UPDATE ON INDONESIA’s CLIMATE CHANGE MITIGATION AND ADAPTATION PLAN

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Ministry of National Development Planning/BappeNas
JICA-IGES Seminar, JICA Building Tokyo, May 24 2013
OUTLINE

I. SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE IN THE NATIONAL DEVELOPMENT PLAN

II. NATIONAL AND PROVINCIAL GHG EMISSION REDUCTIONS

III. ADAPTATION PLAN

IV. ICCTF

V. JICA-GOI COOPERATION
I. SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE IN THE NATIONAL DEVELOPMENT PLAN
**LAW No. 17/2007: LONG TERM NATIONAL DEVELOPMENT PLAN 2005-2025**

### 8 DEVELOPMENT MISSIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Mission</th>
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<tbody>
<tr>
<td>1.</td>
<td>Realizing a society that has Noble Morals, Ethics, and that is Cultured and Civilized</td>
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<td>2.</td>
<td>Realizing a Competitive Nation</td>
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<td>3.</td>
<td>Realizing Indonesia that is Democratic Based on the Rule of Law</td>
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<td>4.</td>
<td>Realizing Indonesia that is Secure, Peaceful, and united</td>
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<td>5.</td>
<td>Realizing Development that is More Equitable and Just</td>
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<td>6.</td>
<td><strong>Realizing Beautiful and Sustainable Indonesia</strong></td>
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<td>7.</td>
<td>Realizing Indonesia as an Archipelago Nation that is Self-Reliant, Advanced, Strong and based on the National Interest</td>
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<td>8.</td>
<td>Realizing Indonesia that has an Active Role in International Relations</td>
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### VISION

**VISI**ON: **SELF RELIENT, DEVELOPED, EQUITABLE AND PROSPEROUS INDONESIA**
LONG TERM PLAN → 4 STAGES OF MEDIUM TERM DEVELOPMENT PLAN

RPJM 1 (2005-2009)
Reconstitute the Unitary State of Indonesia, realizing a secure, peaceful, just and democratic Indonesia, with better welfare standard

RPJM 2 (2010-2014)
Consolidate the reconstitution the Unitary State of Indonesia, improving the quality of human resources, science and technology capacity building, strengthening economic competitiveness

RPJM 3 (2015-2019)
Strengthen overall development by emphasizing the development of economic competitive advantages - based on available natural resources, qualified human resources, and science and technology skill and knowledge

RPJM 4 (2020-2024)
Creating independent, progressive, fair and prosperous of Indonesian people through acceleration of development in all areas with a solid economic structure based on competitive advantage
RPJMN 2010-2014

1. Bureaucratic reform and governance
2. Education
3. Healthy
4. Poverty Alleviation
5. Food Security
6. Infrastructure
7. Investment and Business Climate
8. Energy
9. Environment and Disaster Management
10. Disadvantage, Border & Post Conflict Area
11. Culture, Creativity and Technology Innovation
12. Politics, Law and Security
13. Economy
14. Social Welfare

RKP 2010
NATIONAL ECONOMIC RECOVERY AND MAINTENANCE OF PEOPLE’S WELFARE

RKP 2011
ACCELERATION OF FAIR ECONOMIC GROWTH SUPPORTED BY GOVERNANCE CONSOLIDATION AND CENTRAL-REGIONAL SYNERGY

RKP 2012
“ECONOMIC EXPANSION AND GROWTH ACCELERATION THAT INCLUSIVE AND EQUITABLE FOR INCREASING PEOPLE’S WELFARE”

RKP 2013
STRENGTHENING DOMESTIC ECONOMY FOR EXPANSION AND IMPROVEMENT OF PEOPLE WELFARE

RKP 2014
STRENGTHENING NATIONAL ECONOMY FOR INCREASING EQUITABILITY OF PEOPLE’S WELFARE

1. Mainstreaming Sustainable Development
2. Cross-Sectoral Program: Climate Change
   1. PERPRES 61/2011 RAN GRK
   2. PERPRES 71/2011 GHG Emission Inventory

RAD GRK: 32 PROVINCES WITH GOVERNOR REGULATION
• Monitoring, Evaluation and Reporting
• Training/ Capacity Building
II. NATIONAL AND PROVINCIAL GHG EMISSION REDUCTIONS
Commitment to Reduce GHG Emission

President’s Commitment in G-20 Pittsburgh and COP15
Reducing GHG emission in 2020

26% Own efforts
26 + 15 = 41% + International support

PERPRES 61/2011
On RAN-GRK
PERPRES 71/2012 on GHG Inventory

FORESTRY AND PEATLAND
AGRICULTURE
ENERGY AND TRANSPORTATION
INDUSTRY
WASTE MANAGEMENT
1. Allocate level of GHG emissions for each sector
2. Determine sectoral programs, executing agency, estimated budget

<table>
<thead>
<tr>
<th>Sector</th>
<th>Emission Reduction Target(Gton CO2e)</th>
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<tbody>
<tr>
<td></td>
<td>26%</td>
</tr>
<tr>
<td>Forestry and Peatland</td>
<td>0.672</td>
</tr>
<tr>
<td>Agriculture</td>
<td>0.008</td>
</tr>
<tr>
<td>Energy dan Transportation</td>
<td>0.036</td>
</tr>
<tr>
<td>Industry</td>
<td>0.001</td>
</tr>
<tr>
<td>Waste</td>
<td>0.048</td>
</tr>
<tr>
<td>Total</td>
<td>0.767</td>
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</table>
NATIONAL (RAN GRK) AND PROVINCIAL (RAD GRK) GHG ACTION PLAN

Content:
1. Identification of local sources of emission
2. Local program and activities that contribute to GHG emission reductions
3. Current activities in the existing annual plan and budget document
4. Planned activities for future years.
Current Status of RAD-GRK

31 provinces
(RAD-GRK completion in the form of Governor’s Decree)


1 province
(RAD-GRK completion, in the process of Governor Decree)

- Kalimantan Selatan

1 province
(Finalization process)

- Papua Barat

Launched on December, 19 2012 in Jakarta
Examples

**ENERGY AND TRANSPORTATIONS**

1. The use renewable energy: solar, hydro
2. Energy efficiency: use of energy saving bulb, energy conservation at the industry level.
3. Development of local public transportations → private to mass transport and fuel conversions to gas and transport management

**LAND BASE (FORESTRY, AGRICULTURE)**

1. Biogas and composting
2. Reforestation: billion tree program, community forest and also cash crop at degraded land
3. Waste to energy
4. Biomass development

**Quick wins:**

Jakarta: Transportation and Energy Efficiency; Jogyakarta: Malioboro Transport Program, Central Sulawesi: Forestry Sector, **South Sumatera:** Waste Management
COORDINATION

NATIONAL COORD. TEAM ON CLIMATE CHANGE

CHAIRMAN
VM BAPPENAS

Secretaries:
DEPUTY MINISTER OF BAPPENAS & MOE

WG LAND BASE (FORESTRY AND AG)
WG ON ENERGY-TRANSPORTATION & INDUSTRY
WG ON WASTE
WG ON ADAPTATION

NAT. COORD. TEAM ON CC

BAPPENAS

PROV.1 COORD TEAM ON CC

BAPPEDA

PROV.2 .... COORD TEAM ON CC

BAPPEDA
III. ADAPTATION PLAN
CLIMATE CHANGE ADAPTATION STRATEGY - 2011

IMPACT AND WHO IS VULNERABLE?

- Global Warming

- Increase in Sea Level
- Impact on marine and fisheries

- Change in weather, climate, and intensity rainfall pattern
- Impact on Agriculture
- Impact: Health and the availability of water
- Impact on natural disaster
2012-2013: RAN - API

Main Objective

Sustainable Development Adaptive to Climate Change

Knowledge Management
Planning and Budgeting

Resilience of Environmental Services

Economic Resilience
Resilience of Special Areas
Livelihood Resilience

Supporting System
Capacity Building
Monitoring and Evaluation

Targets

LEAD INSTITUTIONS: BAPPENAS, MOE, CC COUNCIL, METEOROGY AND GEOPHYSICS AGENCY (BMKG)
ADAPTATION ACTION PLAN - RAN-API

SECTOR

- Economy Resilience
- Social and Livelihood Resilience
- Ecosystem Resilience
- Special Area Resilience
- Supporting System

SUB-SECTOR

- Food Security
- Energy Independence
- Health
- Settlement
- Infrastructure
- Ecosystem and Biodiversity
- Urban Area
- Coastal and Small Islands Area

CLUSTER

- 7 clusters
- 4 clusters
- 4 clusters
- 4 clusters
- 7 clusters
- 5 clusters
- 5 clusters
- 5 clusters
RAN-API Development Progress

1. PROCESS:

**Participatory process** in the formulations → workshops, discussions, and bilateral meetings with various parties such as: Line Ministries/Agencies, CSOs, and International Cooperation Institutions.

2. STEPS:

a. 2011: Adaptation Strategy – Durban
b. 2012: Synthesis Report on Climate Change Adaptation – at the 18th Conference of Parties (COP - 18) of the UNFCCC in Qatar
C. 2013: National Action Plan on CC Adaptation → will be mainstream into the development plan.
On progress

- Monitoring, Evaluation and Reporting of activities implementation (MER) both for Mitigation (RAN-GRK) and Adaptation (RAN-API)
- MER template to help the local government in monitoring and reporting the implementation and achievement of emissions reduction is currently being developed by the Climate Change Coordination Team.
- End of May → 1st monitoring workshop in Makasar → check riil activities if the 2013 budget document – implemented and monitored. 2nd in Medan and 3rd will be in Surabaya.
IV. INDONESIA CLIMATE CHANGE TRUST FUND (ICCTF)
Indonesia Climate Change Trust Fund (ICCTF)

About ICCTF

The Indonesia Climate Change Trust Fund (ICCTF) is a nationally managed trust fund that aims to contribute effectively and efficiently to mainstreaming climate change issues in government planning and the implementation of actions against climate change across Indonesia.

- Established by the Ministry of National Development Planning and Ministry of Finance in September 2009 under the Decree of Minister of National Development Planning.
- **Capital:** USD 11.2 million *(2010-current)*
- **Beneficiaries:** central government *(Executing Agency)*; central and local government, universities, CSO, NGO, private sector *(Implementing Agency)*
- Funding Mechanism: Innovation Fund (Grant) and Transformation Fund (under development).

**Objectives:**

1. To achieve Indonesia’s goals of a low carbon economy and greater resilience to climate change
2. To enable the Government of Indonesia (GoI) to increase the effectiveness and impact of its leadership and management in addressing climate change issues
Activity Windows

**Land Based Mitigation Window**
- Strengthen institutional setting and capacities, regulative framework and also governance reforms in land-based sector.
- Improve land-based related management practices and information availability and measurement systems.
- Facilitate investments outside the forest sector to reduce the pressure on forests.

**Energy Window**
- Facilitate the development, deployment and dissemination of low-carbon energy supply technologies.
- Promote the implementation of energy efficiency and energy conservation measures.

**Resilience and Adaptation Window**
- Improve policies and institutional capacity for utilization of climate forecasts.
- Support knowledge building and exchange, adaptation technology transfer, and financing schemes to improve the resilience of the community.
- Improve risk and vulnerability assessment, adaptation strategies formulation, and mainstreaming climate change into local development plans.
Sustainable Peatland Management
1. Banjarbaru, South Kalimantan
2. Jabiren, Central Kalimantan
3. Muaro, Jambi
4. Pelalawan, Riau
5. Sidoarjo, East Java
6. Kediri, East Java
7. Kudus, Central Java
8. Muara Enim, South Sumatra
9. Pekanbaru, Riau
10. Tanjab Barat, Jambi
11. Porsea, North Sumatra
12. Deli, North Sumatra
ICCTF New Projects 2012-2014

Sustainable Management of Degraded Peatland to Mitigate Green House Gas Emissions and Optimize Crop Productivity (ICCTF-MoA)
1. Papua
2. Kalimantan Barat
3. Kalimantan Tengah
4. Riau
5. Jambi

Enhancing Sustainable Management of Community-Based Wood Pellets Production as Biomass Energy to Support Low Carbon Economy and Climate Change Mitigation in Bangkalan, Madura, East Java (ICCTF-MoFor)
1. Bangkalan, Madura

Health Vulnerability: Assessment, Mapping, and Community Based Adaptation on Dengue Hemorrhagic Fever and Malaria Diseases (ICCTF-MoH)
1. West Sumatra
2. DKI Jakarta
3. East Java
4. Bali
5. Central Kalimantan
VI. JICA-GOI
Project On: Capacity Development for Climate Change Strategies in Indonesia
Background and Objective of the Project

Project of Capacity Development for Climate Change Strategies in Indonesia was started in 2010

As a joint initiative between JICA and the Government of Indonesia (GoI) under the coordination of Ministry of National Development Planning / National Development Planning Agency (KemenPPN/BAPPENAS)

The objective of the Project

Support GoI in developing climate change strategy and action in Indonesia through capacity building for key ministries, local government and communities concerned in an integrated manner.
Project Outline

PROJECT OF CAPACITY DEVELOPMENT FOR CLIMATE CHANGE STRATEGIES IN INDONESIA

Sub-Project 1
The Project of Low Carbon Development Strategy by Integrating Mitigation and Adaptation into National Development Planning

Counterpart: BAPPENAS

Outputs:
1. Capacity for formulating mitigation actions in MRV manner
2. Capacity for mainstreaming adaptation into development planning
3. Background Study for RPJMN 2015 – 2019

Pilot Sites: North and South Sumatra

Sub-Project 2
The Project of Capacity Development for Vulnerability Assessment

Counterpart: BMKG

Outputs:
1. Basic Capacity for Vulnerability Assessment
2. Capacity for climate change projection and verification (assessment of exposure)
3. Capacity for assessment of adaptative capacity
4. Implementation Structure for vulnerability assessment

Pilot Sites: Bali

Sub-Project 3
The Project of Capacity Development for Developing National GHG Inventories

Counterpart: KLH

Outputs:
1. Institutional arrangement for preparing national GHG inventories
2. Capacity to periodically and systematically collect and compile data necessary for national GHG inventories
3. Accuracy and reliability of GHG inventories for each sector

Pilot Sites: North and South Sumatra
THANK YOU
Pilot Project Achievements

**Sustainable Peatland Management**
*Ministry of Agriculture*
- Identification and mapping of biophysical characteristics and properties of peatland in 4 provinces of project sites: Central Kalimantan, South Kalimantan, Jambi, Riau.
- Sustainable peatland agriculture management guideline, basis for national level guideline.
- Training in GHG emission and carbon stock measurement to government officials, local university & experts in 4 provinces of project site.

**Energy Conservation**
*Ministry of Industry*
- Established baseline for the CO2 emission in steel and pulp & paper industries for development of energy conservation strategies.
- Developed Energy Efficiency Management Information System (EEMIS) in steel and pulp & paper industries.
- Series of trainings on energy conservation and CO2 emission reduction to strengthen capacity of staff at the industries.
- Developed Energy Efficiency’s SOP, Technology Needs Assessment, Feasibility Study and Investment Grade Audit for participating industries.

**Public Awareness and Education**
*Agency for Meteorology, Climatology, & Geophysics*
- Utilization of community radio program to increase awareness on climate change and food security issues among the farmer and fishermen groups in 5 locations: Serdang Bedagai, Jakarta, Indramayu, Batu and Bau-bau.
- Trainings and modules for field extension workers in agriculture and fishery.
- Curricula modules on climate change for all levels of formal schools in Indonesia.
- TV programs to make information on climate change adaptation and mitigation efforts more accessible to the general public.
On-going Projects (2012-2014)

**Sustainable Peatland Management Phase-2**
*Ministry of Agriculture*
- Maps and management recommendation of degraded Peat Land
- Strategies and models of sustainable management of Peat Land
- Improved institutional and human resources
- Policy inputs and guidelines of sustainable management of degraded Peat Land
- Publications and networking
- Budget: USD 1.5 million

**Community Forest Management and Biomass Energy Estate**
*Ministry of Forestry*
- Established demonstration plot area as biomass energy estate for supplying wood pellet incubator
- Estimated CO2 net emission sequestered in the BEE and CO2 net emission substituted by wood-pellet products
- Developed Business model, entities and incubator of Wood Pellet Industries
- Developed Capacity of communities and institutions
- Budget: USD 625,000

**Health Vulnerability Assessment and Community Based Adaptation**
*Ministry of Health*
- Develop model of DHF and Malaria incidents linked with climate change projection
- Increased awareness of health officers and policy makers at provincial and district level
- Increased capacity of health officials and community to develop adaptation strategy
- Budget: USD 879,000