National Action Plan GHG Emission Reduction in Forestry Sector

Basah Hernowo

Director for Forestry and Water Resource Conservation Ministry of National Development Planning/ BAPPENAS

Presented on Stakeholder Coordination: Comprehensive Mitigation Action for REDD+

February 3rd, 2012

NAP GHG Emission Reduction (RAN GRK)

Climate Change Mitigation

The NAP for GHG Emission Reduction (RAN-GRK) is the workplan document for the implementation of activities to reduce GHG emission in accordance with the national development targets.



Reducing GHG Emission by 2020



Forestry and Peat Land in reducing the emission

Proyeksi emisi business as usual

Juta ton emisi CO₂



Source: SNC, 2010: Indonesia Second National Communication, Under UNFCCC, Ministry of Environment, Republic of Indonesia, Jakarta, November 2010

Targets of Indonesia Emission Reduction

Sector	Reduction Target (Gton CO2e)		
	26%	41%	
Forestry and Peat Land	0.672	1.039	
Agriculture	0.008	0.011	
Energy and Transportation	0.036	0.056	
Industry	0.001	0.005	
Waste Management	0.048	0.078	
Total	0.767	1.189	

Policies for Forestry and Peat Land Sector

- Reduction of GHG and at the same time promote a safe environment, prevent disasters, absorb workforce and increase state's and community's revenues
- Management of marsh water system and network in marsh area
- Maintenance of marsh reclamation network (including the existing peat lands)
- Enhancement of productivity and efficient production of agriculture on peat lands with lowest emission and absorb CO2 optimally

Strategies for Forestry and Peat Land Sectors

- Suppress the rate of forest deforestation and degradation to reduce GHG emissions
- Increase planting to increase GHGs absorption
- Increase the efforts to secure forest areas from fire and illegal loggings and apply a sustainable forest management
- Conduct improvement on water system (network) and dividing blocks and stabilize water level elevation on marsh water system network
- Optimise land and water resources without deforestation
- Apply land management and agricultural farming technologies that have lowest GHG emissions and can absorb CO2 optimally

Core Activities

N O	Action Plan	Period	Indication of Emission Reduction (million tonne of CO2e)	Responsible Institution
1.	Establishment of a Forest Management Unit (FMU)	2010 - 2014	31.15	Kemenhut (PJ)
2.	Planning for forest area utilization and business improvement	2010 - 2014	24.32	Kemenhut (PJ)
3.	Development of a utilization of environmental services	2010-2014	3.67	Kemenhut (PJ)
4.	Inauguration of forest areas	2010-2014	123.41	Kemenhut (PJ)
5.	Improvement rehabilitation, operation and maintenance of marsh reclamation network (including peat lands)	2010-2014	5.23	Kemen PU (PJ)
6.	Management of peat lands for a sustainable agriculture	2011-2020	103.98	Kementan (PJ)

Core Activities

NO	Action Plan	Period	Indication of Emission Reduction (million tonne of CO2e)	Responsible Institution
7.	Development of agricultural land management in abandoned and degraded peat land areas to support plantation, animal raising and horticulture sub-sectors	2011 - 2014	100.75	Kementan (PJ)
8.	Implementation of a forest and land rehabilitation and forest reclamation in the prioritized watershed	2010 - 2014	91.75	Kemenhut (PJ)
9.	Development of social forestry	2010 - 2014	100.93	Kemenhut (PJ)
10.	Forest fire control	2010-2014	21.77	Kemenhut (PJ)
11.	Forest investigation and protection	2010 - 2015	2.30	Kemenhut (PJ)
12.	Development of conservation and essential ecosystem areas and management of protected forests	2010-2014	91.27	Kemenhut (PJ)
13.	Enhancement of plantation forest businesses	2010-2014	110.10	Kemenhut (PJ)

Supporting Activities

NO	Action Plan	Period	Responsible Institution
1.	Survey and data collection on hydrology and geo-hydrology of peat lands	2010-2014	Kemen PU (PJ)
2.	Identification of marsh lands for cultivation and conservation	2010-2014	Kemen PPN/ Kemen PU (PJ)
3.	Research on water system in peat lands	2010-2014	Kemen PU (PJ)
4.	Formulation of Presidential Regulations on National Strategic Zones and Island Spatial Planning	2010-2014	Kemen PU (PJ)
5.	Formulation of river Regional Spatial Planning	2010-2014	Kemen PU (PJ)
6.	Provincial region spatial audit (stock taking)	2010-2014	Kemen PU (PJ)
7.	Spatial planning data and information gathering	2010-2014	Kemen PU (PJ)

Supporting Activities

NO	Action Plan	Period	Responsible Institution
8.	Monitoringthe evaluation of national and island RSPs and national infrastructure programs	2010-2014	Kemen PU (PJ)
9.	Acceleration of the stipulation of Regional Regulation (Perda) on Province and Regency/City RSPs based on Strategic Environmental Assessment (SEA)	2010-2014	Kemen PU (PJ)
10.	Control the non-forestry related uses of forest areas	2010-2014	Kemenhut (PJ)
11.	Forest Resources Inventory and Monitoring	2010-2014	Kemenhut (PJ)
12.	Research and development on forestry climate change policy	2010-2014	Kemenhut (PJ)
13.	Formulation of the standard criteria of Peat Ecosystem Damage	2010-2014	Kemen LH (PJ)
14.	Formulation of the Master Plan of Province Peat Ecosystem MAnagement	2010-2015	Kemen LH (PJ)

Supporting Activities

NO	Action Plan	Period	Responsible Institution
15.	Inventory and mapping of peat ecosystem's hydrological entity	2010-2014	Kemen LH (PJ)
16.	Inventory and mapping of peat ecosystem characteristics	2010-2014	Kemen LH (PJ)
17.	Research and development on low emission technology, MRV methodology on agricultural areas in peat land	2011-2014	Kementan (PJ)

How to Implement RAN GRK??

Implementation Plan of RAN GRK

- **1.** Coordination of the RAN GRK's implementation with national stakeholders
 - a. Establishment of Coordination Team (WG per sector)
 - b. Agreement on methodology and measurement (indicators)
 - c. Agreement on MRV system (Perpres No. 71/2011)
- 2. Coordination of the RAN GRK's implementation with local stakeholders
 - a. Establishment of WG in provincial level
 - b. Socialization and assistance
 - c. RAD GRK is part of RAN GRK to support the achievement of emission reduction target of Indonesia
- 3. Cooperation/networking with the Universities, NGO, strategic groups

RAN GRK and RAD GRK

2009	2010-2011	2012
Indonesia's commitment to reduce the GHG emissions 26%-41% by 2020	RAN GRK had been formulated since 2009 PERPRES NO. 61/2011 on The NAP for GHG	Guideline for RAD GRK RAD GRK is expected to finished in 2012
	Emission Reduction (RAN GRK)	
COMMITMENT FOR LOW CARBON DEVELOPMENT WITHOUT OMITTING ECONOMIC GROWTH	THE COMMITMENT IS ELABORATED TO REAL NATIONAL ACTIVITIES THROUGH FIVE MAIN	THE ELABORATION OF COMMITMENT TO REDUCE THE GHG EMISSION IN PROVINCIAL LEVEL → TO SUPPORT THE ACHIEVEMENT OF NATIONAL
	SECTORS	EMISSION REDUCTION

Sinergy between RAN and RAD GRK **RAN GRK** Target: 26-41% Forestry **Energy and** Agriculture Industry Waste and Peat Land **Transportation**

RAD GRK

Province 2

RAD GRK

Province 1

RAD-GRK is part of RAN-GRK

RAD GRK

Province 3

Guideline in formulating RAD GRK



Principles in formulating RAD GRK

- a) RAD-GRK is a reflection of the provincial development strategy (as well as Kabupaten/Kota) in term of GHG emission reduction
- b) RAD-GRK does not hinder the economic growth and poverty alleviation, and prioritize the people's welfare to achieve sustainable development
- c) RAD-GRK is an integrated action plan between one sector and other sectors with high concern on all aspects of sustainable development (such as carrying capacity, environment capacity, spatial plan, and land use plan)
- d) RAD-GRK is the commitment as well as contribution from local government (Provincial/Kabupaten/Kota) on Indonesia's commitment in reducing the GHG emission to attain clean and low emission life, and sustainable development
- e) RAD-GRK is the local action plan with new approach in development and high concern on the efforts to reduce the GHG emissions

Substance of RAD GRK



Proposed Mitigation Action Plan



Regional Meeting on RAD GRK



Stakeholders Involvement



What is the relation between RAN & RAD GRK and other development planning documents?

RAN & RAD GRK in Economic Development



What is the relation between RAN & RAD GRK and RAN & RAD REDD+?

REDD+ Strategic Framework

 Kelem Badan H Instrum Sistem Pema Pelap Verifi 	 bagaan dan proses Khusus REDD+ en dan Lembaga Pendanaan dan Lembaga MR∨ antauan boran kasi Meningkatkan penegakan hukum dan mencegah korupsi Menangguhkan ijin baru untuk hutan dan lahan gambut selama 2 tahun Memperbaiki data tutupan dan perijinan di hutan dan lahan gambut Menyelaraskan sistem insentif 	Source: Task Force REDD+
Program- program strategis	 Pengelolaan lansekap yang berkelanjutan Perenc. dan pengel. lansekap/ ekoregion/DAS multifungsi Perluasan alternatif lapangan kerja secara berkelanjutan Akselerasi pembentukan organisasi dan operasional KPH Pengendalian & pencegahan kebakaran hutan & lahan Sistem ekonomi pemanfaatan SDA secara lestari Memacu praktek pengelolaan hutan secara lestari Meningkatkan produktivitas pertanian dan perkebunan Mewujudkan praktek pertambangan ramah lingkungan Mempromosikan industri hiilir dengan nilai tambah tinggi Memantapkan fungsi kawasan lindung Mengendalikan konversi hutan dan lahan gambut Restorasi hutan dan rehabilitasi gambut 	Reduksi emisi Cadangan karbon hutan meningkat
 Perubahan paradigma & budaya kerja Pelibatan para pihak 	 Penguatan tata kelola sektor kehutanan Pemberdayaan ekonomi lokal dengan prinsip berkelanjutan Kampanye nasional untuk aksi "Penyelamatan Hutan Indonesia" Melakukan interaksi dengan berbagai kelompok (pemerintah regional, sektor swasta, organisasi non pemerintah, masyarakat adat /lokal dan internasional) Mengembangkan sistem pengaman (<i>safeguards</i>) sosial dan lingkungan 	Ekonomi tetap tumbuh

Mainstreaming REDD+ into National Planning System

REDD+National REDD+National Strategy **FIVE PILLARS:** Institutional development 1. and its process

- 2. Law Enforcement and **Regulatory Framework**
- 3. Strategic Programs
 - a. Sustainable Landscape Management

into

sustainable natural resources economic system

b. Implementation of

- c. Conservation and rehabilitation
- 4. Shift in paradigm and work culture
- 5. Engage multistakeholders



- Locations for each activity must be defined
- Volume of each activity must be defined

Mainstream into

- **RPJMN** \bullet
- **RKP** \bullet
- Implementation \bullet of MP3EI

Working Group 9 Task Force REDD+ Mainstreaming REDD+ into National Planning System

Mainstreaming REDD+ into National Planning System



What are the gaps that can be supported by FCPF??

Support from FCPF for RAN & RAD GRK



FCPF program focusses on four activities and is planned to take place in the national level and 5 selected provinces (NAD, Maluku, South Kalimantan, South Sumatera and West Papua)

Gap Between Implementation and Policies





Land use change in the spatial plan occurs in the kabupaten level. Therefore, LULUCF has to be anticipated in the kabupaten level. The capacity to analyze LULUCF needs to be strengthened.

Gap between the data availability and the requirement to measure the GHG emission

- Most of the provinces and kabupatens do not have sufficient data in regards to LULUCF, particularly for forestry
- The GHG emission accounting should accomodate the emission from LULUCF, which volatile to the change in spatial plan in kabupaten level.

What we need is:



Field Study Level



Implementation Approach



Desk Study



Thank You