



LEMNA ECO CENTER

Vietstar Municipal Solid Waste Treatment Plant Vietnam

Avoiding large scale methane emissions from
landfill in Vietnam



This project combats reduces methane emissions by establishing and operating composting facilities to treat organic matter at a landfill site in Vietnam. The municipal solid waste previously left to decay openly in waste landfills is covered and methane gas emissions are reduced from the atmosphere.



The Context

A majority of landfills in VietNam have been poorly controlled in the past with little concern about the emission of the greenhouse gas methane, which is more potent than carbon dioxide and is released from organic waste when it starts to decompose. The Vietstar municipal solid waste facility is addressing this climate issue by instead capturing methane emissions.

The Project

This project involves pre-sorting and classifying municipal solid waste, recycling plastic waste and then treating remaining organic matter with LEMNA composting technology. The final product of organic compost is then sold as bio-fertilizer to users. The facility treats 432,000 tons of solid waste per year, with a daily waste reception of approximately 1,200 tons. The project activity expects to have an approximate organic compost output of 53,568 tons annually.

The Benefits

By avoiding the emission of methane gas, this project has a positive contribution to combating climate change. It also reduces landfill through recycling, improves soils and creates a sustainable fertiliser for local farmers, improving soil productivity and contributing to economic sustainable development of the region. Jobs are created in operating the waste treatment plant and in distributing the final waste product to market. In addition, technical skills of workers is improved via trainings made available. The introduction of advanced technology from LEMNA, USA for solid waste treatment, not common in Vietnam industries, boosts economies in sustainable infrastructures.



810 jobs

created in project implementation and operation, boosting local economies with new income streams



182,000 tCO₂e

on average reduced annually through sustainable waste handling and disposal activities



53,568 tonnes

of organic output expected to be created annually, providing a sustainable recycled resource for farmers and reducing landfill

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

Official name: Avoided methane emission through aerobic composting at Vietstar municipal solid waste treatment facility | **Registry link:** <https://registry.goldstandard.org/projects/details/403> | **Registry ID:** GS 5556 | **CDM link:** <https://cdm.unfccc.int/Projects/DB/RWTUV1323884904.57/view>

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