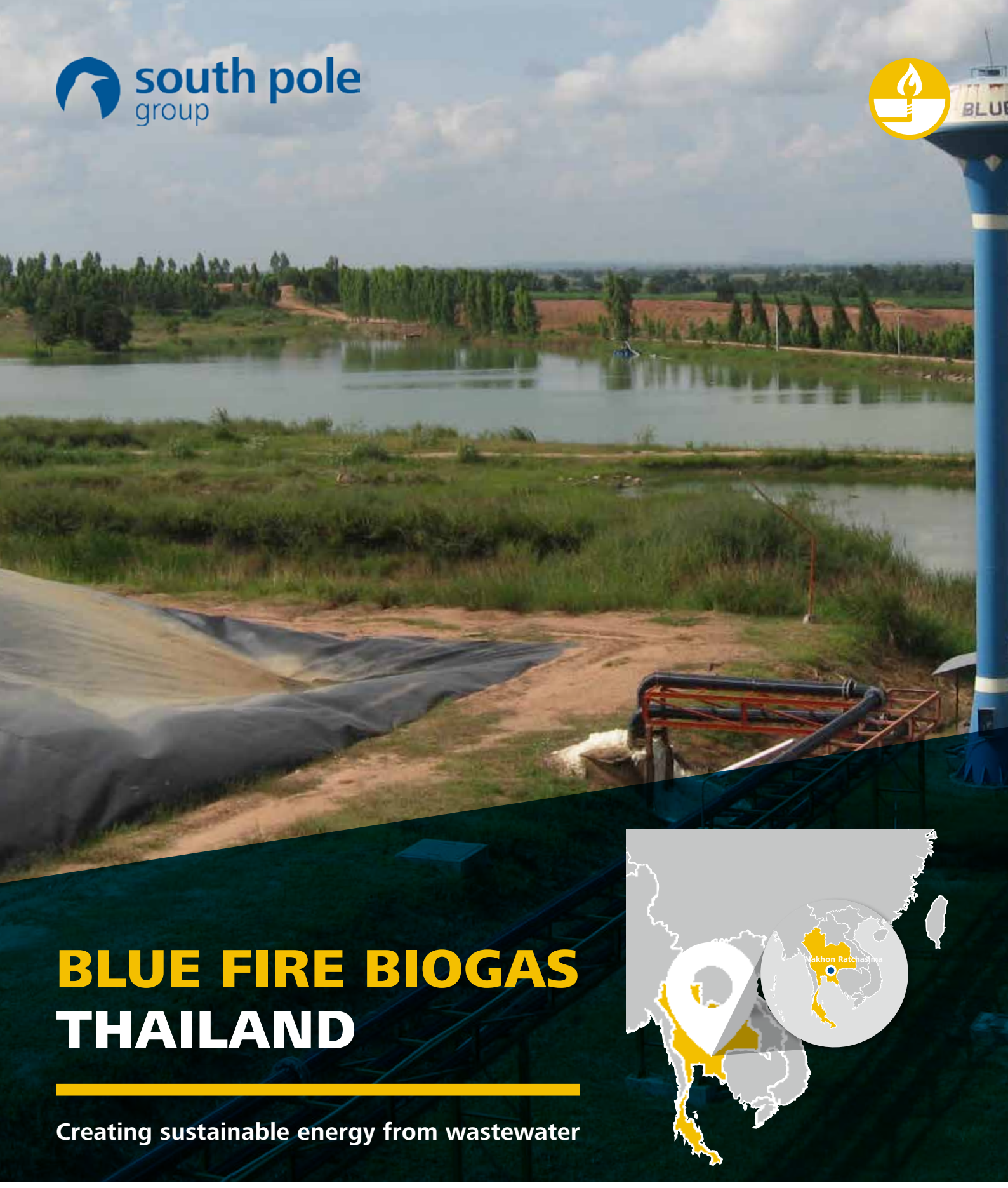
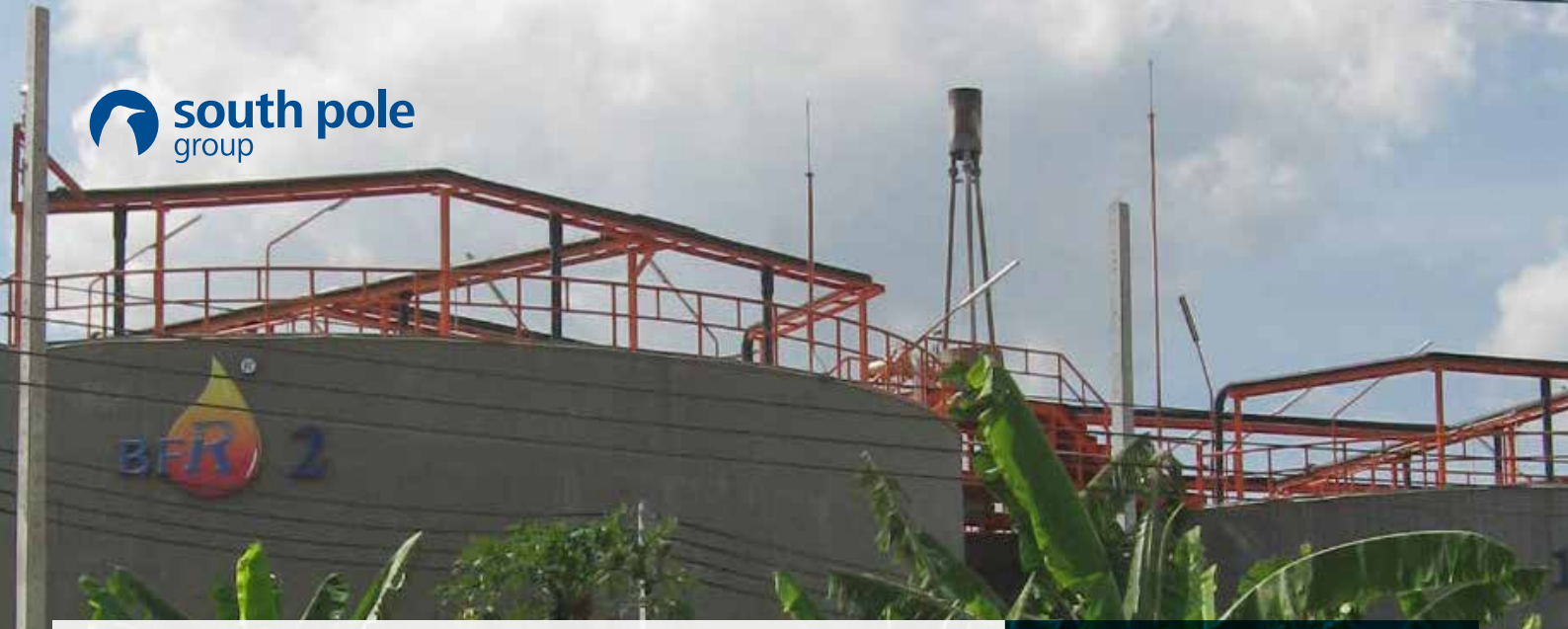
south pole group



BLUE FIRE BIOGAS THAILAND

Creating sustainable energy from wastewater

This project mitigates global warming and air pollution at a Tapioca starch plant in Thailand by capturing and repurposing harmful methane emissions. By doing so, sustainable energy is generated, the environment is improved, and social benefits are created for inhabitants of the local area.



The Context

Imagine if your home, village and workplace was permeated with a bad smell that never went away, one that not only caused discomfort, but was also permanently damaging the environment. For the inhabitants of the Nakhon Ratchasima area in North Eastern Thailand, this used to be a reality. Methane, which is a greenhouse gas 21 times stronger than CO_2, has a strong unpleasant smell and was being steadily released into the atmosphere from open wastewater lagoons at the local starch factory.

The Project

This project involves converting the open lagoons system into two closed anaerobic wastewater treatment facilities (Upflow Anaerobic Sludge Blanket technology) that capture these methane emissions and use them for clean energy production on the plant site.

The Benefits

Today, thanks to the Blue Fire Biogas project, the environment and quality of life in the area has vastly improved. Now, the harmful odor has been vastly reduced, and the quality of the wastewater is much cleaner. Because the plant is less reliant on the purchase of fossil fuels, excess revenue has generated more jobs as well as health and educational support in the local community.

> "The improvement in the quality of wastewater means that the community can also use it for their plantations."
>
> – Mild, Factory Operator (of 8 years)

2 public health centres supported, ensuring access to better health facilities for the area.

30 jobs created permanently for local workers, providing stable income streams for the local economy.

3,500 MWh of clean energy generated a year, providing a cleaner alternative to the burning of fossil fuels.

30,000 tCO_2e mitigated annually by capturing methane emissions and displacing fossil fuel energy.

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

Official name: BFB WWT | **Markit Registry link:** https://mer.markit.com/br-reg/public/project.jsp?project_id=103000000002150 | **Markit ID:** 2150 | **GS ID:** 662