INPUT BY THE GOVERNMENT OF INDONESIA FOR TALANOA DIALOGUE

Pursuant to Decision 1/CP.23 paragraph 10-11 and Annex II on Talanoa Dialogue and the Guidance for Parties by COP Presidencies (27 March 2018), the Government of the Republic of Indonesia herewith submits inputs for the Talanoa Dialogue:

I. WHERE ARE WE?

1. What are the main sources of emissions and their current and future trends? What are the underlying drivers?

- As reflected in Indonesia’s First NDC, forestry and energy sectors are the main sources of national GHGs emission. The Table below shows the current and future trend of emission as well as measures to achieve emission reduction target through NDC. Emission in forestry was historically driven by the need for other sector development including agriculture and other sectors. The growth of emission in energy sector will be influenced by the demand for energy in various sectors including transport and the progress in renewable energy development in the future.

NDC- INDONESIA: emission reduction target for each sector category

<table>
<thead>
<tr>
<th>No</th>
<th>Sector</th>
<th>GHG Emission Level 2010* (MTon CO2e)</th>
<th>GHG Emission Level 2030 (MTon CO2e)</th>
<th>GHG Emission Reduction % of Total BAU</th>
<th>Annual Average Growth BAU (2010-2030)</th>
<th>Average Growth 2000-2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Energy*</td>
<td>453.2</td>
<td>1,669</td>
<td>1,355</td>
<td>314</td>
<td>398</td>
</tr>
<tr>
<td>2</td>
<td>Waste</td>
<td>88</td>
<td>296</td>
<td>285</td>
<td>270</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>IPPU</td>
<td>36</td>
<td>69.6</td>
<td>66.86</td>
<td>66.35</td>
<td>2.75</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture</td>
<td>110.5</td>
<td>119.66</td>
<td>110.39</td>
<td>115.86</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Forestry**</td>
<td>647</td>
<td>714</td>
<td>217</td>
<td>64</td>
<td>497</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1,334</td>
<td>2,869</td>
<td>2,034</td>
<td>1,787</td>
<td>834</td>
</tr>
</tbody>
</table>

Notes:
* Including fugitive
** Including peat fire

2. What are the current sectoral, national and international legal and policy frameworks for addressing climate change? Do they adequately address national and international climate change goals?

A. National level:
- As part of voluntary contribution to implementation of the Bali Action Plan, Indonesia targeted to reduce emission of 26%-41% compared to BAU 2020, which was elaborated
in Presidential Regulation No. 61/2011 – National Action Plans on Emission Reduction (Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca/RAN-GRK), focusing on land-based sectors (forest and peatland, agriculture) and non-land based sectors (energy, transport, industry, and waste). At the same time, Indonesia also developed National Action Plans on Adaptation (Rencana Aksi Nasional Adapta	
si Perubahan Iklim/RAN-API).

- Along with the commitment to the Paris Agreement, Indonesia has:
  1. ratified the Paris Agreement through Act No. 16/2016
  2. submitted the First NDC on 6 November 2016, covering both mitigation (forestry, energy, waste, agriculture, IPPU) and adaptation.
  3. developed Strategy for NDC Implementation, consisting of nine programs, namely:
     - Building commitment and ownership of Government and Non Party Stakeholders
     - Enhancement of institution and human resources capacity
     - Strengthening enabling environment
     - Development of communication framework and network
     - One GHG Data Policy specially for nationally GHG data, MRV, and national registry system
     - Development of policy, planning and program for achieving NDC targets
     - Development of NDC implementation guidelines
     - NDC Implementation
     - Monitoring and review of NDC
  4. put into effect regulatory and policy measures (e.g. Presidential Regulation No. 22/2017 on Long-term National Energy Planning (Rencana Umum Energi Nasional/RUEN 2015-2050), Government Regulation No. 57/2016 on Conservation and Management of Peatland Ecosystem, Government Regulation No. 46/2016 on Economic Instrument for Environment which includes window for climate finance, MOEF’s regulation on Adaptation/Permen LHK 33/2016, MOEF Decree No. 679/2017 on Inter-sectoral Team for Monitoring of NDC Implementation).

B. International level:

Pre 2020:
- Kyoto Protocol Second Commitment Period:
  - Doha Amendment has not entered into force.
- Bali Action Plan:
  - nationally appropriate mitigation action and commitment (NAMAC)
  - nationally appropriate mitigation actions (NAMAs)
- Recognition of Non Party Stakeholder through NAZCA
- Commitment on Long-term finance (LTF) – USD 100 billion up to 2020
- Establishment of Technology Executive Committee (TEC) and CTCN under Technology Mechanism
- Capacity building under Durban Forum on Capacity Building and Paris Committee on Capacity Building (PCCB)
- Reporting and review:
  - Biennial Report (BR) and International Assessment and Review (IAR)
  - Biennial Update Report (BUR) and International Consultation and Analysis (ICA).

C. The aforementioned legal and policy measures have adequately addressed climate change goals. However, the progress of these measures are vary widely both at the international and national level.
3. What are the current main initiatives and actions from government, leading private industries and other non-Party stakeholders to address climate change? Which ones have worked and what obstacles or barriers have been encountered?

- **Government:**
  - Elaboration of NDC commitment into detailed sectoral plans
  - Development of mechanism for engaging sub national authorities in NDC implementation
  - REDD+ Implementation (note: REDD+ is the important part of NDC in land sector)
  - National movement on community-based adaptation and mitigation actions (**Program Kampung Iklim/PROKLIM**)
  - Development of transparency framework through strengthening existing and/or developing new system (National GHGs Inventory System, National Registry System, Vulnerable Data Index Information System, REDD+ Safeguard Information System, and Knowledge Center on Climate Change)

- **Local Government:**
  - Preparatory phase toward renewable natural resource-based economy of East Kalimantan Province:
    - **Initiation Period in 2009**
    - **Capacity Development Period in 2013**
    - **Enhancement of Added Value Period in 2018**
    - **Industrial Development Period in 2020**
    - **Economy Innovation Development Period in 2030**
  - Several cities have participated in ICLEI initiatives such as Jakarta, Bogor, Balikpapan.

- **Private Sector:**
  - Implementation of Carbon-based Reduced Impact Logging by production forest permit holders
  - Collaboration between Government and NPS in forest and peat fire management
  - Integrated Forestry and Farming System (IFFS) and Fire-Free Village Program (FFVP)

- **CSOs at sub national level:**
  - Contribution in awareness raising and capacity development to support NDC implementation
  - Contribution to mitigation actions in forestry sector
  - Contribution to adaptation actions (economic resilience, social livelihood, and ecosystem and landscape resilience).

4. What “best practice” examples and business models have successfully driven climate change action?

- National movement on community-based adaptation and mitigation actions (**Program Kampung Iklim/PROKLIM**) – 1,375 climates villages in 30 provinces
- Energy efficiency through smart street lighting initiative
- Community-based mitigation action in forestry sector (Bujang Raba, Jambi Province) which involves 5 (five) indigenous communities in protecting tropical mountainous forest.
6. How has the financial sector responded to date on opportunities to address climate change within the different sectors? What models have worked and under which conditions?

- National level:
  - Increasing support for climate finance through national budget scheme including budget tagging or earmarking budget for climate change actions in all relevant sectors
  - Establishment of environmental fund which includes climate change funding window and the Government Regulation No. 46/2017 on the Economic Instrument for Environment
  - Contribution of private sectors through CSR for green initiatives which generates climate benefits
  - Note: there has not been significant responses from private and financial institutions on opportunities to address climate change.

7. What are examples of successful partnerships between governments and non-Party stakeholders? Which modalities have proven to be effective (e.g. contracts, blended financing, joint investments, etc.)?

- Government and non-Party stakeholder partnership on forest and peat fire management post 2015:
  - 2015 Forest and peat fire affected approximately 2.7 million ha and produced GHG emission of about 1.08 GtCO\textsubscript{2}e
  - President's Instruction to shift forest and peat fire management from suppression to focus more on prevention involving all relevant ministries, local governments, private sectors and local communities
  - Through leadership of President Joko Widodo, collective efforts and resource sharing (funding, human resource, facilities and equipment), the use of early warning system, law enforcement and compliance, capacity building and introduction of zero burning technique for land preparation to local communities, have resulted in significant reduce of forest and peat fire in the last two years (approx. 0.44 million ha in 2016 and 0.12 million ha in 2017)
  - Sharing resources (finance, human resource, facilities and equipment including technology) and strong commitment of all actors have proven effective in this partnership.

8. What roles have women, local communities and indigenous people including youth played in the transition to low emission and carbon resilient society? What should be their future roles?

- International level:

- National level:
  - Involvement of women, youth and indigenous people in NDC process and other climate change related initiatives
  - Mainstreaming gender and climate change in national and sectoral development planning
  - Long history of role of women, local communities and indigenous people in practicing local wisdoms

- Youth:
  - through international / regional / national association and fora engage in outreach, campaign, and capacity development for their generation
• Future role:
  - Could be at the same area with enhanced roles.

II. WHERE DO WE WANT TO GO?

1. What is your short-term (e.g. by 2030) and long-term vision (e.g. by 2050 and beyond) for climate resilience and for achieving a balance between emissions and removals in the second half of this century?

• Indonesia’s 2030 vision is reflected in NDC which includes mitigation and adaptation. The Government of Indonesia considers climate mitigation and adaptation efforts as an integrated concept that is essential for building resilience in safeguarding food, water and energy resources. Indonesia also views its development pathway towards low carbon and climate resilience is consistent with its commitment to contribute to the global effort for achieving Sustainable Development Goals (SDGs). These global agendas will be contextualized given Indonesia’s unique archipelagic geography and its extensive tropical rainforests, with its high biodiversity and high carbon stock value.

• As an archipelagic country with extensive low-lying and small island areas, Indonesia is highly vulnerable to the adverse impacts of climate change. Indonesia has already experienced extreme climate events such as floods and drought, and is anticipating long-term impacts from sea level rise.

• Climate and climate change is believed to increase the risk for hydro-meteorological disasters, which make up to 80% of disaster occurrences in Indonesia.

• 2015-2085 Sustainable Economy Development vision consist of programs which will contribute to achieve long term Paris Agreement’s goals:
  - Infrastructure development: climate change adaptation and building resilience
  - Energy resilience: energy mix with renewable energy component of 5% (2015), of 23% (2025), and of 31% (2050)
  - Investment: green investment
  - Employment: a just transition and decent work
  - Industry: sustainable supply chain in industry
  - Creative industry (with strong Information-Communication-Technology support)
  - Tourism: enhance value of environmental services in ecotourism
  - Maritime Affairs
  - Food Security
  - International Trade: shifting from commodity based trade to manufacture and services
  - Environmental Commitment: climate change, biodiversity and other environmental commitments.

5. Where should efforts be focused (sectors, regions, practices) in the short, medium and longer terms?

• Mitigation:
  - Short and medium terms: focusing on sectors which can deliver highest emission reduction with reasonable cost and risk (forestry and energy sectors)
  - Longer term: focusing on sectors which can deliver highest emission reduction with reasonable cost and risk (forestry and energy sectors) as well as sectors with potential increase of emission as a result of its development (waste and industry)
• Adaptation:
  - Short and medium terms: focusing on the most vulnerable sectors (agriculture and health) and regions (prone to sea-level rise, regions with high percentage vulnerable groups, and regions with fragile ecosystem)
  - Longer term: focusing on the most vulnerable sectors (agriculture and health) and regions (prone to sea-level rise, regions with high percentage vulnerable groups, and regions with fragile ecosystem) as well as infrastructure

7. Are there fundamental technology barriers preventing a determined response to climate change in any sector? If so, what are the best ways to overcome them?

- The fundamental technology barriers are insufficient or lack of appropriate and affordable technology for specific local conditions, lack of financial resources to implement those technologies. Available technologies (technology being offered) in number of cases are not suitable and not sustainable for local conditions of developing countries, creating continuous dependence on possibly expensive technologies.

- The best way to overcome the problems are provision of the appropriate technical assistance and investment for technology development and transfer which are relevant with the conditions of the recipient country or region.

III. HOW DO WE GET THERE?

1. What fundamental changes are required for the vision described under “where do we want to go” to be realized? What factors would enable the realization of this vision?

- Through 2015-2030 NDC and 2015-2085 Sustainable Economy Development vision, Indonesia intends to achieve the balance between net emission reduction, economic growth, climate resilience, and fair development. Policy reforms (including pro-growth structural reform) and policy alignment (including investment environment) are required to achieve this balance. These two fundamental policy changes need to be aligned with climate change targeted policies.

- Enabling factors:
  - National factors: (1) synergy between policy reform, policy alignment, and climate change policies, (2) finance (adequacy and sustainability), technology (affordable and environmentally friendly), as well as institutional and human resource capacities.
  - International factors: (1) access to finance (adequate and sustainable) and technology (transfer and development), and supports for capacity development, (2) fair international trade including adequate enabling environment.

6. What new engagements and/or partnerships between Parties and non-Party stakeholders can be promoted for increasing ambition and achieving the objectives of the Paris Agreement?

- Engagement of NPS in NDC implementation: (1) contribution to the achievement of emission reduction targets, (2) contribution in building resilience to climate change impact,

7. Which actions could be taken by leaders from national and local governments, regional development banks, private financial Institutions, companies and associations and others in order to contribute to the realization of this vision?

- Government: consistently implement in synergic manner policy reforms (including pro-growth structural reform) and policy alignment (including investment environment) as well as climate change targeted policies.
• Regional development banks and private financial Institutions: increase contributions to climate related investment, e.g. provision of lending scheme to support climate friendly investment

• Companies and associations: support the use of low GHG technology and allocate Corporate Social Responsibility (CSR) to support climate related initiatives.

8. What would be the role of the UNFCCC and what actions can it take?

• Finalize and adopt the Paris Agreement Rule Book. The PA Rule Book should be implementable by all Parties with different national circumstances, capacities, and capabilities.

• Enhance its important role in the process of coherence amongst UN-agencies, particularly in ensuring synergy between Paris Agreement’s goals and SDGs.

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