south pole group

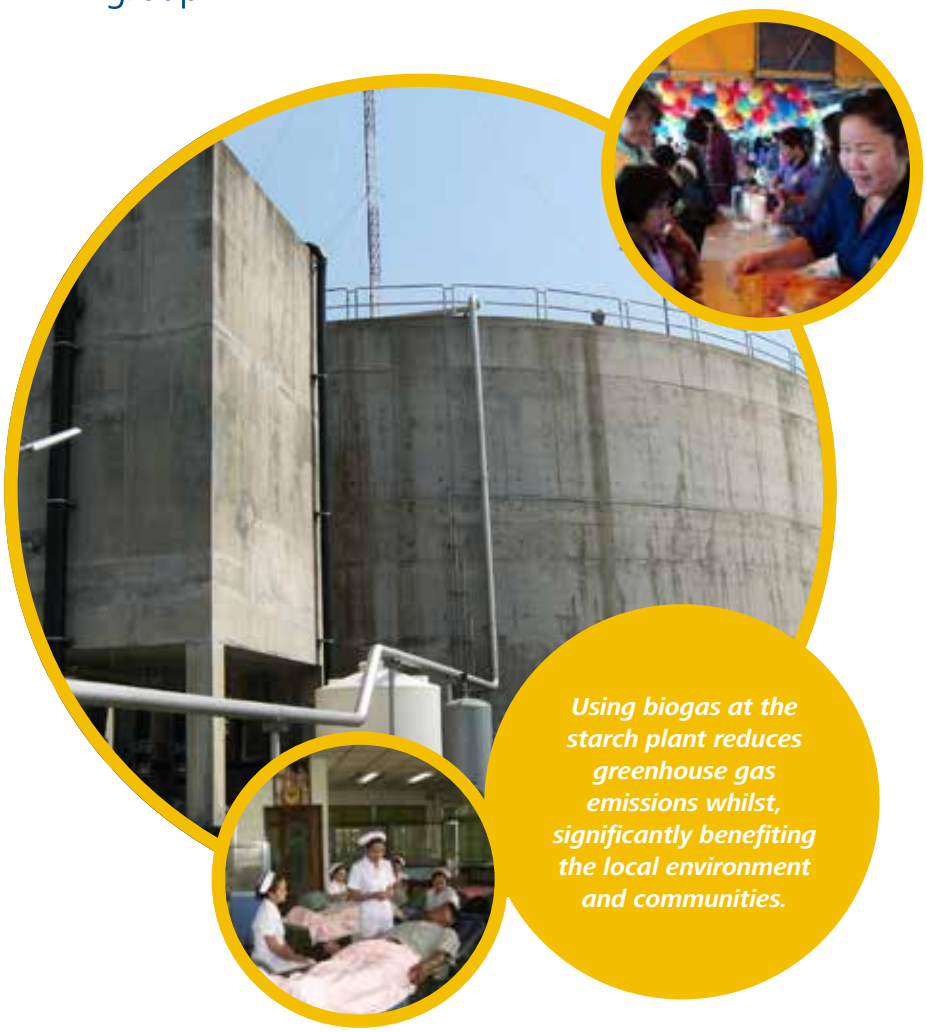
KALASIN WASTEWATER TREATMENT THAILAND

Generating biogas from wastewater in Thailand

The project captures biogas from wastewater in a starch plant in the Kalasin region in Northeastern Thailand. The biogas is used for heat and power generation. The new technology mitigates greenhouse gas emissions, improves local air quality and fosters sustainable development in the region.

south pole group

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD



Using biogas at the starch plant reduces greenhouse gas emissions whilst, significantly benefiting the local environment and communities.

With 75% of the global market share, Thailand is the world's largest exporter of tapioca products. The process of drying tapioca starch requires large volumes of water, resulting in vast quantities of wastewater with high organic content that is often stored in open lagoons. The tropical climate create perfect conditions for the breakdown of organic compounds in the wastewater. This produces large amounts of methane, a powerful greenhouse gas.

The Kalasin wastewater treatment project introduced a closed loop system in the starch plant that captures the methane emissions to generate heat and electricity for the factory. As a result, the electricity generated from the fossil-fuel intensive grid and heavy fuel oil used in the boilers is replaced with a clean alternative. This project saves approximately 29,000 tonnes of carbon dioxide equivalents on a yearly basis. The project reduces air pollution and saves precious groundwater resources. It promotes sustainable development of the region by supporting local farmers with free agricultural fertilizers and creating jobs during the construction and operating phases.

3 GOOD HEALTH AND WELL-BEING

HEALTH

Local hospital and health centre receives support

4 QUALITY EDUCATION

80

Students are awarded with scholarships

8 DECENT WORK AND ECONOMIC GROWTH

30

Jobs created during construction and operation phases

13 CLIMATE ACTION

29,000

GHG emissions reduced in relevant year (tCO_2e)

PROJECT HIGHLIGHTS

VCS | VERIFIED CARBON STANDARD

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