

Thailand's Response to Climate Change

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Thailand and Climate Change

- Thailand has been a party of UNFCCC since March 1995
- Has participated in bilateral and multilateral projects on climate change
- Hosted 3 AIJ Projects from Japan

Thailand and Climate Change

- Submitted her Initial National Communications to UNFCCC in 2000
- Preparing for the second National Communication
- Ratified Kyoto Protocol 28 August 2002

Thailand's National 1994 GHGs Inventory

□ Used 1996 revised guidelines

➤ Gross CO₂ 241 Tg (-sink 39 Tg): Net 202 Tg

➤ Energy emitted more than one-half of CO₂: forest and land use emitted less than that of 1990

Thailand's National 1994 GHGs Inventory (cont.)

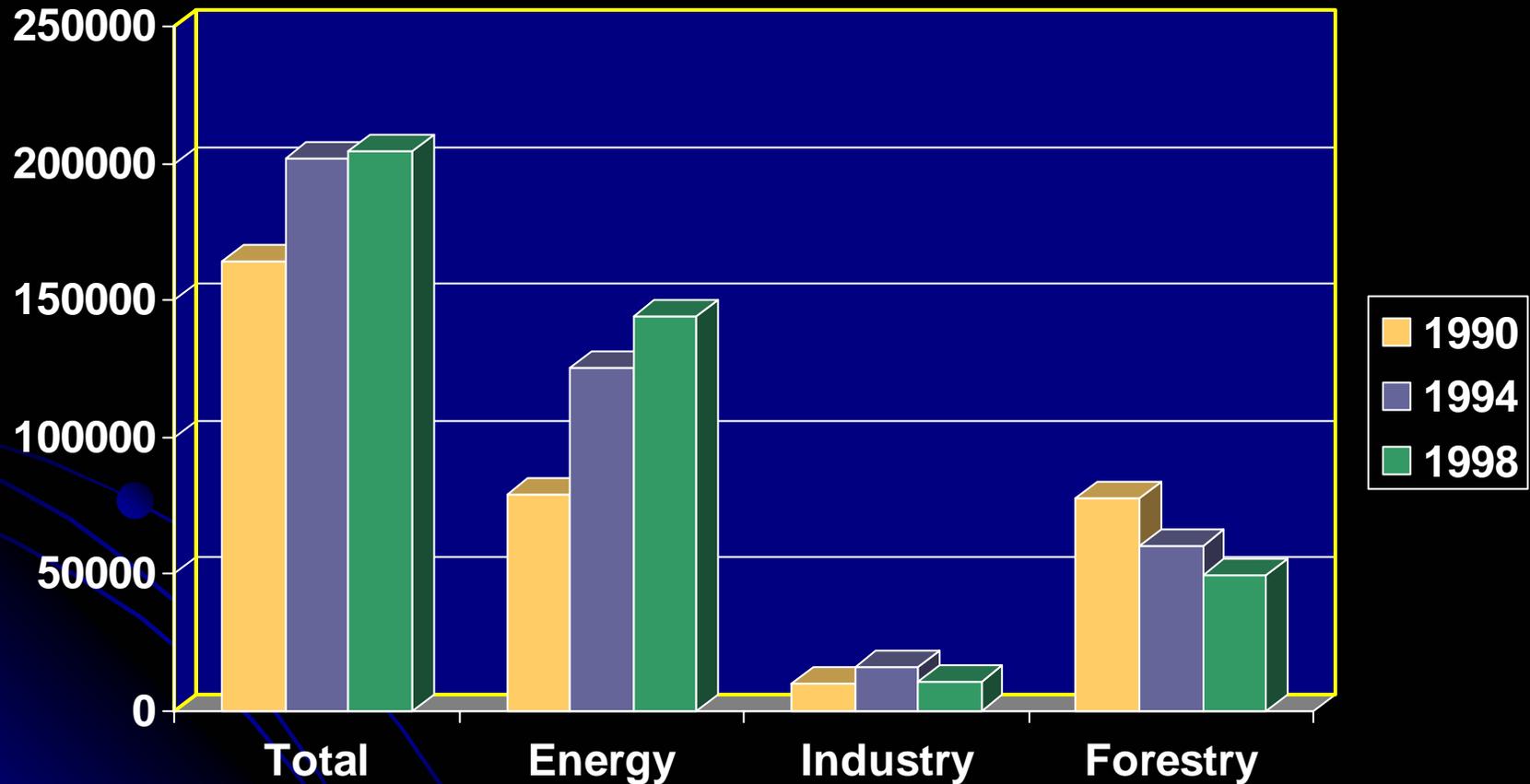
- Methane 3.2 Tg. About 91 % from rice and livestock (emitted about 2.9 Tg)
- N₂O 48 Gg, mostly from manure and agriculture soils
- N₂O 304 Gg, mainly from energy

Thailand's National 1994 GHGs Inventory (cont.)

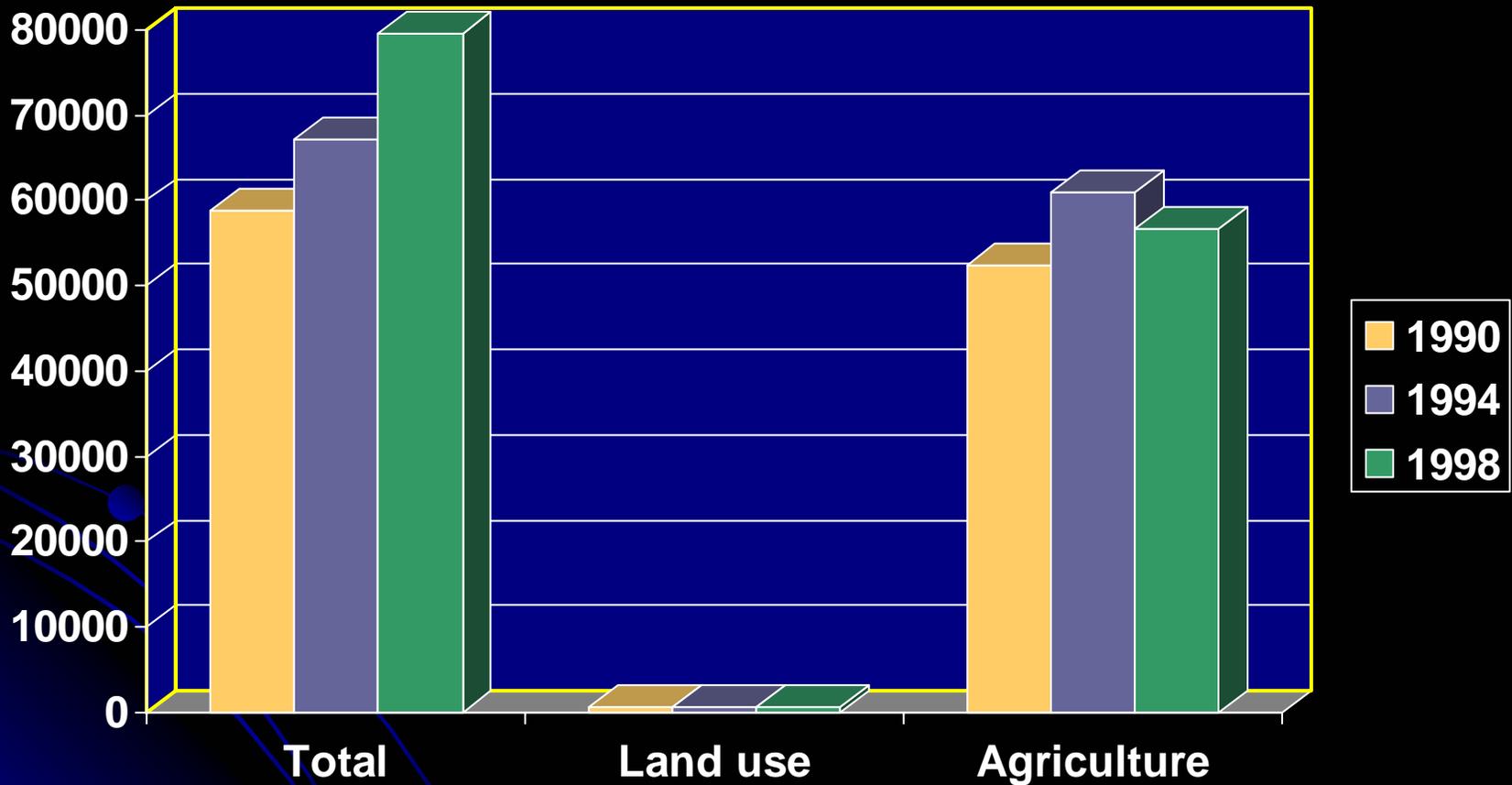
- CO 1 Tg mainly from land use change and forestry and agriculture
- NMVOC 0.9 Gg, mainly from energy

Total 1994 emission in CO₂ equiv.. = 442 Tg

Thailand's CO₂ Emissions



Thailand's CH₄ Emissions



Mitigation Measures: Energy Sector

□ Demand-side management Program

- Started since Thailand become a party to UNFCCC
- Energy Saving Double Divided Program
- Number 5 Energy Saving Appliances Program
- Energy Saving Light Bulb Program

Mitigation Measures: Energy Sector (cont.)

□ Energy Conservation and Promotion Act

- Promotion of more efficient use of energy
 - Development and use of renewable energy sources
 - Development and dissemination of energy conservation technology
 - Promotion of sustainable energy
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Mitigation Measures: Energy Sector (cont.)

□ Fuel Switching

- Several alternative energy sources to replace domestic use of fossil fuels and coals: natural gas, hydro, solar, wind, biomass, biogas

□ Transportation Improvement

- New emission vehicle standards
- Mass transit: elevated light train, subway, bus, train
- Rapid transport system

Mitigation Measures: Forestry Sector

□ Protection of Forest

- Logging Ban
- Increasing Forest Areas: mangrove forest, commercial forest, community forest, conserved forest

□ Reforestation

- Promoting reforestation: to celebrate the Auspicious Occasion of Her Majesty the Queen's 6th Cycle Birthday Anniversary 12th August 2004

□ Afforestation: Prime Minister's Policy to increase green areas by using economic incentive tools

Vulnerability and Adaptation

- As a tropical country, Thailand is highly vulnerable to climate change:
 - Agriculture
 - Forest
 - Coastal
 - Health
- V&A is the most disadvantage area of work in climate change

Vulnerability and Adaptation (cont.)

- Capacity building on research and development is urgently needed
 - Lack of sufficient international support to conduct research on the issues
 - Need immediate attention-regionally and globally
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Thailand and Kyoto Protocol

- Thailand already ratified Kyoto Protocol
- The importance of KP to Thailand
 - Emitter: less than 1 % of global total in 1990
 - One of the most vulnerable countries
- Thailand fully supports KP, based on its principles and those of UNFCCC

Thailand and Kyoto Protocol (cont.)

- Thailand emphasizes that domestic actions are of priority
 - Three mechanisms, especially CDM, are just supplementary ones
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CDM: Thailand's Perspectives

- CDM must fully conform with the conditions required
- Sustainable development of Thailand must be fully adhere to
- Real and genuine technology transfer must present
- Only quality proven CDM projects would be implemented in Thailand

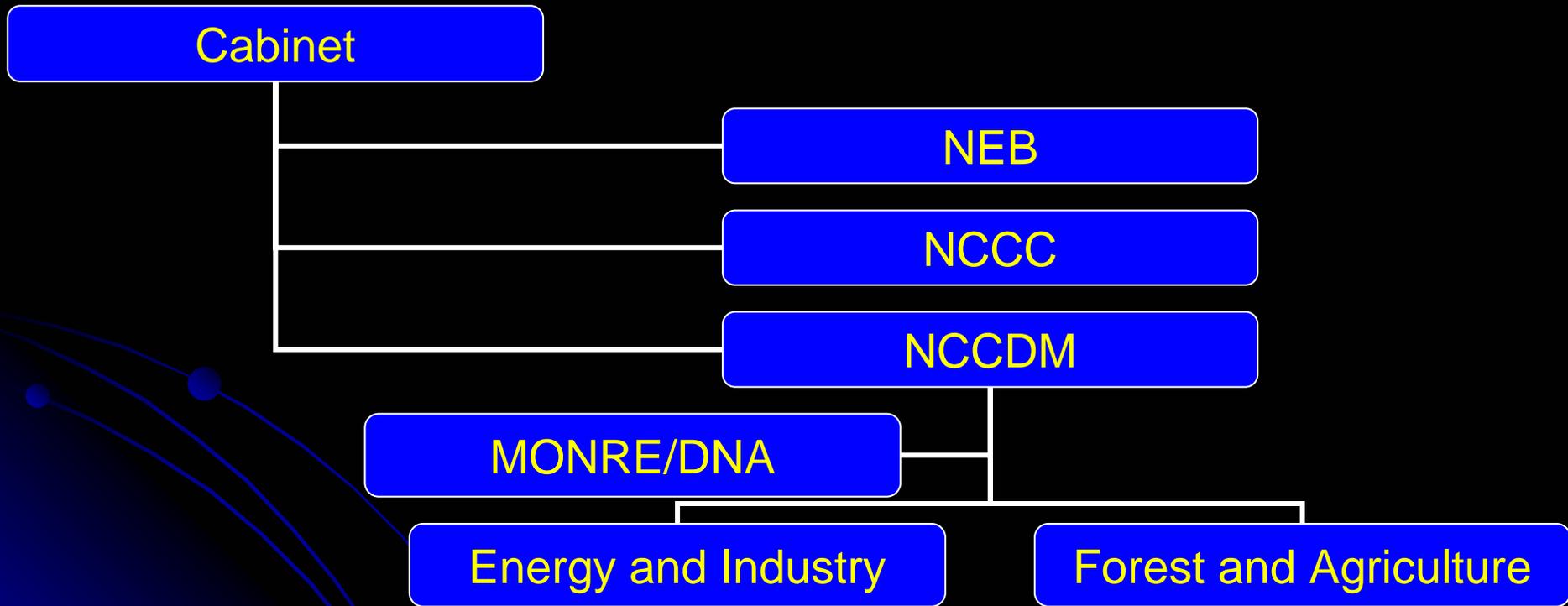
Thailand's CDM Potential

- **Permit Prices for CERs are relatively low**
- **Energy sector is the most potential CDM candidates**
 - **Biomass/Biogas**
 - **Energy Efficiency Improvement**
 - **Production Process Improvement**
 - **Boiler Feed water System Retrofit**
 - **Steam Trap retrofit**
 - **Economizer for boiler/Steam leakage reduction**

Thailand's CDM Potential

- **Energy sector is the most potential CDM candidates**
 - Combustion efficiency improvement
 - Chiller system retrofit
- **Forest sector also has potential to be CDM candidates**
 - Afforestation in abandoned agricultural land
 - Reforestation in poor forest area both terrestrial and mangrove forests

Thailand's Preparation for CDM



Conclusion

- Thailand will continue to play her fair share in implementing the UNFCCC and KP
- Thailand believes that CDM would play a significant role in reducing the climate change problem while contributing to the sustainable development in developing country
- Cooperation among Asia-Pacific countries may lead to the achievement of the ultimate goal of UNFCCC