

Mekong Region Waste Refinery - International Partnership towards Zero Waste, Zero Landfill and Reduction of Greenhouse Gas Emission

Project Objective

To improve the understanding of the importance of zero waste, zero landfill and reduction of greenhouse gas emissions and to play a leading role in its implementation in the Mekong Region.

Description

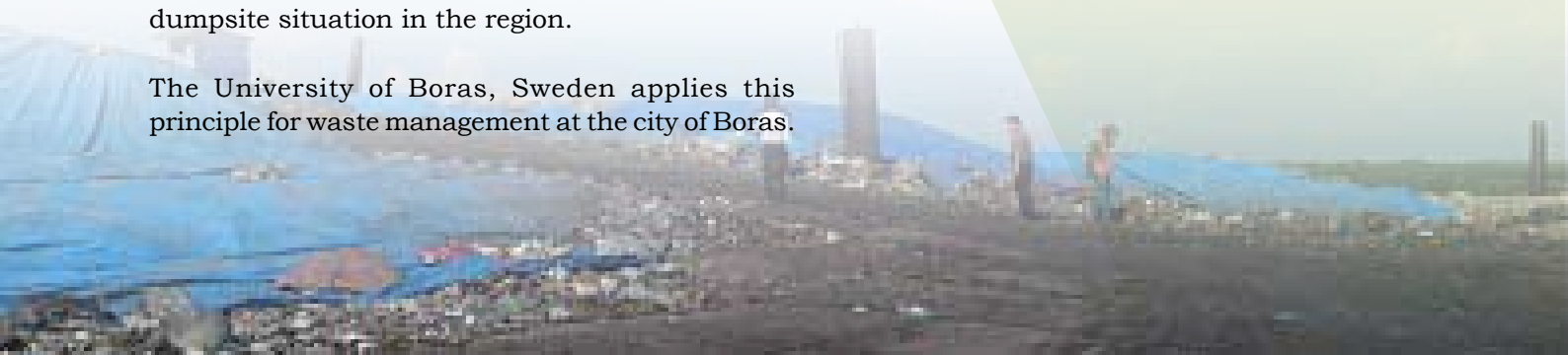
Rapid economic development and population migration lead to rapid urbanization in the Mekong region. The volume of waste generated in the region has doubled in 10 years. Cities in the region are experiencing problems in managing bulk waste: physical facilities are inadequate and not enough resources are allocated by the authorities to cover the needs. In addition, poverty alleviation and employment generation receive higher priority than environment in policy and planning at national and city level. Open dumping of waste is still being practiced in most of the cities in the region while in some places, waste remains uncollected due to inadequate facilities. In the future, land for dumpsite may become unavailable due to high cost and demand for land. Thus, introducing zero landfill concepts in the region is essential through the introduction of 3R initiatives.

Anaerobic digesters convert waste to biogas. Gas micro-turbine will be installed to convert biogas to electricity, reducing the greenhouse gas emissions. The residues from the anaerobic digester will be turned into new resources. Non recyclable and non-biodegradable organic waste can be converted to electricity through thermal combustion. This shall lead in the long run to a zero waste and zero dumpsite situation in the region.

The University of Boras, Sweden applies this principle for waste management at the city of Boras.

Project Highlights

Project ID	: 3-R-091
Country	: Cambodia, Lao PDR Thailand and Vietnam
Lead Partner	: Asian Institute of Technology, Thailand
Partners	: Department of Environment of Phnom Penh Municipality, Cambodia, Vientiane Urban Development Administration Authority (VUDAA), Lao PDR Detudom Municipality, Thailand Ho Chi Minh City Department of Natural Resources and Environment (HCMC DONRE), Vietnam University of Boras, Sweden Boras City Sweden
Total Project Cost	: € 237,000
EEP Financing (% to total project cost)	: € 200,000 (84.39%)
Technical Focus	: Waste to energy, waste to resources and zero land filling
Activity	: Capacity development, feasibility study and pilot project
Duration	: 15 months



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Relevance to Region's Energy and Environment Policies

This project is expected to contribute to the generation of electricity and to the reduction of greenhouse gas emissions in the region, supporting the energy and environment policies of the participating countries.

Innovation and Knowledge Transfer

The concept of zero waste is new in the Mekong Region. The project will strive to transfer the technological know-how to the whole region. The adoption of the zero waste initiative plays a crucial role in transferring knowledge from the west to Mekong region towards reducing greenhouse gas emission and converting waste into useful resources.



For more information:

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