

# Agriculture Update

## [Thailand]

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**GMI Agriculture Subcommittee Meeting**  
**Singapore, 2-3 July 2012**



# Agriculture

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- Livestock waste impact current situation
- Discharge of waste water ( eg. quality of public water way, pathogen, heavy metal)
- Air pollution (eg. smell odor, pathogen)
- Global warming, ghg emission from waste

# Methane Reduction, Recovery, and Use Initiatives

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- Modified covered lagoon, Channel Digester Plus, (LWMEAP, 286,000 pigs, 98,000 t CO<sub>2</sub> equivalent/yr)
- Tubular bio-digester( on process)
- Zero waste project; pig manure utilization for rice cultivation (on process)
- Carbon foot print initiate

# Tubular bio-digester



# Tubular bio-digester



# Pig liquid manure for rice cultivation



# Strategic replication plan, 2012 - 2016

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- Zero discharge; eg. Utilization or recycling
- Waste water treatment ; eg. Various types of AD for renewable energy from waste
- Carbon foot print for livestock product

## Action plan, 4 yrs (2013 – 2017)

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- Small and medium pig farm
- Small pig farm = 100,000 pigs, tubular bio-digester
- Medium pig farm = 200,000 pigs, CDP, MCL
- Dairy cow farm = 50,000 cows, Tubular bio-digester, MCL
- Zero waste project
- Carbon foot print for livestock sector



# Barriers/Challenges to Methane Reduction, Recovery, and Use

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New optional model of AD; eg. Combine waste

Financial and subsidy; low cost digester or provide subsidy for medium-small farm

Maintenance; outsource for system maintenance

H<sub>2</sub>S removal; Looking for the more appropriate de-hydrogen sulfide removal technology

# Statement of Purpose

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- To promote new innovation of AD system to the country members of GMI for GHG mitigation.
- Exchange or transfer appropriate technology among country member in order that developed country can closely assist developing countries to mitigate GHG in their country. eg support experts as request by country member.

# CDP presentation with DVD

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Thank you very much for your attention.