

Key Information on the Project:
**Containerized Anaerobic Digestion for Renewable Energy and Fertilizer –
Philippines**

The main aim of the project is to process unused organic waste streams into renewable energy and organic fertilizer through processing it in containerized biogas plants in the Philippines. This process not only generates electricity and fertilizer but also prevents the waste from being disposed of in a landfill, where decomposition under oxygen free conditions leads to the emission of methane, a greenhouse gas 27 times more potent than CO₂. In this project the organic fraction of household waste and food waste from restaurants combined with industrial organic waste will be processed.

Reurasia will establish container biogas plants where under controlled, air free conditions the organic material is processed to biogas, which is utilized to generate renewable energy. The first facility will be installed in Alterna Verde's waste recovery site in San Pablo, where the generated power will be supplied to a nearby school and the surrounding community. The residual organic material from the biogas process will be converted into organic fertilizer, contributing to improved agricultural productivity and enhancing the long-term sustainability of local farming systems. Furthermore, the development and operation of the biogas facilities will create employment opportunities for members of the local communities.

The project activities shall be supported by carbon finance for the reduction of greenhouse gases. For this purpose, the project is seeking certification under the Gold Standard. The Gold Standard is one of the highest available standards for climate change mitigation projects, following strict social and environmental criteria. The Local Stakeholder Engagement is an essential part of the project registration process.

Project Implementation

The pilot project is run by Reurasia and Alterna Verde Corporation.

Reurasia is a renewable energy project developer based in the Philippines since 2016, with a focus on biomass projects and extensive experience in the planning, operation, and management of biomass power plants. Reurasia also conducts safety and efficiency audits for WtE and gas boilers around South-East Asia, following international standards and quality frameworks.

Reurasia is installing the first containerized biogas plant on the former landfill of San Pablo, Laguna. The anaerobic digestion system, which consists of four containers, has a capacity for 1,200 tons of organic waste per year. Around 256 MWh of electricity will be generated each year.


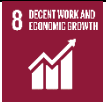


Alterna Verde Corporation is a renewable energy company based in the Philippines since 2011. They operate a waste-to-energy facility based in San Pablo, Laguna since 2023. Alterna Verde is responsible for the collection of municipal waste. Previously a public landfill, Alterna Verde has transformed it into a waste recovery system facility. The first containerized biogas plant will be installed on Alterna Verde’s site.

Targeted Implementation Plan

Q4 2026	Installation of the biogas plant
Q1 2027	Full capacity operation (around 1200 tons/year)
Q2 2027	Expansion

Social, economic and environmental impacts of the Project

Besides reducing GHG emission in line with the UN’s Sustainable Development Goal (SDG) number 13, the project will also contribute to the following SDGs:

	SDG 5: Reurasia and Alterna Verde actively try to attract female employees and gender wage equity will be ensured among all employees hired in the project.
	SDG 7: The project will generate renewable (electrical) energy from organic waste.
	SDG 8: The operation of the biogas plant drives economic development of the local communities and generates employment and professional development opportunities.
	SDG 11: The project provides a sustainable waste management solution that will process the organic fraction of the urban waste (MSW).
	SDG 12: The project installs sustainable waste management solutions that recycle organic waste to fertilizer and thereby close the nutrient cycle.