INDONESIA EXPERIENCE TO SCALE UP SUBNATIONAL CLIMATE ACTION

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Climate Change in Indonesia

- Indonesia is the largest archipelago with a number of islands more than 17,500 islands and a coastline of 81,000 km.

- Indonesia has various conditions of geographical, topographical and climatic, and also the surface areas which consists of oceans, coastal to wetlands, peat and forest mountain.

- Some areas of Indonesia has a consistent trend in temperature increase of about 0.63 to 0.69 °C over a period of 25 years (1985-2010) and average surface temperatures projected will increase by 0.8 to 1 °C relative to the climate period the last in the 20th century, in throughout Indonesia.
Climate Change in Indonesia

- The changes of the frequency and magnitude of the rainy season has also affected to the increase of extreme rainfall in some areas such as in Malang and South Sumatra are projected to increase by about 8% until the 2030s.

- Sea Surface Temperature (SST) projection showed the increase of average 1 - 1.2°C by 2050 relative to the SST of the year 2000.

- Simple Ocean Data Assimilation (SODA) which analized by 1960 to 2008 shows that sea level rise in Indonesia has been increased by 0.8 mm per year, and it will rise to 1.6 mm per year by 1960 and then jumped to be 7 mm per year by 2050. It projected that the maximum of sea level rise would be reached 175 cm by 2100.
NATIONAL POLICIES ON CLIMATE CHANGE

- Act No. 6/1994 –UNFCCC Ratification
- Act No 17/2004 –Kyoto Protocol Ratification
- Act No 41/1999 – Forestry
- Act No 32/2009 – Environmental Protection and Management
- Act No.16/2016 –Paris Agreement Ratification

Climate Change

RPJMN 2015-2019

- Presidential Decree No 61/2011–Climate Change Mitigation
- Presidential Decree No. 71/2011–Inventory GRK
- National Action Plan on Adaptation 2014
- Policies on National MRV

Adaptation
- Mainstream adaptation into development planning
- Climate change vulnerability
- Climate Village Program-ProKlim

Mitigation
- National and Sub-national Action Plan on Mitigation
- REDD+ Implementation
- Montreal Protocol - ODS

GHG Inventory and MRV
- GHG Inventory – SIGN SMART
- MRV on mitigation
- Registry System
- Financial support

Resource Mobilization
- Technology and capacity building
- Climate change negotiations
- Prevention actions
- Management actions

Forest Fire Management
- ASEAN Agreement on Transboundary Haze Pollution (AATHP)
INDONESIA STRATEGIC PLAN 2015–2019

- Low emission and adaptive development plan (in particular mitigation and adaptation).
- Accuracy and effectiveness of early warning analysis regarding climate and disasters (in particular related to forest fire).
- Quality of data and information in supporting climate change development plan and strategies.
- Means of implementation of the Convention through bilateral-, regional- and multilateral-cooperation.
STRUCTURE OF INDONESIA’s FIRST NDC

NATIONAL CONTEXT

MITIGATION

ADAPTATION

STRATEGIC APPROACH

PLANNING PROCESS

INFORMATION TO FACILITATE CLARITY, TRANSPARENCY AND UNDERSTANDING

TRANSPARENCY FRAMEWORK

INTERNATIONAL SUPPORTS

INDONESIA LOW CARBON AND CLIMATE RESILIENCE STRATEGY

REVIEW AND ADJUSTMENT
**Economic Resilience**
- Sustainable agriculture and plantations
- Integrated watershed management
- Reduction of deforestation and forest degradation
- Land conservation
- Utilization of degraded land for renewable energy
- Improved energy efficiency and consumption patterns

**Social and Livelihood Resilience**
- Enhancement of adaptive capacity by developing early warning systems, broad-based public awareness campaigns, and public health programmes;
- Development of community capacity and participation in local planning processes, to secure access to key natural resources;
- Ramping up disaster preparedness programmes for natural disaster risk reduction;
- Identification of highly vulnerable areas in local spatial and land use planning efforts.
- Improvement of human settlements, provision of basic services, and climate resilient infrastructure development.
- Conflict prevention and

**Ecosystem and Landscape Resilience**
- Ecosystem conservation and restoration
- Social forestry
- Coastal zone protection
- Integrated watershed management
- Climate resilient cities
## NDC Implementation Strategy: 9 Program

<table>
<thead>
<tr>
<th>I. BUILDING OWNERSHIP AND COMMITMENT</th>
<th>• Ministries/Institutions, sub-national government, private sectors, civil society, financial institutions</th>
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<tr>
<td>II. CAPACITY BUILDING</td>
<td>• Enhance capacity of institutions and human resources (elaboration of NDC, sectors and regions, GHG inventory, NDC implementation)</td>
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<td>III. ENABLING ENVIRONMENT</td>
<td>• Government regulations and policies (Act No. 16/2016 regarding Paris Agreement Ratification, PP. 46/2016 regds. SEIMA, etc.)</td>
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<td>IV. DEVELOPING FRAMEWORK AND NETWORK</td>
<td>• Coordinate and synergy amongst sectors, regions and actors/stakeholders</td>
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| V. ONE GHG-DATA POLICY               | • SIGN–SMART: national GHG inventory  
• SRN (incl. MRV): mitigation actions, adaptation actions, JMA, and MoI (finance, technology and CB) |
| VI. DEVELOPING POLICIES, PLANNING AND INTERVENTION PROGRAM | • Mainstreaming NDC into development planning in 5 category sectors (forestry, energy, IPPU, waste, agriculture) and adaptation (sectoral and regions) ➔ assuring financial support (public fund) and resource mobilization (national and international support). |
| VII. DEVELOPING GUIDANCE ON NDC IMPLEMENTATION | • Guidance for national and sub-national (planning, implementation, MRV, and NDC review). |
| VIII. NDC IMPLEMENTATION             | • Refer to KRP and the planning of NDC implementation.  
• Coordinated by MoEF (regarding emission reduction target and climate change policies) and BAPPENAS (regarding national development planning). |
| IX. MONITORING AND REVIEW OF NDC     | • Monitoring the progress of NDC implementation.  
• Review of NDC and its adjustment (if necessary, no-backsliding) will be conducted prior to 2020. |
Climate Change Roadmap & Development Planning

Sources: ICCSR (2010)
RAN API Targets Framework

Main Objective

SUSTAINABLE DEVELOPMENT AND ADAPTIVE TO CLIMATE CHANGE

Targets

ECOSYSTEM RESILIENCE

SPECIAL AREAS RESILIENCE

STRENGTHENING SUPPORT SYSTEM

ECONOMY RESILIENCE

LIVELIHOOD RESILIENCE

Knowledge Management, Planning and Financing, Capacity Building, Monitoring and Evaluation
Ministry Regulation Regarding Guidance to Develop Adaptation Action (Permenlhk No. P33/2016)

Provide guidance to develop and mainstreaming adaptation action into development planning in the region as well as specific area

The regulation will be a basis to develop local action plans and to strengthen the NA-CCA
Climate Change Adaptation Related Regulation

- Minister Environment and Forestry Regulation No. P.7/Menlhk/Setjen/Kum.1/2/2018 regarding Guidance for vulnerability, risks and impact of climate change
  - Director General for Climate Change Regulation No. P.1/PPI/SET/KUM.1/1/2018 regarding Guidance for Climate Change Adaptation Experts Registration
  - Director General for Climate Change Regulation No. P.2/PPI/SET/KUM.1/1/2018 regarding Guidance to facilitate development of Climate Change Adaptation Plan in Sub-National Level
- Minister Environment dan Forestry Regulation No. P.84/MENLHK-SETJEN/KUM.1/11/2016 regarding Program Kampung Iklim
  - Director General for Climate Change Regulation No.P1/PPI/SET/KUM.1/2/2017 regarding Implementation Guidance of Program Kampung Iklim
  - Director General for Climate Change Regulation No.P5/PPI/SET/KUM.1/12/2017 regarding GHG Emission Calculation for community based climate change actions

Policy Development and implementation *(top down approach)*

Community Actions and Initiatives *(bottom up approach)*
Guidance to Develop Adaptation Action (Permenlhk No. P33/2016)
Structure of Guidance

GUIDANCE TO DEVELOP ADAPTATION ACTION

- Appendix 1: Scope identification of area and/or specific sectors, and CC Impacts
- Appendix 2: Guidance to assess climate vulnerability and risks
- Appendix 3: Documentation and Data Quality Control
- Appendix 4: Guidance to set up the adaptation options
- Appendix 5: Guidance to adaptation prioritization and integration
- Appendix 6: Task Force Team for CC Adaptation
- Appendix 7: Registration Form for Climate Expert

RPPLH: Env. Protection & Management Plan in National, and Provincial, as well as Distric/City Level

KLHS: Strategic Environment Assessment

Integration into Development Planning in the region and/or specific sectors
CLIMATE RISKS ASSESSMENT AND ADAPTATION (CRAA)

PARTICIPATION, MONITORING & EVALUATION

Identification of vulnerable and important sectors

Climate Factors Analysis (Temperature, precipitation, sea level rise)

Climate Hazard & vulnerability analysis (sensitivity, exposure, adaptive capacity)

Climate Risks Analysis

Policies, Strategy, Programme, and Activities (ACTION PLAN)

POLICY INTEGRATION BETWEEN NATIONAL AND LOCAL LEVEL (RPJMN/D; RTRW)
INVENTORY SISTEM FOR CLIMATE VULNERABILITY INDEX

1: Exposure Data, 2: Social Economy & Culture Data, 3: Climate Hazard & Disaster Data, 4: Verification process to the local vulnerability data

Sources: Boer, 2014
Input-Processing-Output of SIDIK

**INPUT**
- Statistic Data of the Village
- Extreme rainfall data

**PROCESSING**
- User: Formula modification
  1. Type: National or Local Level
  2. Adding the indicators
  3. Updating index weight measurement

**OUTPUT**
- Information:
  - SEI: Sensitivity & Exposure Index
  - ACI: Adaptive Capacity Index
  - CRI Index: Coping Range Index
  - Climate Risk: Flood & Drought

- National: MOEF
- Local: Provincial/District/City
- Other Stakeholder

SIDIK: Inventory System for Vulnerability Index

User: Analysis Scoping
1. Analysis Scope: National, Provincial, Districts or City
2. Analysis Level: at most one level is under the scope
System Information Vulnerability Data Index (SIDIK)
Utilization of Vulnerability Assessment To Synergizing CCA and DRR

Implementation: Synergizing CCA, DRR and Climate Mitigation in the priority area

Priority Area to implement CCA, DRR and Climate Mitigation

Data and Information on Climate Vulnerability, Climate Disaster & Risk

Planning: Strategic Plan (RENSTRA) & Local Govt Program related to CCA, DRR and Climate Mitigation

Local Task Force: Facilitate multi stakeholders to design & implement integrated CCA, DRR and climate mitigation

Planning: Strategic Plan (RENSTRA) & Local Govt Program related to CCA, DRR and Climate Mitigation

Synergizing of programmes of whole related stakeholders to enhance disaster and climate resilience

Source: Boer, 2014
ProKlim – Climate Village Program

• Policy tool to promote and recognize active participation of community in implementing adaptation and mitigation activities
  ➢ collect local good practices data to enhance community resilience and their contribution in reducing GHG
• Strengthening multi stakeholders collaboration
  ➢ Including national and sub-national/local government, private institutions, non-government organization, university, community groups, etc.
ProKlim Component

Adaptation

to respond climate change impact

- Drought, Flood and land slide control
- Food Security
- Climate related diseases control
- Sea level rise

Mitigation

to reduce GHG emission

- Solid waste and waste water management (domestic, home industry)
- Conservation and saving energy
- Low carbon emission agriculture
- Forest/Land cover management
- Forest/Land fire prevention
Proklim component – sustainability aspect

- Local organization to manage and implement the activities
- Local policies, traditional ethics and other local knowledge
- Community dynamics
- Local capacities
- External support from governments, private sectors, NGOs, university, etc
- Continual improvement of existing activities
- Positive impacts (economic and environmental benefits, minimize impact of climate extreme events)
Note
Total Location
Total Trophy Award
ROAD MAP PROKLIM

1. Enhance Institutions
2. Capacity building (local government and community)
3. Build partnership (national and local government, private company, development partner, NGO)
4. Encourage local leadership
5. Disseminate success story
6. Strengthen applied technology
7. Encourage sufficient allocation of financial and human resources

10,000 ProKlim in 2030
Conclusion

- Policy, program and modalities to scale up climate change action in sub-national level have been developed in Indonesia and continue to strengthen the implementation.
- Engagement of Sub-National authority and stakeholders are a key aspect for sustaining the climate change action programme.
- Commitment of sub-national leader (governor and major) is crucial.
- Effective National – Sub National dialogue framework should be established to facilitate information exchange among stakeholder at different level.
THANK YOU