

Thailand Country Update (Agriculture Sector)

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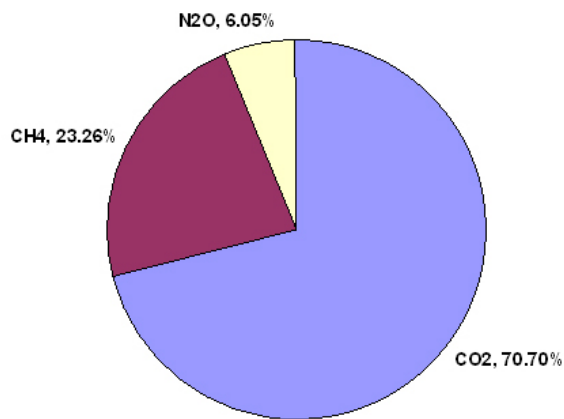
outline

- GHG emission in Thailand
- GHG from Agriculture in Thailand
- Approved CDM project by DNA
- Registered CDM project by EB
- GHG reduction campaign in Thailand
- updated project in Thailand

GHG Emission in Thailand from 1994-2003

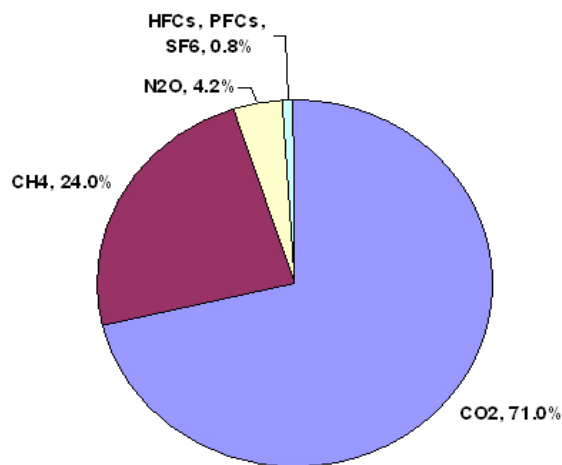
Within 10 years, Tendency to increase 20%

1994 Thailand's GHG Emission By Gas



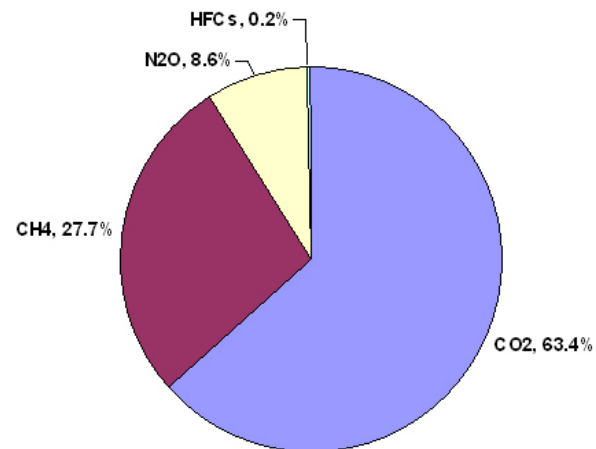
Source: MONRE (2000)

2000 Thailand's GHG Emission By Gas



Source: World Resource Institute, 2000

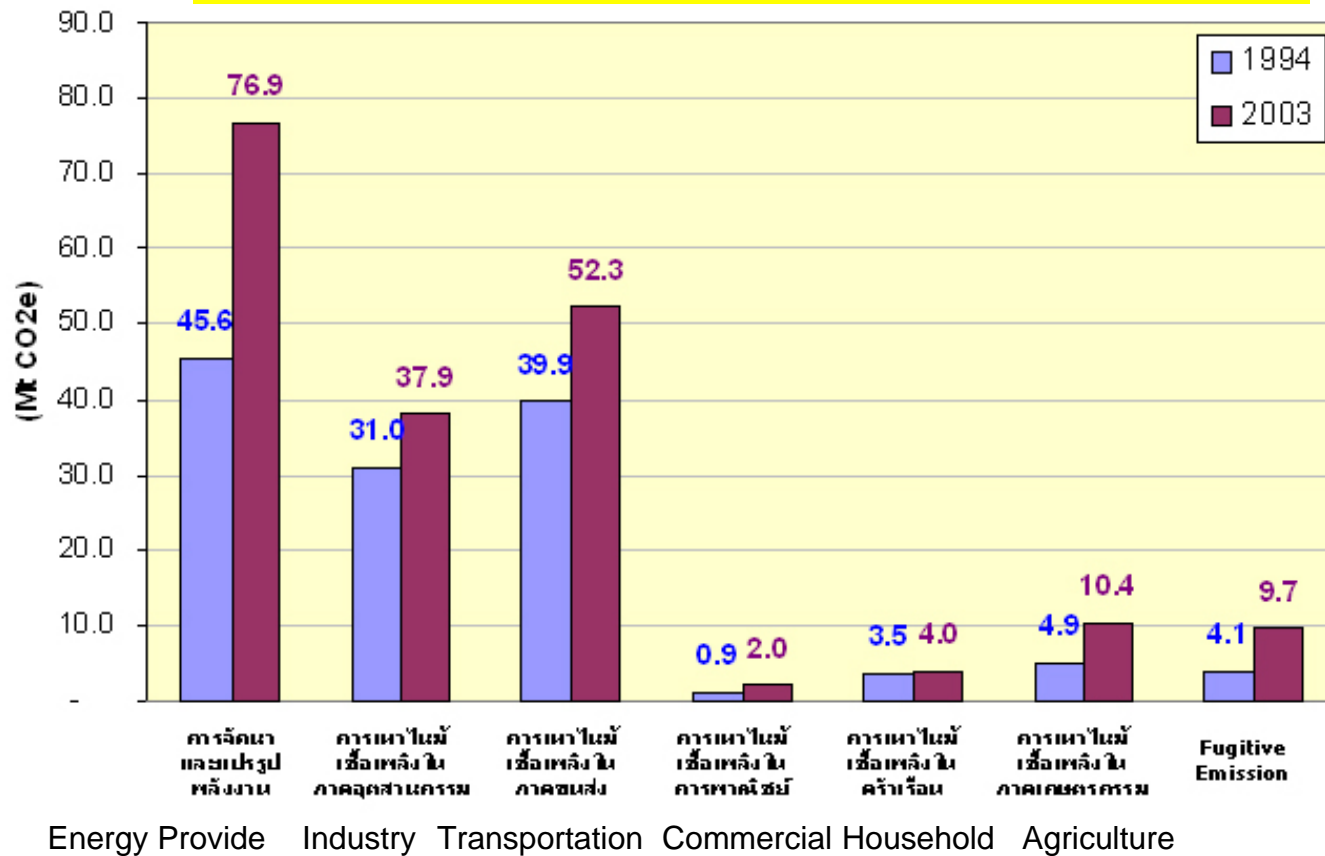
2003 Thailand's GHG Emission By Gas



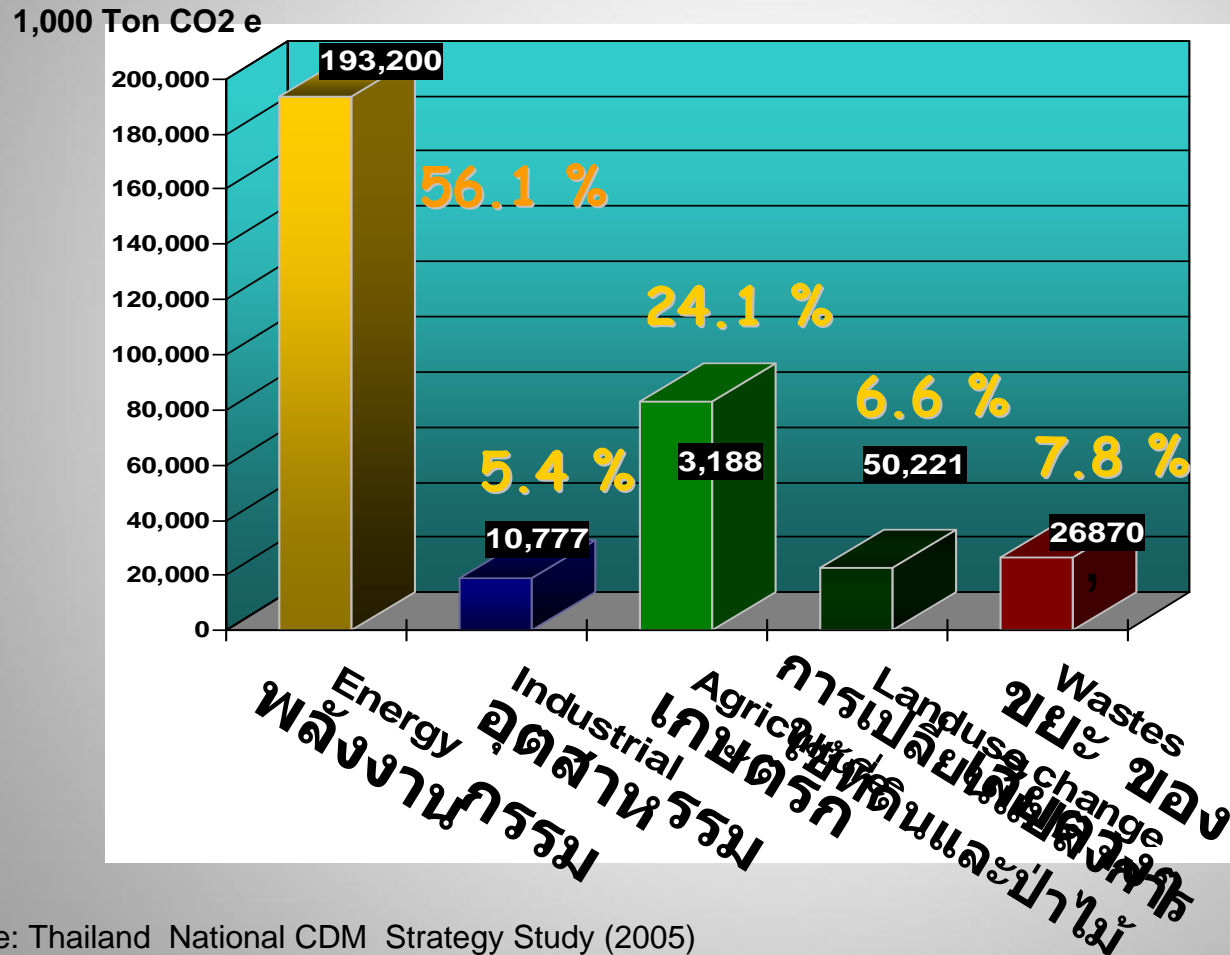
Source : ERM Siam, 2003

Most GHG Emission is Energy Sector

GHG Emission in Energy Sector Compare year 1994 vs 2003



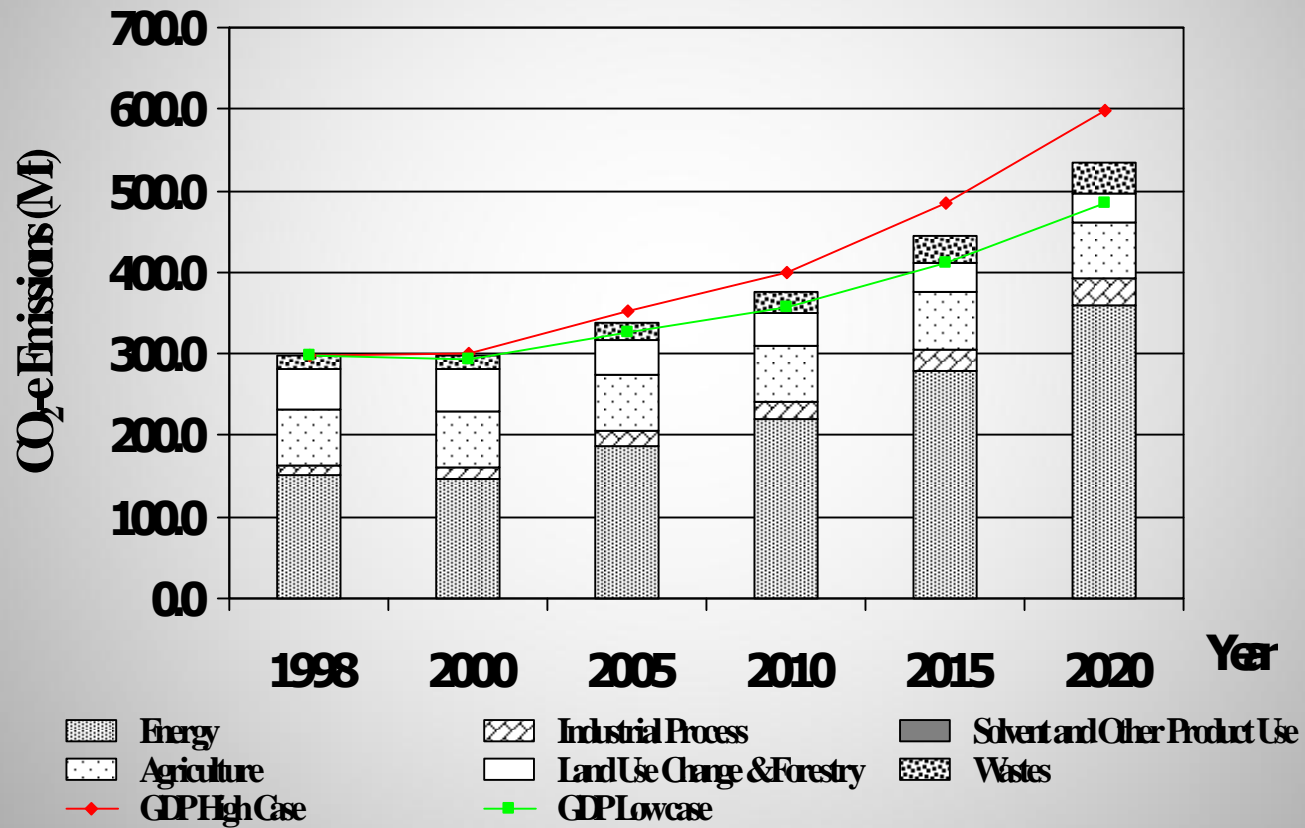
Greenhouse Gas Emission in Thailand Year 2003 by Categories



Source: Thailand National CDM Strategy Study (2005)

Note: Only 6 GHG under Kyoto protocol

Forecast GHG Emission in Thailand



GHG Emission from Agriculture Sector

- Estimated GHG emission in year 2008 equal to 360-380 Million Metric Ton CO₂ equivalent per Year
- GHG emission from **Agriculture sector** was 24.1% or equal to **89.2** Million Metric Ton CO₂ equivalent per Year



GHG Emission from Livestock Production

- Total Methane Emission Potential from Livestock Waste Equal to
5,012,732 ton CO₂e/year

Or equal to **5.6 %** of Agriculture sector

Estimated by Department of Livestock Development

GHG Emission from Livestock Production

- Total Methane Emission Reduction from Swine Waste Equal to

700,000 ton CO₂e/year

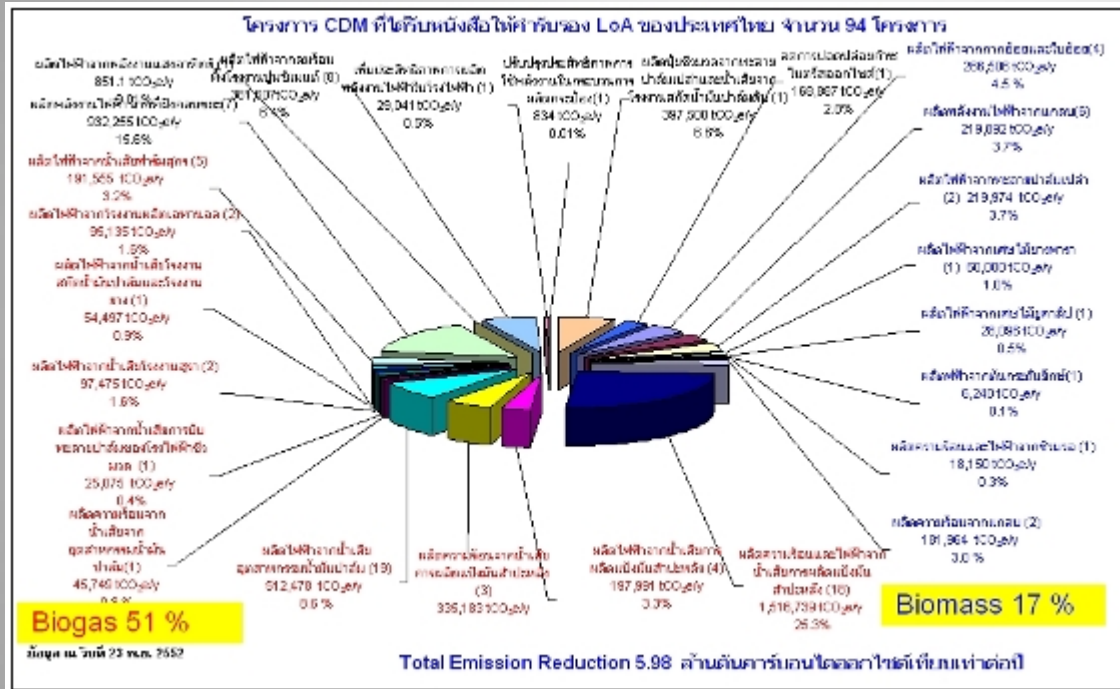
As estimated by January 2010

- Project on progress for Methane Emission reduction from Swine Waste Equal to

500,000 ton CO₂e/year

Expected to complete during 2011-2012

Approval CDM Project by Thailand DNA



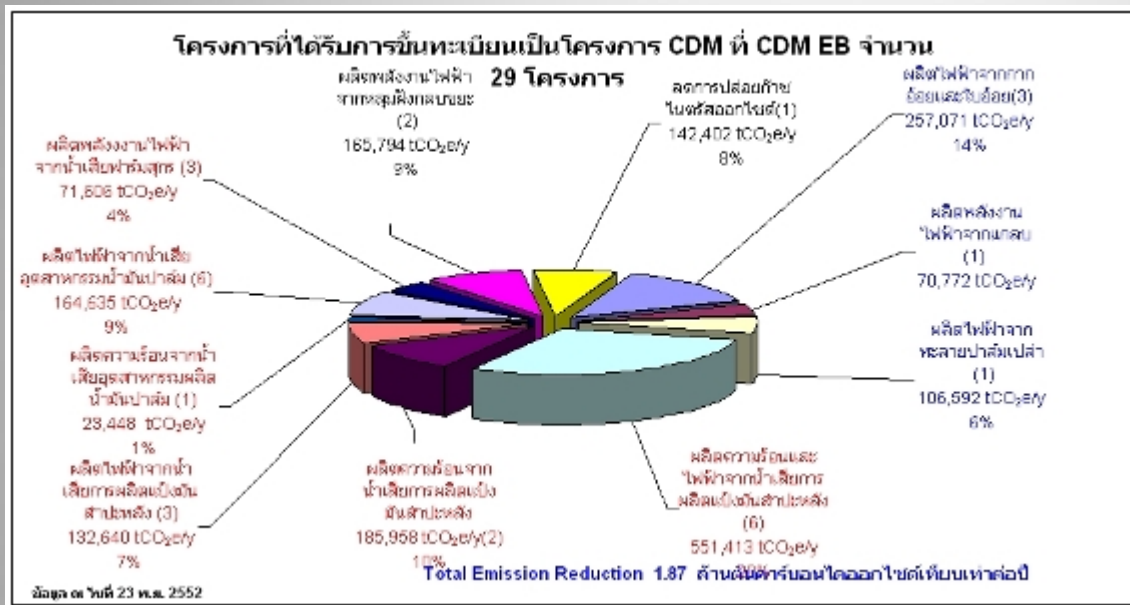
Total CDM projects with Thailand DNA Approval (Thailand Greenhouse Gas Management Organization) = **94** Projects

Total Emission = **5.98** Million CO₂ e per Year

Biogas Project 51%
 Biomass Project 17%
 Others 32%

Source : TGO , 23 November 2009

Registered Projects with CDM EB



Project Registered with CDM Executive Board = **29** Projects

Total Emission Reduction = **1.87** Million CO₂ e per Year

GHG Emission Reduction Campaign in Thailand

Carbon Reduction Label

What is Carbon Label ?

- A carbon label provides a measure, expressed as “carbon dioxide equivalent,” of how much a product contributes to the reduction of greenhouse gas emissions across its life cycle
- Most carbon labeling efforts have focused on process life-cycle assessments (LCAs)
- These assessments investigate how much lower carbon charge the product can achieve throughout its life, starting from production of raw materials to its manufacturing process, distribution, use and disposal, including all intervening transportation steps necessarily caused by the product's existence

GHG Emission Reduction Campaign in Thailand by TGO

Carbon Reduction Label

Why Carbon Label ?

Consumers

- A carbon label is designed to give consumers information in order to make more informed choices when choosing products and services.
- The power of consumer choice influences manufacturers to analyze their energy use and carbon charge and increase their competitiveness
- Consumers can take part in tackling climate change problem more easily

GHG Emission Reduction Campaign in Thailand by TGO

Carbon Reduction Label

"Carbon Labels" on products in Thailand

1. **Dried/Dehydrated foods** - Doi Kham / Doi Kham Food Products Co., Ltd.
2. **Cement** - Siam City / Siam City Cement Public Co., Ltd.
- TPI Polene / TPI Polene Public Co., Ltd.
3. **Wood substitute** - SHERA / Mahaphant Group
4. **Packaged white rice** - Mah Boonkrong / Patum Rice Mill and Granary Public Company Limited
5. **Condom** - One Touch / Thai Nippon Rubber Industry Co., Ltd.

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GHG Emission Reduction Campaign in Thailand by TGO



Crown Standard for Thai CDM Projects

What is Crown Standard ?

- **Thailand Greenhouse Gas Management Organization (Public Organization) (TGO)** launches its own **Crown Standard** for Thai CDM Projects
- **TGO** expects the **Crown Standard** to become an incentive for Thai CDM projects to contribute more to the environment and to society. In addition, the Thai CERs will be internationally recognized and gaining more value added
- The project which receives the **Crown Standard** will have a greater chance of obtaining the Gold Standard in a shorter period of time and probably less approval fee

Potential project in Thailand

- Target farm; 22 pig farms (250,000 pigs)
- 10 farms finished;
 - 1 Modified covered lagoon,
 - 9 Channel Digester Plus to be bundled for CDM project
- 11 farms will start construction in May 2010

Sa-ard Farm 100%



Sa-ard Farm 100%



KOS Farm 100%



KOS Farm 100%



KOS Farm 100%



Generators in farms



Maneerat Farm 100%



Wanchai Farm 100%



Wanchai Farm 100%



Wanchai Farm 100%



Kanchana Hybrid Farm 97.1%



V-tai Farm 85.8%



Phanus amporn farm



Phanus amporn farm



Phanus amporn farm



Thank you

