THE ROLE OF KNOWLEDGE FOR LOW-CARBON and SUSTAINABLE DEVELOPMENT POLICYMAKING IN INDONESIA

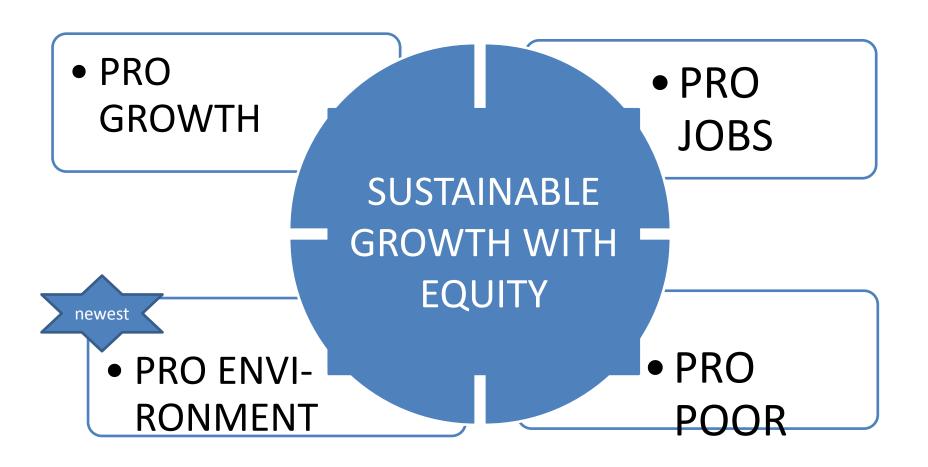
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FOR THE 3RD ANNUAL MEETING OF THE LOW CARBON ASIA RESEARCH NETWORK – LoCARNet

Bogor, 24-26 november 2014

4 DEVELOPMENT STRATEGY 2010-2014





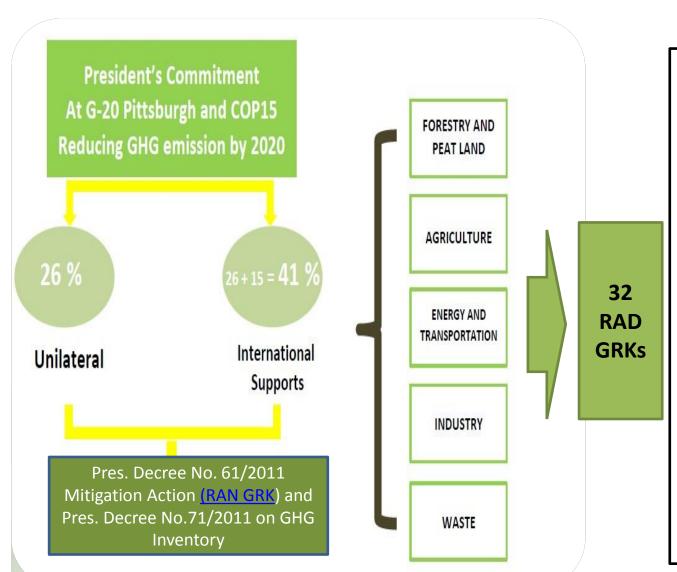
PRO ENVIRONMENT

- 1. Since 1972: sustainable development was introduced Implementation: through environmental Laws and standard → many challenges
- CONSTRUCTIVE APPROACH:
 - a. 2004 putting: Sustainable development as development mission in the Long Term Development Plan 2005-2025
 - b. 2009: Committed to reducing GHG emission: 26% from BAU by 2020 with own effort and 41% by international support.
 - c. Medium Term Development Plan 2010-2014:
 - i. Sustainable development is mainstreamed into all development aspect
 - ii. Climate Change as cross sectoral program.

More concrete actions:

- 1. Climate Change Council (DNPI) rep. of global climate change talks and negotiations.
- 2. REDD+ Task Force: (i) moratorium; (ii) One map.
- 3. 2011: National Action Plan for reducing GHG emission as Presidential Regulations 61/2011 (RAN GRK) and its GHG inventory in Perpres 71/2011.
- 4. 2012: 32 Local Action Plan on GHG Emissiion Reduction (RAD GRK)
- 5. 2013: 10Y Framework on Sustainable Consumption and Productions (SCP) → launched on the Earth Day in Jakarta
- 6. 2014: NATIONAL ACTION PLAN ON ADAPTATION (RAN API)

NATIONAL ACTIONS PLAN ON GHG EMISSION REDUCTION



- How is carbon
 emission situation in
 the region level in
 what sector,
 activities?
- 2. What can Local Government do to reduce emission-program-activities?
- 3. Impact on income and local economy → what are the alternatives and new income sources?
- 4. Capacity: institutions and HR needed for M & A at the government level, universities, NGO and community?

National Action Plan GHG emission Reductions

ACTIONS

- 1. Forestry and peatland:
 - a. Sustainable forest management
 - b. REDD+
- 2. Agriculture Sustainable farming:
 - a. Use degraded land
 - b. Sustainable plantation ISPO
 - c. Optimum water use and resources, and use of organic material (fertilizer, pesticide and pest management)
- 3. Waste management:
 - a. Reuse and recycle
 - b. Waste to energy
- 4. Energy and Transportations:
 - a. Traffic management
 - b. Reduce fuel subsidy
 - c. Shift to public transportation
 - d. Efficient energy use
 - e. Clean energy sources: gas, geothermal
 - f. Renewable energy
- 5. Industry:
 - a. Clean technology
 - b. Energy efficiency

Executing Agnecy and National Program (Development Plan)

Executing agency

Mo Forestry,

REDD Task Force/Agency

Mo Agriculture

Mo Public Works

Mo Energy

Mo Transportation

Mo Industry

Actions/activities:

153 activities:

- a. 63 direct
- b. 66 supporting
- c. 24 enablers (data, information, educations/ communications)

Estimated emission reductions from each activities.

THE ROLE OF RESEARCH AND ACADEMIA:

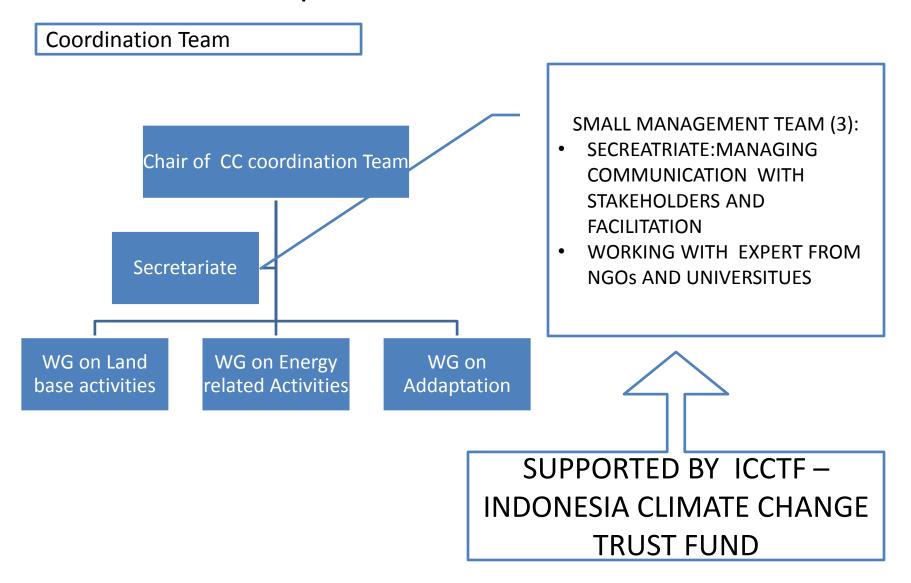
1. NATIONAL ACTION PLAN - formulation

- Knowledge andd awareness
- Setting national target: total and sectoral target (baseline, BAU, projection etc.)
- Formulation of actions to reduce emission in the sector

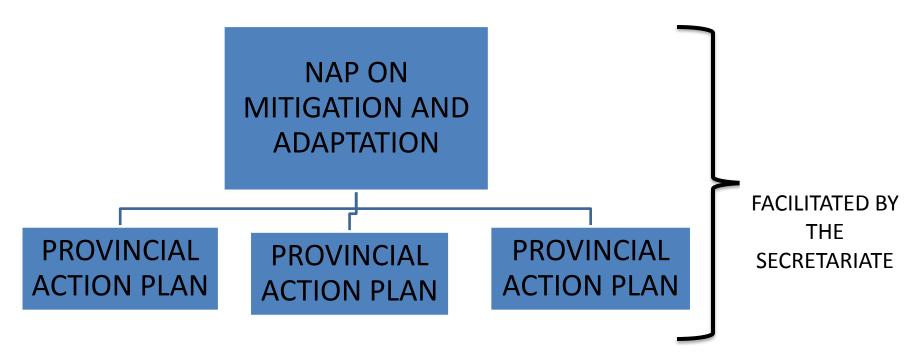
2. NATIONAL ACTION PLAN – Implementation and monitoring

 The role of science in developing a monitoring system – calculation of the target activities- target

Framework for implementation



National and Provinces ACTION PLAN (33)



COOPERATION WITH LOCAL EXPERTS:

- ESTIMATION OF TARGET AND MEASUREMENT: TOTAL AND SECTORAL
- 2. IDENTIFICATION OF ACTIVITIES AND MEASUREMENT
- 3. ESTIMATION AND IMPLEMENTATION ACTIVITIES
- 4. MONITORING FRAMEWORK AND MEASURING RESULTS

THE ROLE OF SCIENCE IN ADAPTATION PLAN

1. Development of RAN-API

- Identification of risk vulnerability map and indicator
- Formulation of Climate Change Adaptation Actions
- Data and Information needed
- Integration between DRR and CCA
- Gender Mainstreaming in CCA Action Plan

Implementation of RAN-API

- Development of Pilot Areas for RAN-API at local and regional level
- Integration of CCA into Local Development Plans
- Monitoring and Evaluation of CCA



Moving to Green development-Sustainable development

SUSTAINABLE DEVELOPMENT

Social Pillar

- 1. Equity
- 2. Health
- 3. Education
- 4. Security
- 5. Housing
- 6. Population

MDG

Indonesia achieved most of the MDG goals prior and track.

Economic Pillar

- 1. Economic Structure
- 2. Consumption & Production Pattern

Green Economy

GHG emission provide a good momentum to:

- 1. Developing SCP
- Valuing the nature (environmental services and biodiversity values) and externalities.
- 3. Internalize environmental externalities into the economy.

Environment Pillar

- 1. Atmosfir
- 2. Land
- 3. Coastal an Marine
- 4. Clean Water
- 5. Biodiversity

Environment and Biodiversity

- 1. Environment protection
- 2. CC Mitigation and Adaptation
- 3. Economy of Biodiversity
- 4. Environmental Services Economy

on going (2012)

10Y FRAMEWORK FOR SUSTAINABLE CONSUMPTION AND PRODUCTIONS (SCP)

PRODUCTION:

- 1. AGRICULTURE
- 2. ENERGY AND MINING
 - 3. INDUSTRY
- 4. CONSTRUCTIONS: BUILDING & OTHERS
- 4. SERVICES SECTOR: FINANCE, TOURISM, ENV. SERVICES, EXPERTISE/CONSULTANCY

CONSUMPTION:

- 1. HOUSEHOLD
- 2. CORPORATE
- 3. LIVING: CITY, STYLE....

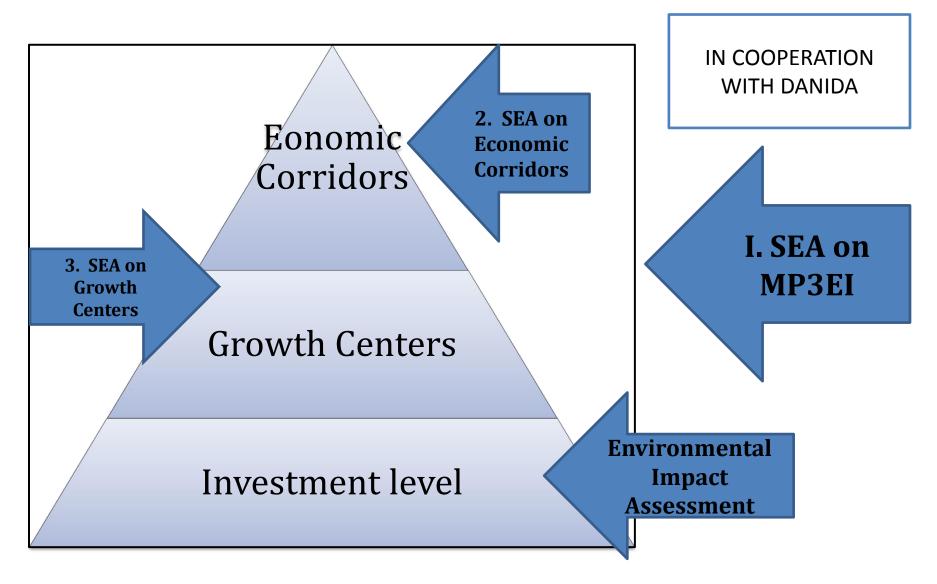
LAW AND REGULATIONS: RULES, PROCUREMENT, STANDARDS

HRD: CAPACITY AND COMPETENCIES NEEDED FOR SCP IMPLEMENTATION

SCI-TECH: Green technologiydan knowledge

DATA AND INFORMATION: COMMUNICATION, INFORMATION & DATA BASE

Greening the Master Plan(example)- SEA



SUSTAINABLE DEVELOPMENT BECOME MORE IMPORTANT

IN MAKING A BETTER QUALITY OF DEVELOPMENT:

- SUSTAINABLE DEVELOPMENT → PEOPLE-PROFIT-PLANET, SUPPORTED BY THE RIGHT INSTITUTIONS
- 2. LOW MIC → SUSTAINABLE GROWTH PATH TO AVOID MIDDLE INCOME TRAP
- 3. POPULATION GROWTH → FOOD, ENERGY ANDSPACE?

GREEN → as opportunity to broadening growth in a more sustainable way

- 1. Broadening **spatial** base sustainably \rightarrow increase share of outside Java economy
- 2. Broadening the **participant**: example, Economic growth in all parts of Indonesia → promote processing of natural resources → moving from primary sector to secondary sector/manufacturing → more value added, more business partners and SMEs and higher quality of jobs
- 3. Broadening "commodity" base → finding and developing new economy base environment services and biodiversity values:
 - a. Environmental services economy economy that is generated from "transaction of environmental good and services":
 - Carbon absorbtion and sink services generated by forest and other land cover including mangrove
 - ii. Economic activities from nature: ecotourism and cultural tourism, including local craft
 - b. Economy of biodiversity develop bioprospecting both land base and ocean base strategic issue in
 - c. Economic creatives: arts, film, music, etc.
 - d. Green jobs: new profession due to development of green activities → opportunity for educated labor forces

THANK YOU