



climatmundi

Biogas generated from wastewater in Thailand

Thailand has seen tremendous economical growth in the last two decades. Such a transition implies a growing energy demand, more than 90% of which are met with fossil fuels, the majority of which is imported. This makes Thailand not only dependent on fossil fuels causing high emissions of greenhouse gases, but also makes it exposed to political and commercial risks associated with energy imports.

This project aims at collecting the methane from the wastewater of a starch plant to use it as a combustion source. By utilizing this potential, the plant has turned a source of climate damaging emissions into an integrated source of clean, renewable, free and locally available energy.

Focus...

The project takes place at a starch plant which is located in Chaiphum Province. As a residual product of about 200,000 tonnes of starch produced annually, huge amounts of high organic wastewater are collected in open lagoons, releasing large amounts of methane gas directly into the atmosphere. Rather than spreading it directly over this ecosystem, the project collects it and extracts the methane out of it. Then, such biogas is used to produce thermal energy. Approximately 17,000 MWh are generated each year.

This project comes with numerous advantages. First of all, it reduces methane emissions in the atmosphere-let's remind that methane is 25 times as harmful for the environment as carbon dioxide.

Moreover, it allows one to not use oil for thermal energy production, contributing therefore to decrease the energy dependency of the country and its greenhouse gases emissions at the same time.

Finally, it improves local air and water quality especially by avoiding overflows during periods of heavy precipitations.

Project registered at the
United Nations Framework
Convention on Climate
Change as project
MDP n°1993



The project enables
to avoid

100,000

t CO₂e p.a.

Credits type

VER

Standard

VCS

Registre Carbone
audité par
BUREAU VERITAS
Certification



Certificate dated 19/09/2013