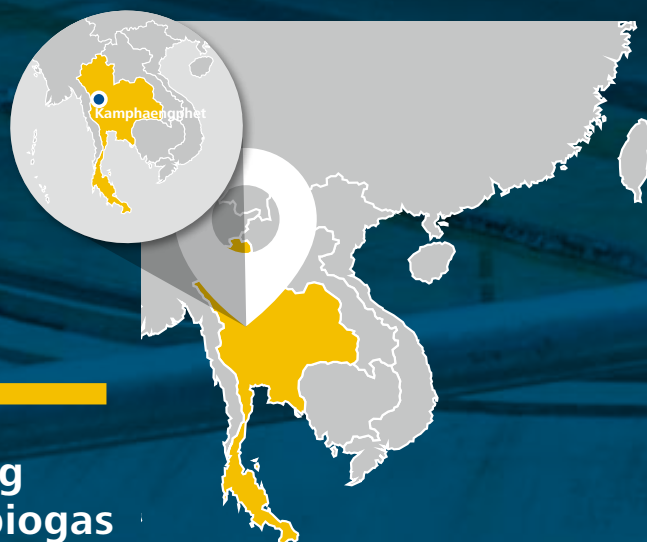


# LAN DOKMAI BIOGAS THAILAND

**Reducing climate impacts and helping  
local communities with sustainable biogas**



*Harmful methane emissions are captured in this project and used for clean energy production at a local starch factory. As a result, the air is cleaner and less fossil fuels are purchased. This means that revenue can be generated to support social and educational activities in the community.*



*The cleaned water from the new wastewater cycle allows for fish farming and irrigation of nearby fields, and components can also be used as fertilizer, thus enabling locals to increase their income.*

Thailand is one of the largest producers of Tapioca starch, which forms an important part of the economy. Unfortunately, tapioca starch production is a carbon-intensive process that not only damages the environment, but also produces strong-smelling methane emissions that affect the quality of life in surrounding areas.

The Lan Dokmai project applies modern wastewater treatment technology to a starch factory in the Kamphaengphet Province, not only reducing emissions and generating sustainable energy, but also creating opportunities for sustainable development in the local area. Technically, it involves replacing previously open wastewater lagoons with two closed anaerobic wastewater treatment facilities (Upflow Anaerobic Sludge Blanket technology) that capture methane and repurpose it for sustainable biogas energy production. Part of this energy powers the plant, the rest is supplied to the local grid.

Now, air pollution has decreased dramatically, a total of 8 new jobs have been created and training opportunities on modern technologies provided by the project implementation. The treated wastewater is much cleaner, and can be used for fish farming and irrigation of nearby fields, even the wastewater sludge is given to farmers and recycled for fertilizer.

**Gold Standard**


**8**  
new jobs created for the operation of the wastewater cycle



**2,100**  
cubic metres of cleaned wastewater produced daily can be used for fish farming and irrigation of nearby fields



**2,200**  
litres per day for fossil fuel reduced daily



**20,000**  
metric tonnes of CO<sub>2</sub> reduced per year

## PROJECT HIGHLIGHTS

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