

Clean Development Mechanism (CDM)

Nilapha Paemanee

Electricity Generating Authority of Thailand



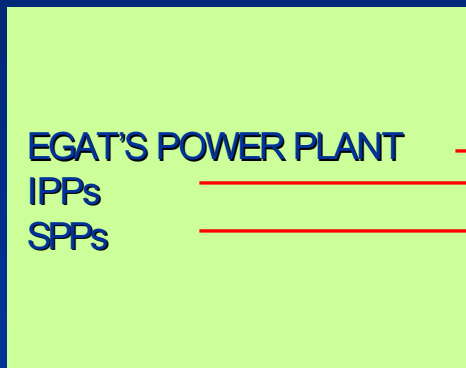
Electricity Generating Authority of Thailand (EGAT)

Electricity generation and Transmission
for the whole country



Thailand's Power System Structure

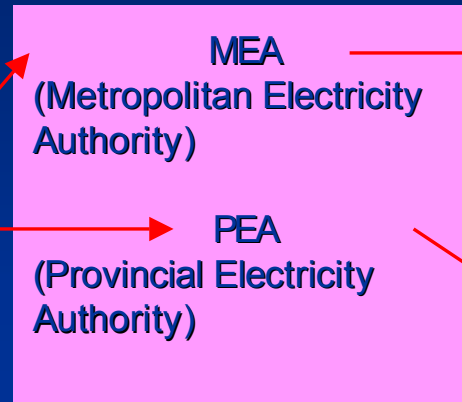
Power Producer



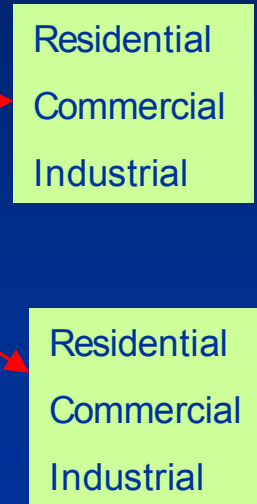
EGAT'S TRANSMISSION
SYSTEM AND SUBSTATION

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Distributors



End Uses



PRESENTATION OUTLINE

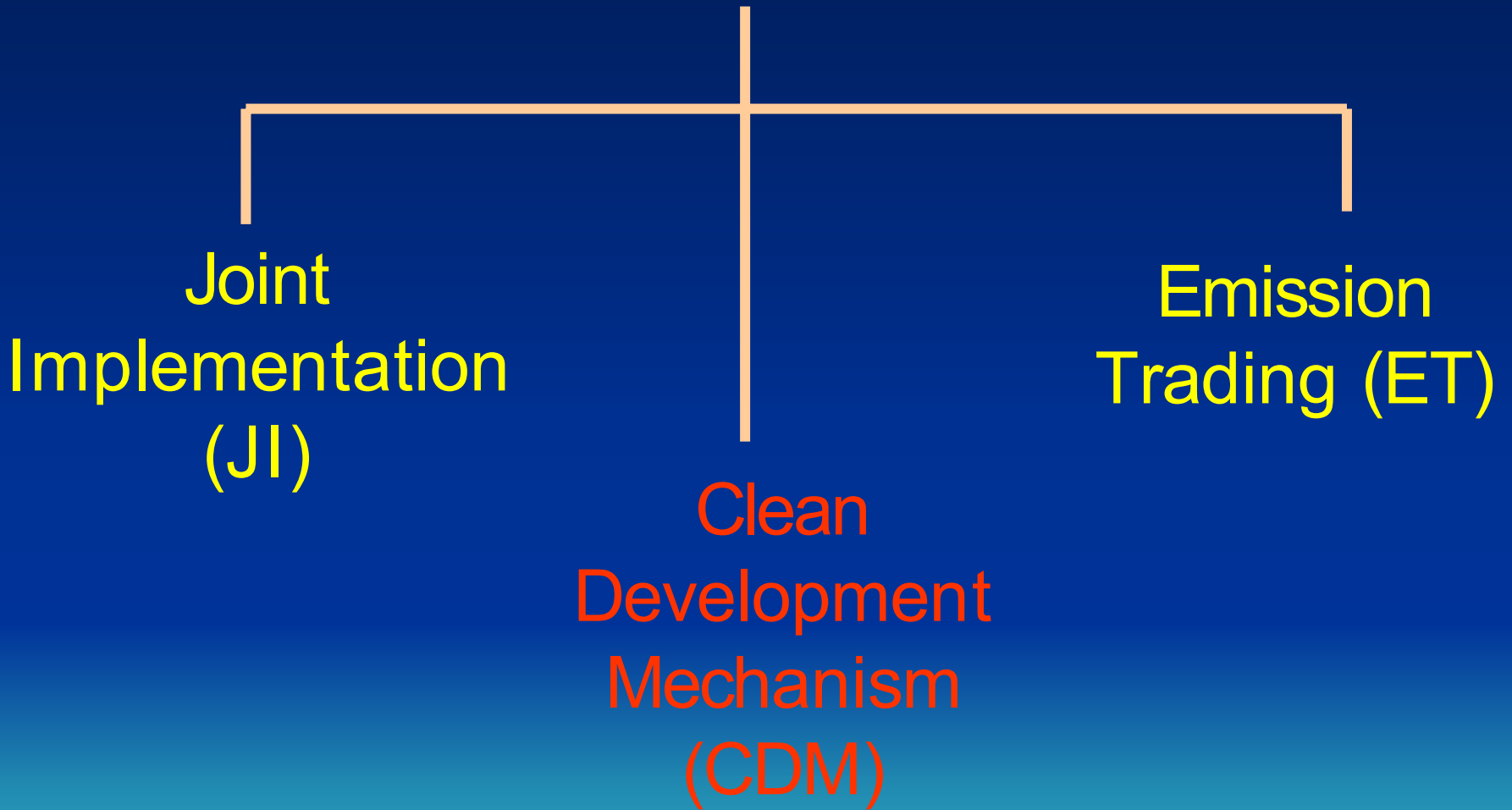
- an overview of CDM Activity in Thailand
- CDM Activity in EGAT
- Barrier of CDM Activity



- 1992 The United Nations Framework Convention on Climate Change (UNFCCC)
- 1994 The Convention enters into force
- 1995 First Session of Conference of Parties : COP-1
- 1997 COP-3 The Kyoto Protocol was adopted



Kyoto Protocol



An overview of CDM Activity in Thailand

Sustainable development

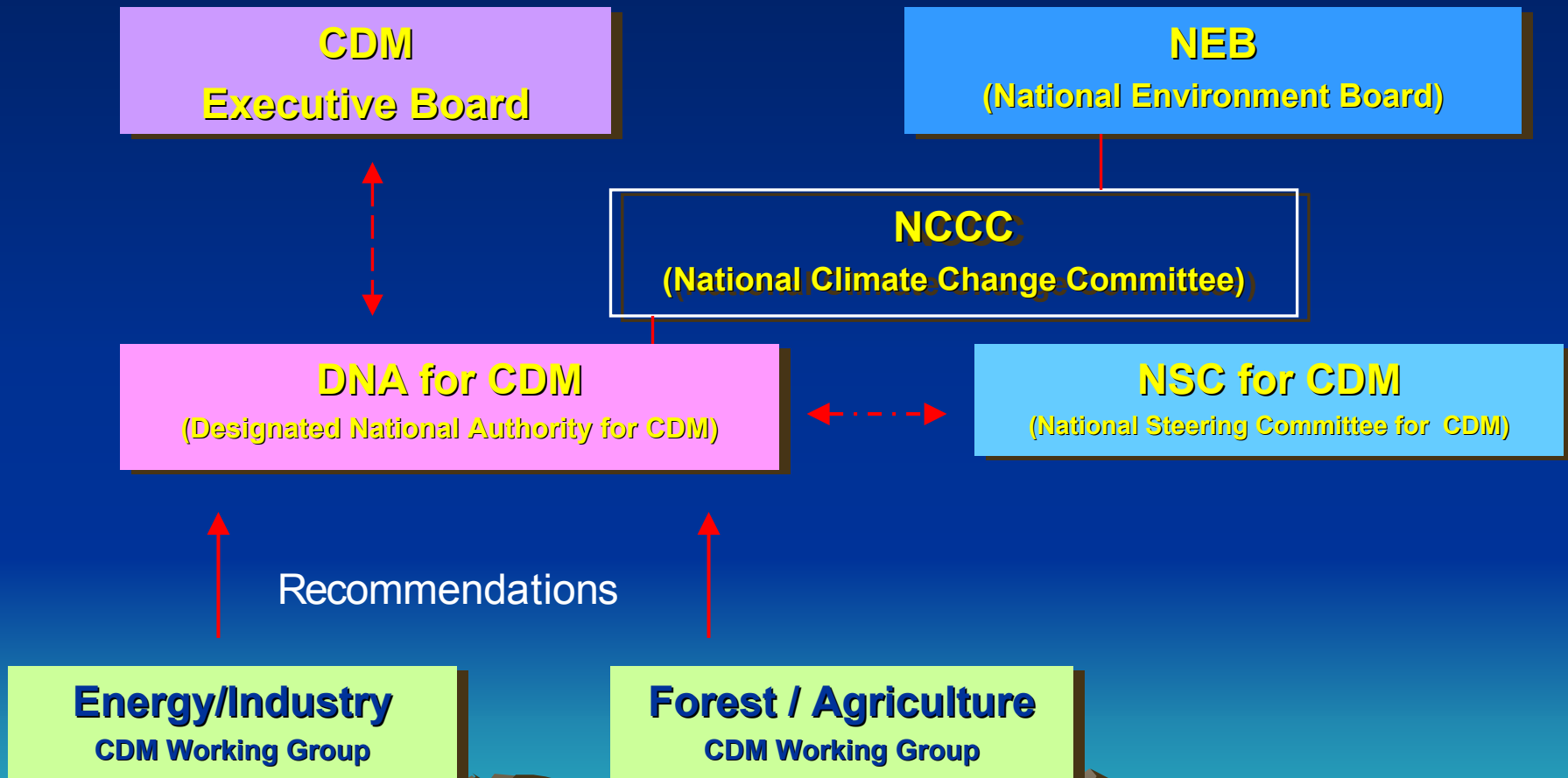
Thailand ratified Kyoto Protocol in
Aug 28, 2002 as non-annex I

Annex I countries lead to promote and
cooperate

Emission reduction Target



CDM Structure in Thailand



The Protocol's emission target cover the six main GHGs

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur Hexafluoride (SF₆)



Source of GHGs

- An natural or human activity that emits GHGs into the atmosphere.
- The most important anthropogenic source of CO₂ is Fossil-Fuel combustion



Estimated Air Pollutant Emissions by Type from Energy Consumption

Year / Sector	Energy Consumption	CO ₂	CO	NO _x	CH ₄	SO ₂
	(ktoe)	(10 ³ ton)				
2001 / Total	64,426	154,535	2,791	703	55	350
Transport	18,629	45,623	461	203	4	21
Power	22,748	61,264	32	181	3	158
Manufacturing	13,428	33,900	122	150	3	167
Res. & Com.	6,645	4,535	2,077	28	44	0
Others	2,976	9,213	99	141	1	4
2002 / Total	68,455	163,039	2,887	752	57	359
Transport	19,633	48,026	489	214	4	21
Power	24,012	63,458	37	189	4	153
Manufacturing	14,871	37,135	138	170	3	180
Res. & Com.	6,758	4,569	2,120	29	45	0
Others	3,181	9,851	103	150	1	5

Remark : - others include agriculture, construction and mining

- Emissions are estimated according to "Revised 1996 IPCC Guideline for GHG Inventories".

CDM Activities in EGAT

There are some CDM Projects in EGAT which have been prepared by Annex I

- Re-powering of North Bangkok Thermal Power Plant
- Modernization of Bangpakong Power Plant
- Green Building Project



All CDM projects for EGAT's business units are on the feasibility study processes

Barrier of CDM Activities in EGAT

- Unclear of know-how of acceptable methodologies to calculate the baseline or Business-as-Usual condition
- Lack of expert on CDM
- Technology Transfer and Financial Assistance needs



Thank you

