

Contribution to Sustainable Development

The project supports Thailand's sustainable development strategy in the following ways:

- 1) Effectively reducing CH₄ emissions from animal wastes. The project activity consists of an advanced improvement from the common practice of livestock waste treatment, reducing CH₄ and N₂O emissions from livestock waste through biogas digesters with methane capture and utilization;
- 2) Improving the local environment and human health. Properly handling of large quantities of animal waste is critical to protecting human health and the environmental quality. The advanced livestock waste management system to be employed will reduce the nuisance of odors and wastewater, benefiting both farmers' and children's health;
- 3) Creating job opportunities and increasing farmers' income. This project activity will increase local employment for skilled labor during production, installation, operation, and maintenance of the anaerobic digestion and electricity generation equipment and systems;
- 4) Localizing energy production. The project will diversify the source of the energy supply through biogas production and biogas-based power generation. The effort will substitute local energy for electricity from the grid which relies mainly on fossil fuel;
- 5) Establishing a positive model of swine waste management practice for other livestock operations. The project activity will apply new, advanced, and environmentally friendly technologies in treating swine wastes and associated utilization, which can be replicated on other livestock farms, which will dramatically reduce livestock-related GHG emissions.