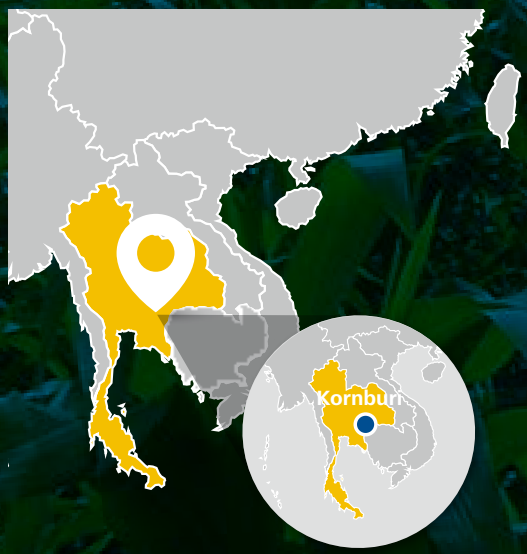
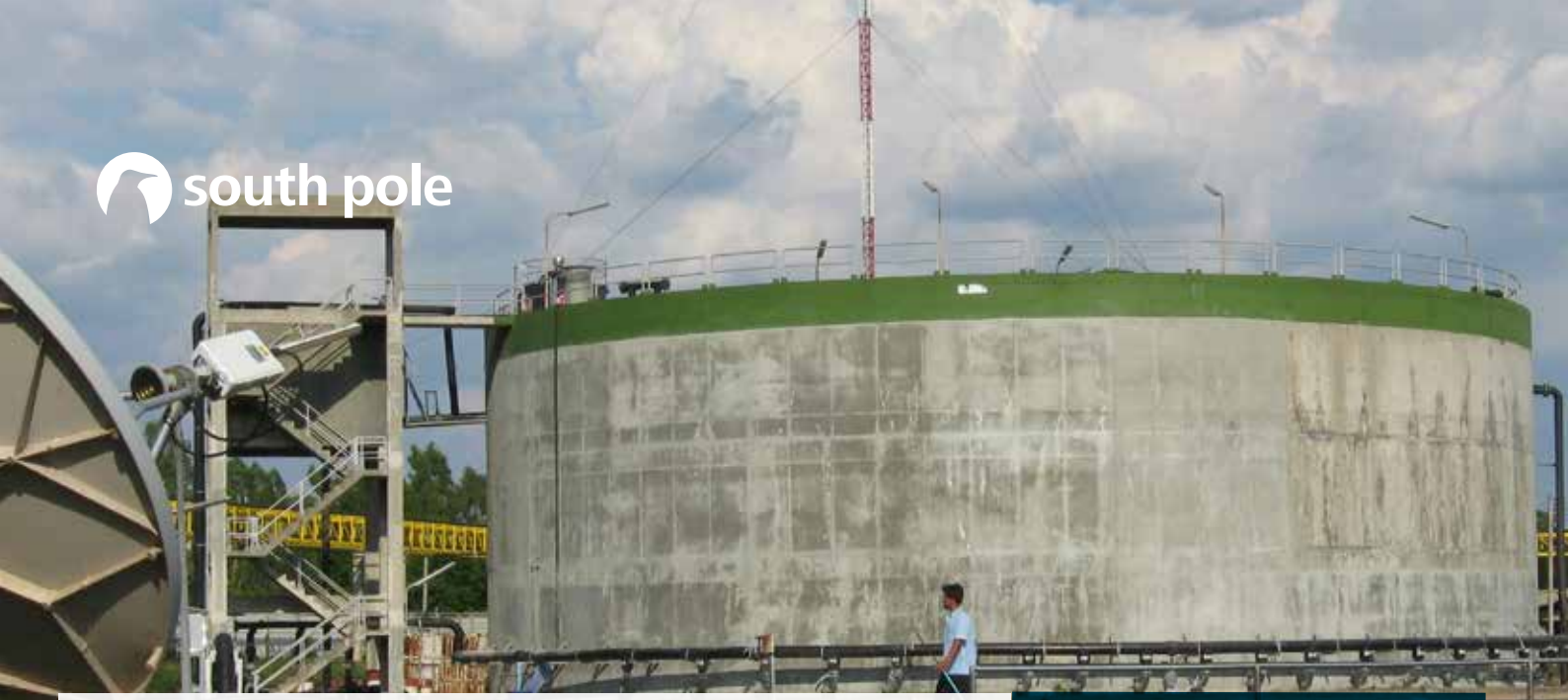
south pole

KORNBURI WASTEWATER TREATMENT THAILAND



Biogas reduces Thailand's dependence on fossil fuels

The Kornburi Wastewater Treatment Project is located at a tapioca starch processing plant in Kornburi District in Northern Thailand. Biogas from wastewater is captured and burned to generate electricity and heat that powers the factory, preventing approximately 39,000 tonnes of greenhouse gases each year.



The Context

The General Starch factory in Kornburi District produces tapioca starch from dried cassava that is grown by farmers in the region. This process creates vast amounts of wastewater which is stored in a series of open lagoons. The large size of these lagoons and the warm temperature creates perfect conditions for the breakdown of organic compounds in the wastewater. This produces large amounts of the greenhouse gas methane, which is known to contribute to global warming.

Promoting diverse energy sources supports Thailand's sustainable development and improves energy security.

The Project

The existing process has been modified into a closed loop system that captures the methane emissions and uses them to generate heat and electricity for the factory. The project not only reduces GHG emissions by avoiding the release of methane into the atmosphere, but also by reducing fossil fuel consumption.

The Benefits

The treatment process has improved wastewater quality, so that the water can now be reused in the factory for washing the cassava, saving precious local groundwater resources. The new technology has improved local air quality as it reduces the unpleasant odour and noxious emissions from the lagoons.

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

8 local employees helps regional advancement

8 permanent jobs created

2 anaerobic wastewater treatment facilities installed

39,411 tCO_2e mitigated on average each year

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

Official name: Wasterwater Treatment with Biogas Production (UASB) and Heat Utilization at General Starch Co.,Ltd. |
VCS Link: https://www.vcsprojectdatabase.org/#/project_details/82 | **VCS ID:** 82