

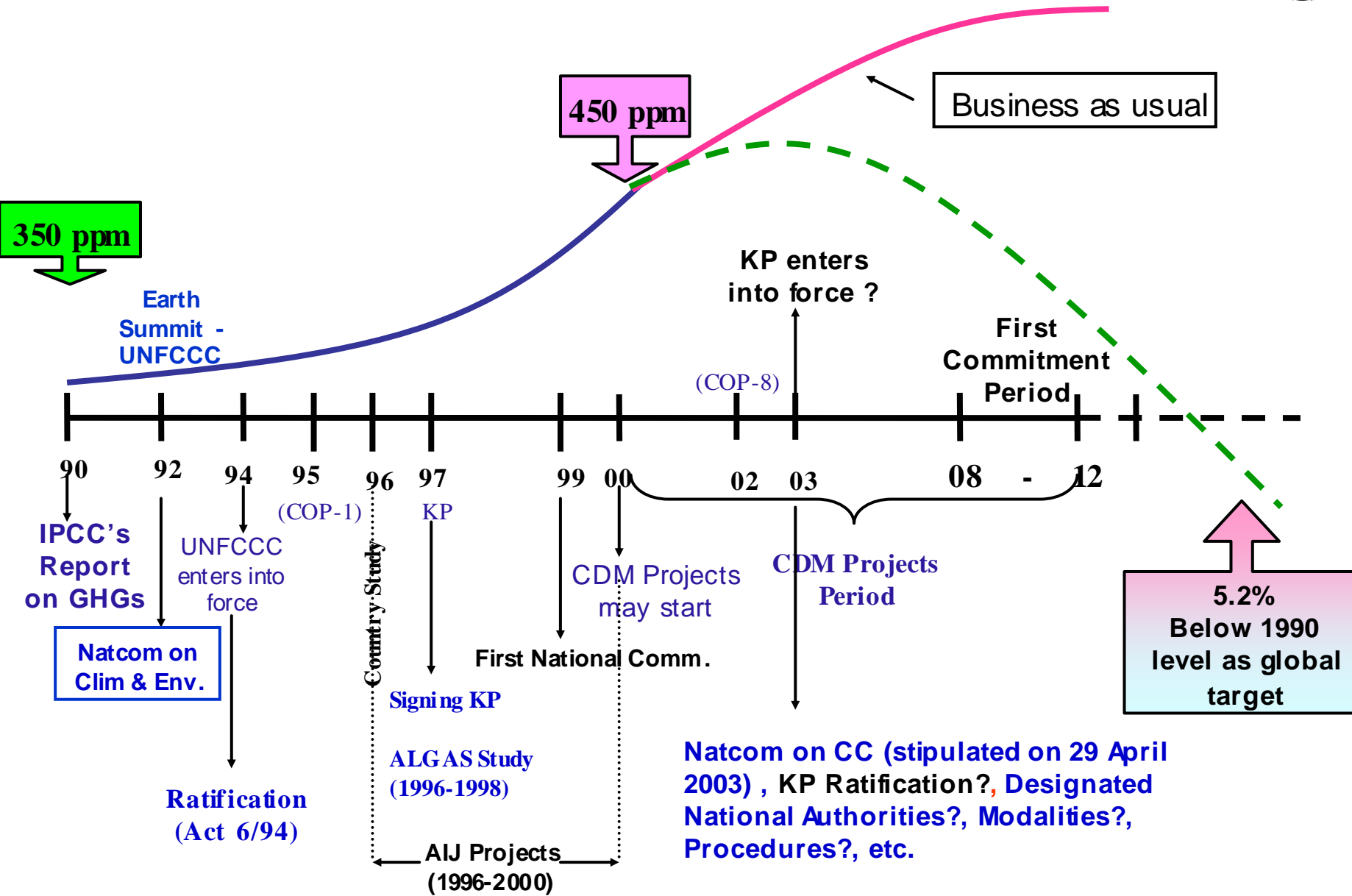


PROPOSED DNA FOR CDM IN INDONESIA

Hendry Baiquni
Head of Climate Change Division
Ministry of the Environment of Indonesia

13th Asia-Pacific Seminar on Climate Change
Miyazaki-Japan, 2-5 September 2003

Indonesia's Response to the International Commitment on CC





Some Activities on Climate Change

- **CO2 emission study (1991; Japan)**
- **C-sequestration study (1992-98; Norway)**
- **Climate Change in Asia: Indonesia Country Report on Socioeconomic Impacts of Climate Change and a National Response Strategy (1994; ADB)**
- **Country Study: Inventory of Greenhouse Gases Emissions and Sinks in Indonesia (1996; US-EPA)**
- **Vulnerability and Adaptation Assessments of Climate Change in Indonesia (1996; US-EPA)**
- **Mitigation Assessments of Climate Change in Indonesia (1996; US-EPA)**
- **First Exercise on Initial National Communication under the UNFCCC (1998; GEF)**
- **Indonesia National Action Plan on Climate Change (1997-98; Indonesia)**
- **Asia Least-Cost Greenhouse Gas Abatement Strategy: Indonesia (1996-98; ADB)**
- **Economics of Greenhouse Gas Limitations: Indonesia Country Study Series (1999; UNEP)**
- **Indonesia: the First National Communication under the UNFCCC (1999; GEF-UNDP)**
- **National Strategy Study on CDM on Energy Sector in Indonesia 2001; (WB-GTZ)**
- **Identification of Less Greenhouse Gases Emission Technologies in Indonesia (2001; GEF-UNDP)**
- **National Strategy Study on CDM on Forestry Sector in Indonesia (WB-AusAID, 2003)**
- **Others (UNIDO, the Netherlands, GTZ, CIDA, SIDA).**



GHG ISSUES INDONESIA

- Indonesia's GHG emissions are projected to increase rapidly in the coming years
- Major GHG: carbondioxide, methane and nitrous oxide amounted to ± 343 million tons of CO2 equivalent.
- An additional 156 million tons of net CO2 emissions due to land uses
- Agriculture was responsible for 85 million tons of CO2 equivalent



Efforts to prepare Indonesia for CDM

- **National Strategy Studies**
 - NSS in the Energy Sector (funded by GTZ) has been completed.
 - NSS in the Forestry Sector (funded by AusAID) has been completed.
 - Covers:
 - CDM market size, dynamics, and sensitivity;
 - The Indonesian market perspectives;
 - The **institutional arrangements**; and
 - Portfolios of projects.
- **Transitional mechanism has taken precedent**
 - Approval of CDM projects (for example, under CERUPT, the Netherlands) while the Designated National Authority is still being established.



Preparation as the host country of Kyoto Mechanism (especially CDM)

Steps	Status
Ratification of the Kyoto Protocol	Ratification through the Parliament. Academic paper has been finalized, and a Draft Law has been formulated, to be submitted to the Parliament.
In parallel with the ratification process, re-establishment of the National Committee on Climate Change	The National Committee exists under Decree of the Minister of Environment, and has been extended with another Ministerial Decree. Funding is secured domestically as well as from the Government of the Netherlands.
Establishment of the supporting institutions	Currently being established (funding secured through GTZ). Pelangi, an Indonesian environmental think tank, is currently assisting the Ministry of Environment.
Establishment of the Clearinghouse	Clearinghouse is currently being established.



Preparation as the host country of Kyoto Mechanism (especially CDM)

- (1) Institutional Arrangement as the host country of CDM
 - Establishment of Designated National Authority (DNA)
- (2) Key issues to be discussed and determined as the host country of CDM
 - SD criteria.
 - Criteria for establishing the baselines.
 - Criteria for additionality of CDM project.
 - Project monitoring and evaluation.



International legal background for DNA

- Kyoto Protocol: Dual function of the CDM
 - For developing countries, to **foster sustainable development** and to contribute to the ultimate objective of the Climate Convention.
 - For industrialized countries, to meet their emission reduction commitments.
- Marrakech Accords:
 - Ratification of the Kyoto Protocol.
 - Establishment of the designated national authority (DNA).





Main tasks of the DNA

- Certifying and expressly stating to the Executive Board that the proposed CDM project:
 - Supports Indonesia's sustainable development efforts.
 - Has done and met the requirements for Environmental Impacts Assessment ("AMDAL").
 - Has accommodated and reacted to stakeholder comments.





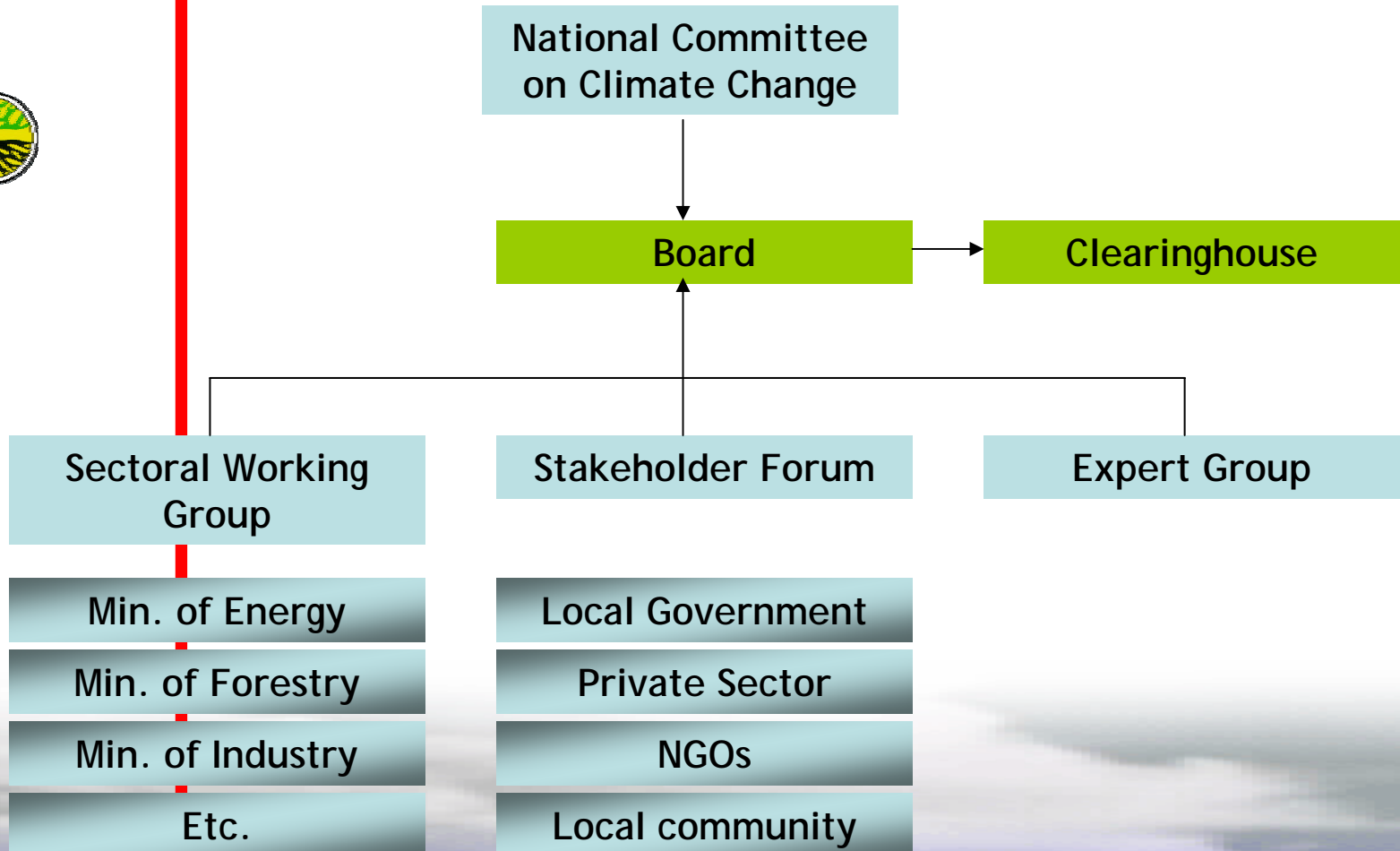
Not the tasks of the DNA

- **Testing the additionality of the project**
 - This will be undertaken by the Executive Board, based on validation by Operational Entity(ies).
- **Finding investors for potential projects or finding projects for potential investors**
 - This can be taken up by a private entity, a broker, or a Fund.
- **Monitoring**
 - This will be undertaken by Operational Entity(ies) based on the Monitoring Plan.
- **Certifying the Emission Reductions**
 - This will be undertaken by the Executive Board, based on verification by Operational Entity(ies)



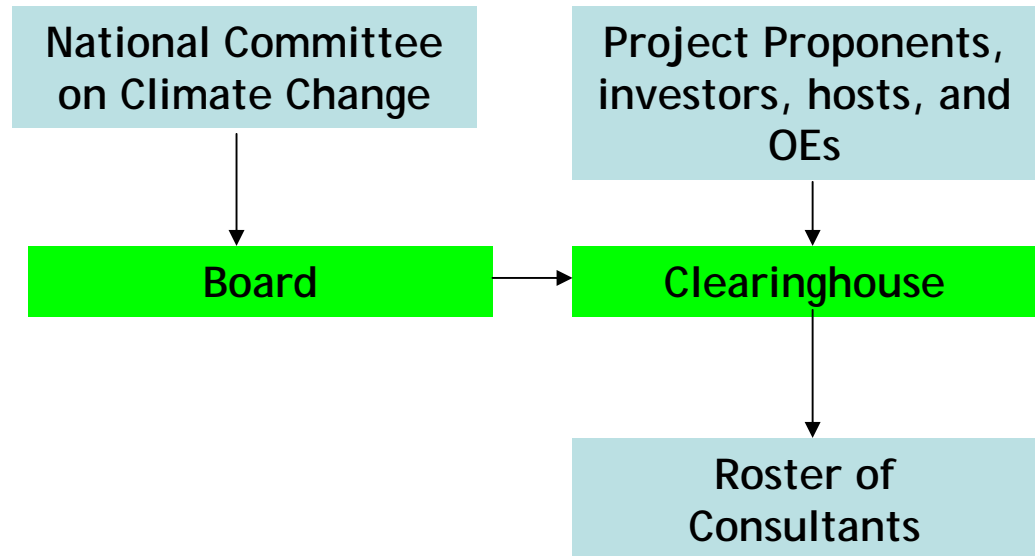


Proposed form





Proposed working mode





Activities

- Design the working mechanism of DNA;
- Define DNA's tasks and rules;
- Increase the working capacity of the DNA and of potential project proponents in Indonesia; and
- Introduce DNA and the CDM Approval Guidelines to potential project proponents, operational entities, local authorities, and the public.





Workplan

- 15 months.
- COP9 (December 2003) — a fully working DNA will have been established.
 - CDM Board has been established
 - CDM Clearinghouse has been established.
 - CDM Website has been up and running, and periodically updated.





More still needs to be done

- **Inter-governmental coordination:**
 - What has been carried out by other ministries? Other stakeholders?
 - What other activities have been planned?
- **Donor coordination:**
 - What has been supported by which donors for capacity building of the designated national authority?
 - What other activities will be supported?
 - What other activities need to be supported?
- **Needed supports:**
 - Establishment of indigenous **operational entity(ies)**.
 - Establishment of an **Indonesian Carbon Fund**.
 - Development of more **training modules** and covering more **modalities**.
 - Supports, development, and capacity building for **local authorities**.



Programmes on climate change impacts mitigation



- **The integration and internalization of environmental considerations** as well as efficiency steps in energy development in the sector of electric power plant, transportation, industry and households;
- **The capacity building**, as well as better defined steps in facing greenhouse gas related global issues such as biodiversity loss, sea level rise, agriculture, as well as ozone layer depletion;
- **The capacity to implement steps** particularly those related to energy efficiency, land use change and forestry sectors as source and sink of the greenhouse gas emission, and
- **The national capacity in facing global fora and negotiation** among Parties for win-win solution in performing common responsibilities with differentiate magnitude objectives of the Convention.

Needs of Assistance in Climate Change Issues



- (1) Institutional and capacity building of central and local governments in relation to climate change issues:
 - Awareness raising seminars/workshops for central/local government, industry, bankers, citizens, parliamentary members, etc.
 - Institutional establishment for promoting the use of CDM. (DNA, etc.).
 - Documentation in relation to the procedure for approval of CDM by the host country (SD criteria, baseline, additionality, monitoring, etc.)



Needs of Assistance in Climate Change Issues

(2) Study needs in relation to climate change issues:

- Forest and carbon sink inventory study (critical for LULUCF CDM)
- Climate change adaptation study (vulnerability assessment, estimation of economic loss of climate change, adaptation measures, etc.)
- CDM project identification studies (transport, industry, agriculture, residential/office/commercial, sub-sector wise industry, etc.)

12th Asia Pacific Seminar on CC Bangkok, 29 Jul.-1 Aug. 2002



NSS WORKSHOP ON KYOTO PROTOCOL CAPACITY BUILDING Sigriswil, 23 - 25 Sep '02



The World Bank



- Themes:**
- Basic institutional prerequisites
 - Additional enabling steps
 - Links between CC and SD

"The overall objective is to assess CB needs and the best means of addressing these requirements"
(Peter J. Kalas - World Bank, 22 Sep '02)



PARTICIPANTS

APN 2nd Workshop on Vegetation Recovery in Degraded Land Areas
Kobe, 26-28 Nov 02

Mizuho-ku, Nagoya

brother

Photo Voltaic System

Providing 0.8 % of total electricity demand (14.4 million kWh - FY 2001)
CO₂ reduction: 80 tons/year
Power Generation: 116,000 kWh
Maximum Power: 100 kW
Total Panel Area - 752 m²

- 4 G -
Moral Support

CTI Wshop
Tue, 29 October 2002

ICETI

Refuse
Reduce
Reuse
Reform
Recycle

ISO TC-207 (WG5), Bali-30 Jun. '03



Recent CDM-Related CB Activities



CDM Workshop on Possible BCPA with
The Netherlands – Jakarta, 8 Jul. '03





MRI's needs assesment
for transfer of technology to mitigate
the effects of global warming,
Jakarta - 26 Aug. '03



Meeting with NEDO, Jakarta -26 Aug. '03

Recent CDM-Related Capacity Building Activities in Indonesia



Tokyo Electric Power Company (TEPCO), Jakarta-26 Aug. '03



Garbage Bin Painting Competition for Primary School Children to Commemorate The International Ozone Day on 16 Sept. 2003



Jakarta, 30 Agustus 2003



Potential CDM projects in Energy Sector in Indonesia



Emission Reduction Option	Price Range ¹	Quality of GHG Offset ²	Emission mitigation potential (t CO ₂ /yr)
Industrial Sector Energy Efficiency			
1. Salt production from desalination effluent of fossil-based power plant	Medium	Medium	4.37E+05
Renewable Energy			
2. Rice husk-based small power generation units (each ≤ 100 kW)	High	High	8.72E+04
3. Geothermal Power Plant	High	High	1.95E+06
4. Micro-hydro power generation	High	High	1.58E+06
5. Utilization of low level geothermal heat for agricultural activities	Medium	High	2.98E+04
Transportation Sector			
6. Gasohol Fuel ³	Medium	High	3.35E+06
7. Biodiesel ⁴	Medium	High	4.46E+06
8. PV-based small vehicle	High	High	1.62E+05
9. CNG vehicles (Buses) ⁵	High	Medium	1.92E+05
Power Generation			
10. Coal drying using power plant waste heat	Low	Low	1.79E+04

Source: Center for Research on Material and Energy, Bandung Institute of Technology (ITB), 2001

³ 10% by volume absolute bio ethanol

⁴ 5% blend in petroleum-based diesel fuel

Activities Implemented Jointly (AIJ) in Indonesia



Activity	Type	Location	Executioner	Donor
Eastern Indonesia Hybrid Energy	Ren. energy/ Energy efficiency	Sulawesi Selatan	PT LEN & Agency For Tech. A & A	Australia
Renewable Energy Supply System	Renewable Energy	NTT & Sulawesi Selatan	Dept. of Energy & Min. Resources	E-7*
Power Plant Thermal Efficiency Improvement	Energy Efficiency	Suralaya Power Plant, Jawa Barat	PT. PLN PJB I & Dept. Energy & Min. Resources	NEDO / Japan
Utilization of Paper Sludge and Solid Waste	Energy Efficiency	Bekasi, Jawa Barat	PT Fajar Wisesa & Dept. of Trade & Industry	NEDO / Japan
Demonstration Study on Carbon Fixation Forest Management	Reforestation	Bogor, Jawa Barat	Dept. of Forestry	JICA / Japan

* Received the Asean Energy Award (July 2002) from the Asean Centre for Energy and the ICC/UNEP World Summit Business Award for Sustainable Development Partnerships (Agustus 2002)



Thank You

Arigato



サミットホール
SUMMIT HALL