

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

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MH Bio-Energy Co., LTD, bio-ethanol distillery Cambodia, has taken the initiative for the implementation of the project activity in Duong village, Preak Phnou Commune, Pornhear Leu District, Phnom Penh Province, Kingdom of Cambodia.

The Project activity involves the installation of an anaerobic digestion system with methane recovery for the treatment organic wastewater generated by an existing ethanol manufacturing plant. The recovered methane will be used for steam generation onsite consumption that will displace fuel oil (RFO) consumed in co-fired boilers. The Project activity therefore results in a reduction of methane that would have otherwise been allowed to dissipate into the atmosphere, at the same time displace the use of fossil fuels (RFO) for steam. Wastewater treatment facility is an integrated part of the distillery of MH Bio-Energy Co., LTD (hereafter referred to as MH). Wastewater is generated 1,200m³/day dependent on quantity of ethanol production 40,000kl.

Contribution to Sustainable Development

Cambodian DNA (Designated National Authority) presents a document regarding sustainable development criteria for proposed CDM activities¹. The following shows how the project meets the 4 criteria outlined in the instruction.

Environmental Protection and Improvement

By recovering and utilizing methane, which would have otherwise been emitted to the atmosphere, the project contributes to mitigation of global climate change.

- 1) Reducing air pollution, odor and also will not result negative environmental impact.
- 2) Recovered methane displace carbon intensive fossil fuel, other chemical components otherwise would evaporate to the atmosphere are reduced

Social-Enhancement of income and quality of life

- 1) Improving human capacity and diversity of new job opportunity for the biogas recovery and wastewater treatment sector. It will contribute to enhancement of Cambodian staffs' income and quality of life.

Technology transfer

- 1) Relevant technologies will be transferred to Cambodian local staff through MH's manpower training schedule.

Economic Benefits

- 1) Reducing fossil fuel consumption: Since nearly 100% of fossil fuel is imported to Cambodia, the project partially attribute to energy independence and Cambodia's national economy.