A Brief Analysis of Indonesia's Intended Nationally Determined Contribution (INDC)

Institute for Essential Services Reform

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Author:
Fabby Tumiwa
Henriette Imelda

Institute for Essential Services Reform (IESR)
E-mail : iesr@iesr.or.id
Phone : +62-21-7992945
Fax : +62-21-7996160
Website : www.iesr.or.id

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1. Introduction

Indonesia has submitted its INDC to UNFCCC in 24 September 2015, calling for 29% of emission reduction funded by national budget, with another additional 12% of reduction if international support is provided to make 41% reduction. Indonesia INDC used business-as-usual scenario baseline starting in 2010, based on historical trajectory 2000-2010, projected toward 2030.

According to CAIT using 2012 data, Indonesia is the 7th largest emitter (including LULUCF) in the World, with 1.981 $GtCO_2e$, slightly above Brazil 1.823 $GtCO_2e$. Emission from land use change and forestry contributes more than 60% of total emission. Indonesia Second National Communication (SNC, 2010) projected that BAU emission will reach 2,95 $GtCO_{2eq}$ in 2020.

The draft of INDC released to the public in the late August by Ministry of Environment and Forestry for comments. However prior to the release, civil society organizations raised concern over the development of INDC. Critiques also directed toward overall contents of INDC and toward specific issues such as recognition to the indigenous people, applied methodologyand modelboth in defining the baseline as well as in defining the target of emission reduction, transparency of data, as well as the process in developing INDC.[1]

This briefing paper contains brief analysis of two Indonesia's INDC documents released in August and September (final and submitted to INDC). We recommend what would it take for Indonesia to improve their INDC to be a strong and robust National Determined Contribution, which should be implemented in the year of 2020.

2. Overview of Indonesia's INDC

Indonesia's INDC released on 24 September 2015 put forward the mitigation and adaptation contributions. On mitigation, the document includes 2030 unconditional GHG emission reduction target of 29% below business as usual (BAU), and additional 12% conditional reduction below BAU by 2030 with sufficient international support, to make 41% of total reduction.

[1] See critiques after INDC became public: AMAN harappemerintahakuimasyarakatadatdalam INDC, http://www.antaranews.com/berita/517986/aman-harap-pemerintah-akui-masyarakat-adat-dalam-indc; RI Emission lack transparency, http://www.thejakartapost.com/news/2015/09/18/ri-emissions-targets-lack-transparency.html; Indonesia INDC is not fit for purpose, http://www.greenpeace.org/international/Global/international/briefings/forests/2015/Indonesia%20INDC%20Briefer.pdf

The document consists of six parts: the National context (including the mitigation and adaptation situation), planning process, strategic approach, information to facilitate clarity, transparency and understanding, key assumptions, as well as review and adjustment. The document also containedan annexto elaborate salient items, particularly on adaptation.

However given the extensive explanation on rationale and background, Indonesia's INDC has failed to elaborate further its intention/s but limited to cutting emission by 2030 in percentage. One of the problematic issues is regarding the methodology in determining baseline referencethat justifies29-41% of emission reduction.

The document also failed to show emission trajectory, indicates “peak year” of emission to justify the needs to develop before it can reduce emission effectively.In adaptation the explanation of the scientific basis to justify adaptation needs and measures are vaguely explained, as well as the relation of mitigation and adaptation approach in building resiliency as explained in the annex of the document.

Although Indonesia's INDC is heavily rich with background thinking and process, it has failed to come up with clear measures both on adaptation and mitigation to meet certain condition written in the rationale. For example in the rationale regarding adaptation the document stated a plan to study and map *regional vulnerabilities* as the basis of adaptation information system but the relation of this plan with the objective of medium term climate change adaptation strategy to reducing risks on *all development sector* (agriculture, water, etc.) is unclear, as well as its relation to the landscape approach.

3. Intended contributions

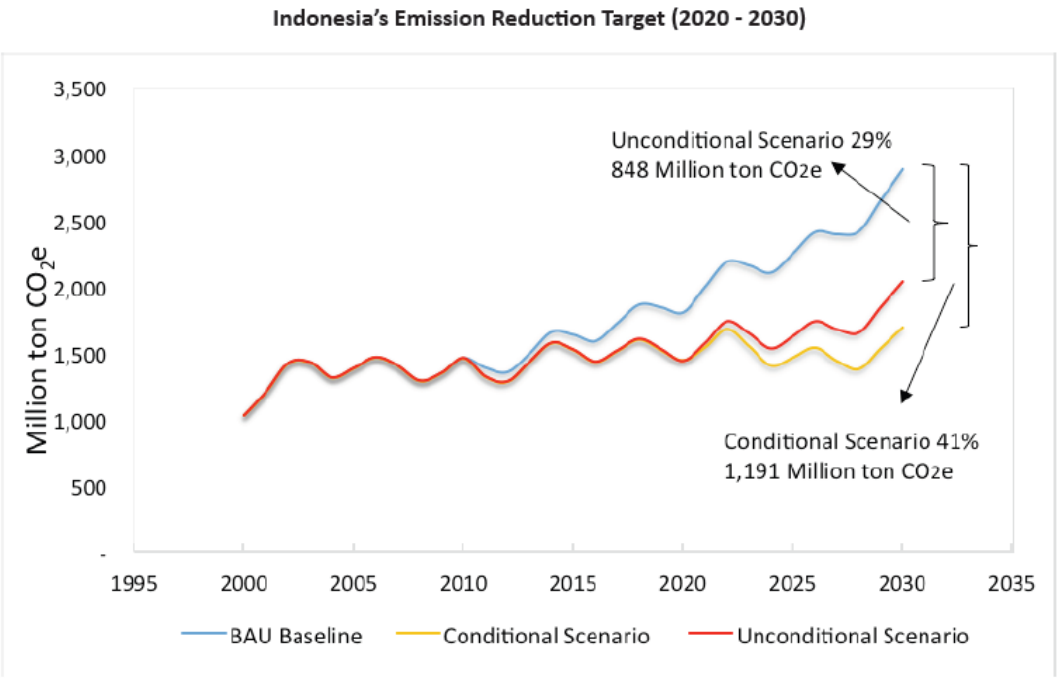
Indonesia intends to do actions on mitigation as well as adaptation. On GHG mitigation, the GoI sees this as continuation of 26%-41% GHG reduction pledge by 2020 but with bolder commitment beyond 2020. The INDC reflected existing national and sectoral development policies pre-2020 and beyond 2020. For instance, GHG emission reduction target is calculated based on renewable energy target in 2025 and 2030 as stated in National Energy Policy.

The INDC stated two type of mitigation target:conditional and unconditional.The document stated that it would reduce 29% of the emission compare to the business as usual (BAU) scenario by 2030as unconditional scenario, where the BAU scenario is projected to be 2,881 $GtCO_{2\text{-eq}}$ in 2030. If there is additional international support, Indonesia intends to reduce additional 12% of the emission. The additional emissions to be reduced is said to be subjected to provision in the global agreement including through bilateral cooperation, covering technology development and transfer, capacity building, payment for performance mechanism, technical cooperation, and access to financial resources.

The intended contributions cover five sectors: energy(including transportation), industrial processes and product use, agriculture, land-use, land-use change and forestry, as well as waste sector, with 3 (three) greenhouse gases account Carbon dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). The amount of emission under 29% and 41% reduction target would be 0.848 $GtCO_{2eq}$ and 1.119 $GtCO_{2eq}$.

Indonesia considers its INDC to be fair and ambitious, due to other challenges that it has to face at the same period when it has to reduce its emissions. The challenges are the following: (1) poverty challenges that remains at the 10.96% of the population still living in poverty (2014); (2) unemployment rate reaches (5.9%); (3) the increasing average population at 1.49%, and (4) GDP growth rate is slowed from 6.2-6.5% per annum in 2010-2015 to only 4% in the first quarter of 2015. Therefore, allocating budget to reduce emission up to 29% by 2030, is the optimal solution that Indonesia can offer, due to the above challenges that remain to be solved by the country.

Fig. 2. Indonesia Emission Reduction Target (2020-2030)



Note: Baseline has been calculated based on review process of National Mitigation Action Plan undertaken in 2015.

Source: Bappenas (2015)

4. Analysis

The COP 20 decision regarding to INDC clearly mention about the minimum requirement of Intended Nationally Determined Contribution (INDC). The paragraph 7-14 of the decision is related with it.

Paragraph 13 mentions, "*Reiterates its invitation to all Parties to communicate their intended nationally determined contributions well in advance of the twenty-first session of the Conference of the Parties (by the first quarter of 2015 by those Parties ready to do so)* ***in a manner that facilitates the clarity, transparency and understanding of the intended nationally determined contributions;***" This paragraph clearly says that all Parties should communicate their INDC in a way that will facilitate the clarity, transparency and understanding of the submitted INDCs. Therefore, it is important to present INDC that

is clear, transparent, that the readers will understand one's INDCs. How to develop such kind of INDC is elaborated in paragraph 14 of the decision.

Paragraph 14 of the decision says, "*Agrees that the information to be provided by Parties communicating their intended nationally determined contributions, in order to facilitate clarity, transparency and understanding, may include, as appropriate, inter alia,* ***quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2****;*"

Based on the highlighted items, IESR has developed an analysis matrix to see the relevance of Indonesia's INDC to the minimum required information based on COP 20 decision, which can be seen in Annex I of this paper.

In overall, Indonesia's INDC does not meet the minimum requirement of INDC which was agreed in Lima. There is a lot of information that are not being elaborated as transparent as it should. The construction of baseline was not really clear, such as what kind of activities that are included to establishthe baseline? Although Indonesia mentioned that the base year uses is 2010, but it is not clear on how Indonesia has included several decisions that were made after 2010, for instance the development of 35 GW power plant in 2015 to 2019, in original plan about 90% of the capacity will be using fossil fuel, but then have change, by increase renewable energy by 25% or equal to 8.7 GW. The same applies to the forest fires that heavily dominated Indonesia's 2015 emission profile.

It is unclear how the 29% and 41% target will be achieved and what would be reduction of each sector? Based on initial INDC document prepared by National Planning Agency (Bappenas), about 50% of BAU emission in 2030 will come from energy sector, mainly power and transportation, and 37% will come from AFOLU, peat decomposition and peat fire, the remaining emission come from various sector. In this case it is very logical that the largest emission reduction will come from two main sectors however since INDC does not give clarity on how the reduction will be delivered in the period 2020-2030 and transparently on what type of action will be taken during this period, it is hard to judge the reliability and transparency of this target.

Another unclear component of Indonesia's INDC lies in the planning processes as stated in the document. The planning processes was claimed to be conducted to be a multi-stakeholder process. Hohne et al (2014) suggested two track process for developing INDCs: the technical part and the political part.[2]This approach can be used to review planning process and the inclusion of other key stakeholders

[2]Hohne, Niklas, et al (2014): Process Guidance for Intended Nationally Determined Contributions (INDCs), downloaded

in INDC development. The process of developing INDC begun with aprocessof reviewing National Action Plan for GHG Emission Reduction, lead by National Planning Agency (Bappenas) that involved related ministerial and government agencies. The objective of this process was to review GHG emission target (2010-2015) and develop baseline and emission reduction scenario for INDC. Although there were bottom up process that involve ministries and government agency since January 2015, there were very little engagement with broad non-governmental institutions or civil society organizations and other non-state actors, before the final draft of INDC released for public comments.[3]

In IESR's public dialogue to review Indonesia's INDC conducted in October 2015, an assessment between draft INDC that was submitted to UNFCCC and the ones that was open for public consultation were delivered[4]. The call for public consultation on draft of INDC has gathered around 8 (eight) inputs that were submitted by various non-governmental organizations (NGO), however very few of these input has been taken as substantial inputs to the final text by GoI. Based on our briefassessment on the final document, it was found that there are no substantial differences between the two versions. The conclusion from this that although the draft INDC is open for public comment and input for about 3 weeks, the process itself was unclear yet transparent, and GoI failed to incorporate substantive inputs from public to the final document.

5. Way forward

Indonesia's INDC appears lack of clarity, transparency and improve understanding for those who are reading and evaluating it. Although the intention of pledge seems ambitious (29%) the basis for determining the BAU are questioned: the methodology, baseline, as well as the activities are separated in a way and another.

The legal basis for implementing INDC remains unclear, as well as the commitment of future government to keep the pledge in the future national development plan. While this is not unique to Indonesia, the basis for implementing the INDC should be carefully considered in the near future.

Therefore, the following should be undertaken for Indonesia to improve its INDC, which then later be Nationally Determined Contribution (NDC):

1. Clarity and transparent on the baseline. Indonesia should improve their INDC including the logic of developing the baseline. In the future, emissions that resulted from forest fire should be included in the baseline, as it may increase in the future. Baseline should not only be developed for mitigation only, but also for adaptation. A scientific basis of the impact of climate change

from:http://mitigationpartnership.net/sites/default/files/ipmm_2014_process_guidance_for_intended_nationally_determined_contributions_indcs.pdf

[3] IESR has taken liberty to participate in few sessions in the period of February to May 2015 and has provided some input to the initial draft of INDC.

[4] Jalal, "Tokenisme: INDC Indonesia danMasukanMasyarakatSipil", presented at IESR's public dialogue on Indonesia's INDC review held in October 26th 2015.

should be provided in order to justify what will happen in the future and what are the appropriate means of actions that should be done regarding to it. This includes the estimated financing required to implement climate change actions.

2. Clarity and transparent on methodology that is used to develop baseline as well as determining emission reduction. The methodology to estimate and accounting for greenhouse gas emission should be disclosed, not only the source of data.
3. Clarity on Indonesia intends to reduce the emission under 29% and 41%. It is not clear on existing INDC, how the reduction will be achieved in 2030, what does contribution of each sector, what type of action will be undertaken for particular sector and what is the outcome of emission reduction.
4. Clarity on the engagementwith stakeholders. The achievement of INDC will depend on wide is the GoI do an outreach to the other stakeholders. In the period of 2015-2020, acknowledgement of non-state actors (such as private sectors and CSOs) will be emphasized. UNEP Emission Gap Report 2013,acknowledged the role of International Cooperative Initiative (ICI), which usually led by non-state actors, can provide additional help to close the emission gap.[5]This implies that the process to engage multi-stakeholders need to be optimized that the implementation of NDC beyond 2020 will also be inclusive to other stakeholders such as private sectors and CSOs. The GoI shall develop a clear and transparent process for engaging civil society and non-stake actor in reviewing INDC in the near future.
5. Ensuring benefits for the poor. As a country with more than 10% of poverty, Indonesia should consider to design a pro-poor INDC which means that the INDC needs to have co-benefits: low carbon development and poverty reduction. Mitigation and adaptation actions in the INDC should also enable the marginalized to have equal access to sustainable development, among others in regard to access to clean energy, water security, food, and increase opportunity to green job, and increase resilience.

[5] http://mitigationpartnership.net/unep-2013-emissions-gap-report-2013

Annex I.
IESR's Analysis of Indonesia's INDC

Information needed according to COP 20 Decision	Indonesia's INDC	IESR's Analysis
Quantifiable information on the reference point (including, as appropriate, a base year)	Under the '*Baseline*' it says "BAU scenarios of emission projection started in 2010, with each sector having various data year interval. For example, the historical data of land-based sector is available from 1990-2012, as seen in Indonesian FREL-REDD+ submission"	This line confirms that Indonesia's base year is 2010. However it does not clear how a baseline is constructed based on the information used. (a) How did the historical data for each sector use to construct the baseline?Didit use extrapolation of the historical emission to the 2030? (b) What kind of activities included in the historical data? (c) How will additional event during or after2010 be incorporated in the construction of baseline? For instance the 35GW power plant program in which originally 90% of the capacity are fueled by fossil fuels but also has been ordered by President to increase share of capacity from renewables up to 25%, or the land and forest fires that happens since early 2015. Would the baseline still reliable with such condition? (d) How accurate the BAU scenario for 2020-2030 given certain uncertainties regarding provision electricity supply (2020-onward), and implementation of National Energy Policy Plan (RUEN) in the period of 2015 to 2030? This issue should be carefully considered as baseline projection used both documents (RUPTL and KEN) as key assumptions.
Time frames and/or periods for implementation	There is no specific section on time frame and/or periods for implementation	Although there is no specific section on time frame and/or periods for implementation, under the part of 'Key assumptions on mitigation' section 'Baseline', it mention about a range of time which

		is assumed to be 'time frames', and that is 2020-2030. Indonesia's INDC also did not mention whether it will be single year of multiple years.
Scope and coverage	The scope of gasses in Indonesia's INDC is carbon dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). While the coverage as it is stated in the document is "Nationwide with a landscape and ecosystem management approach in both adaptation and mitigation efforts by building and strengthening sub-national jurisdictional capacity," and 5 sector.	There is some confusions between what is stated as coverage in Indonesia's INDC with the other section on key assumptions on coverage. The key assumptions mentioned the five sectors that are taken into account in developing INDC. While under the coverage in the document, the linkage between sectors covered and the term of "landscape and ecosystem management approach" are vague. The mis-linkage between the two causes the determination of INDC is eroding the clarity of the coverage itself.
Planning processes	Indonesia's INDC reveals its commitment to institutional development by the establishment of Directorate General of Climate Change under the Ministry of Environment and Forestry. The mandate that is given to this Directorate Generate according to Presidential Regulation No. 16/2015 is to effectively facilitate ongoing relevant programs and processes being implemented by a variety of government sectors and stakeholders. And due to climate change has local to national and international dimensions, coordination and synergy will continuously be enhanced between the Ministry of Environment and	In the initial development of INDC by National Planning Agency/Bappenasthere were two steps approaches. The first one is the review process of national action plan on emission reduction (RAN-GRK) and the second one is the development of INDC based on the review. The review process of national action plan was conducted by the National Planning Agency or Bappenas, which included most of the technical ministries to verify the implementation of the national action plan in the process. While the process of INDC was not conducted as transparent as the review process of RAN GRK and the process itself was not clear and well planned. No written document of the inclusive process for INDC's development. At the end, the process of developing INDC was taken offer of by Climate Change Steering Committee (Wanrah PI).

	Forestry with Ministry of National Development Planning (Bappenas) in the context of climate change and national development and with Ministry of Foreign Affairs in the context of climate change and international negotiations. Indonesia's INDC also mentioned that the preparagraphtion of INDC, GoI has conducted consultations with various stakeholders representing academia, the private sector, and civil society organizations; these consultations have included workshops and consultations organized at both the national and local levels.	Although CCSC opened for comment and input from stakeholders (mainly civil society organization) in the period of two weeks after the draft circulated in late August, it is not clear how the input and feedback are taken into account and being processed in the formulation of final INDC that submitted to the UNFCCC.
Assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and as appropriate removals	Indonesia has listed key assumptions on mitigation as the following: metric applied, methodology for estimating emissions, baseline, MRV, Coverage (as sectors/source categories) and international market mechanism	The required information to be elaborated in here should unfold the methodology used to estimate and do accounting for anthropogenic greenhouse gas emissions. However, what is written cannot explain what is the methodology used to estimate and do accounting for the anthropogenic GHGs as well as appropriate removals.
Consideration of the Parties to consider that its intended nationally determined contribution is fair and ambitious in light of its	Indonesia frames its INDC as fair and ambitious by recalling its poverty level (10.96% of the population still living in poverty in 2014), the unemployment rate (5.9%), Indonesia's population increament	Aside from that, Indonesia will also need investment to reduce the forest fire events, especially those resulted by peatland. These two facts will absorb Indonesia's resources to be allocated. Indonesia should also elaborate the scientific based findings

national circumstances	at an average rate of 1.49%, and the GDP growth rate that is slowed between 2010-2015 from 6.2-6.5% per annum to only 4% in the first quarter of 2015.	regarding to its vulnerability in the coming years, which requires more financing to overcome the impact of climate change to the country. As the INDC will be effectively implemented after 2020, it remains uncertain how the medium-term development plan 2019-2024 and 2025-2029 will be taking into account this pledge. However, it is important to also recall Indonesia's voluntary emission reduction action to be 26% from the BAU by 2020 (with the baseyear of 2010). With such background, Indonesia will continue its INDC based on the condition that Indonesia has started to do.

Annex 2
Comparison between Indonesia's INDC and other countries'

Information needed according to COP 20 Decision	Indonesia's INDC	Brazil's INDC	China's INDC
Quantifiable information on the reference point (including, as appropriate, a base year)	Under the '*Baseline*' it says "BAU scenarios of emission projection started in 2010, with each sector having various data year interval. For example, the historical data of land-based sector is available from 1990-2012, as seen in Indonesian FREL-REDD+ submission"	Brazil intended to reduce greenhouse gases emissions by 37% below 2005 levels in 2025. Subsequent indicative contribution: to reduce greenhouse gas emissions by 43% below 2005 levels in 2030. The reference point is 2005	China has defines its peak year to be around 2030 and making best efforts to peak early; China would lower carbon dioxide emissions per unit of GDP by 60%-65% from the 2005 level. To increase the share of non-fossil fuels in primary energy consumption to around 20%; To increase the forest stock volume by around 4.5 billion cubic meters on the 2005 level
Time frames and/or periods for implementation	There is no specific section on time frame and/or periods for implementation	Single-year target for 2025, indicative values for 2030 for reference purposes only	There is no specific section on time frame and/or periods of implementation
Scope and coverage	The scope of gasses in Indonesia's INDC is carbon dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). While the coverage as it is stated in the document is "Nationwide with a landscape and	Coverage: 100% of the territory, economy-wide, including CO2, CH4, N2O, perfluorocarbons, hydrofluorocarbons and SF6.	China's INDC is very specific on the activities that they will do. However, it does not specify the sector per se, but it does reflected from the activities that they will do, inter alia: energy

	ecosystem management approach in both adaptation and mitigation efforts by building and strengthening sub-national jurisdictional capacity," and 5 sector.		efficiency in their industrial system, controlling emissions from building and transportation sectors, increasing carbon sink through forest resource protection as well as wetlands, promoting the low-carbon way of life, enhancing overall climate resilience, innovative low-carbon development growth pattern, and promoting carbon emission trading market
Planning processes	Indonesia's INDC reveals its commitment to institutional development by the establishment of Directorate General of Climate Change under the Ministry of Environment and Forestry. The mandate that is given to this Directorate Generate according to Presidential Regulation No. 16/2015 is to effectively facilitate ongoing relevant programs and processes being implemented by a variety of government sectors and stakeholders. And due to climate change has local to national and international dimensions, coordination and synergy will continuously be enhanced between the Ministry of Environment and Forestry with Ministry of National Development Planning (Bappenas) in	All policies, measures and actions to implement Brazil's iNDC are carried out under the National Policy on Climate Change (Law 12,187/2009), the Law on the Protection of Native Forests (Law 12,651/2012, hereinafter referred as Forest Code), the Law on the National System of Conservation Units (Law 9,985/2000), related legislation, instruments and planning processes. The Government of Brazil is committed to implementing its iNDC with full respect to human rights, in particular rights of vulnerable communities, indigenous populations, traditional communities and	Does not stated this item.

	the context of climate change and national development and with Ministry of Foreign Affairs in the context of climate change and international negotiations. Indonesia's INDC also mentioned that the preparagraphtion of INDC, GoI has conducted consultations with various stakeholders representing academia, the private sector, and civil society organizations; these consultations have included workshops and consultations organized at both the national and local levels.	workers in sectors affected by relevant policies and plans, while promoting gender-responsive measures.	
Assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and as appropriate removals	Indonesia has listed key assumptions on mitigation as the following: metric applied, methodology for estimating emissions, baseline, MRV, Coverage (as sectors/source categories) and international market mechanism. **Metric applied** : Global Warming Potential (GWP) on a 100 year timescale in accordance with the IPCC's 4th Assessment Report **Methodology for Estimating Emissions** : Inventory is based on 2006 IPCC Guidelines for National Greenhouse Gas Inventories and the IPCC GHG for LULUCF. All data will refer to the National	Inventory based approach for estimating and accounting anthropogenic GHG emissions and, as appropriate, removals in accordance with the applicable IPCC guidelines. This INDC takes into account the role of conservation units and indigenous lands as forest managed areas, in accordance with the applicable IPCC guidelines on the estimation of emission removals.	China does not mentioned its assumptions and methodological approaches including those for estimating and accounting for anthropogenic GHG emissions and as appropriate removals. But China does say how they will do their emission reduction through several sectors.

	Inventory System of Greenhouse Gases (SIGN SMART), UNFCCC Biennial Update Report (BUR), and FREL-REDD+ document. **Baseline :**Assumptions used for baseline projection and policy scenarios for the 2020 to 2030 period are: - Long-term economic growth will still be influenced by land use governance, tenurial issues energy consumption, and quality of infrastructure connecting the archipelago. - Beside GDP per capita, population growth, energy intensity and value added, the increasing demand of both domestic and international market on natural resources based commodities influence the dynamic behavior of each sector and the economy. - Policy scenario for post 2020 in the energy sector refers to Electricity Supply Business Plan (RUPTL) 2015-2024 and National Energy Policy (KEN). - Measurable, Reportable, Verifiable (MRV) : Indonesia commits to periodically communicate its greenhouse gases emissions from various sectors, including the status of emission reduction efforts and		

	results to Secretariat of UNFCCC. Indonesia is currently preparing the Third National Communication Report (TNC), to be submitted by 2016. Indonesia produced the Biennial Update Report (BUR) along with the INDC document. **Coverage :** **Sectors/Source Categories:** 1. Energy (including transport) 2. Industrial processes and product use 3. Agriculture 4. Land-use, Land-use Change and Forestry 5. Waste **International Market Mechanisms :** Indonesia will meet its unconditional commitments regardless of the existence of international market mechanisms. Indonesia welcomes bilateral, regional and international market mechanisms that facilitate and expedite technology development and transfer, payment for performance, technical cooperation, and access to financial resources to support Indonesia's climate mitigation and adaptation efforts towards a climate resilient future.		
Consideration of the Parties	Indonesia frames its INDC as fair and	In the document, it is said that	China's INDC mentioned all

to consider that its intended nationally determined contribution is fair and ambitious in light of its national circumstances	ambitious by recalling its poverty level (10.96% of the population still living in poverty in 2014), the unemployment rate (5.9%), Indonesia's population increment at an average rate of 1.49%, and the GDP growth rate that is slowed between 2010-2015 from 6.2-6.5% per annum to only 4% in the first quarter of 2015.	Brazil is developing country with several challenges regarding poverty eradication, education, public health, employment, housing, infrastructure and energy access. In spite of these challenges, Brazil's current actions in the global effort against climate change represent one of the largest undertakings by any single country to date, having reduced by its emissions by 41% (GWP-100; IPCC SAR) in 2012 and in relation to 2005 levels. Despite of its situation, Brazil is nevertheless willing to further enhance its contribution towards achieving the objective of the Convention, in the context of sustainable development. The document also recall that by adopting economy-wide, absolute mitigation target, Brazil will follow a more stringent modality of contribution, compared to its voluntary actions pre-2020. This contribution is consistent with emission levels of 1.3 GtCO2-eq (GWP-100; IPCC AR 5) in 2025	activities that they have been done in regards to emission reduction, such as: - Carbon dioxide emissions per unit of GDP is 33.8% lower than the 2005 level; - The share of non-fossil fuels in primary energy consumption is 11.2%; - The forested area and forest stock volume are increased respectively by 21.6 million hectares and 2.188 billion cubic meters compared to the 2005 levels; - The installed capacity of hydro power is 300 GW (2.57 times of that for 2005); - The installed capacity of non-grid wind power is 95.81 GW (90 times of that for 2005); - The installed capacity of solar power is 28.05 GW (400 times of that for 2005); and - The installed capacity of nuclear power is 19.88 GW (2.9 times of that for 2005) China also stated that it accelerates the implementation of the National Strategy for Climate Adaptation and improving its capacity to

		and 1.2 GtCO2-eq (GWP-100; IPCC AR5) in 2030, corresponding, respectively, to a reduction of 37% and 43%, based on estimated emission levels of 2.1 GtCO2-eq (GWP 100; IPCC AR5) in 2005. In relation to Brazil's existing national voluntary commitment, which aims to achieve gross emissions of approximately 19% in 2025. Furthermore, this contribution is consistent with reductions of 6% in 2025 and 16% in 2030 below 1990 levels (1.4 GtCO2-eq GWP-100; IPCC AR5). This represents reductions of 43% and 52%, respectively, compared to estimated emission levels of 1.7 GtCO2-eq (GTP-100; IPCC AR5) in 2005. These reductions translate to reductions of 37% and 43% when expressed in GWP-100 (IPCC AR5)	respond to extreme climatic events and making positive progress in key areas of climate change adaptation.
Others		The type of emission reduction is absolute target in relation to a base year. Metric use : 100 year Global Warming Potential (GWP-100),	

		using IPCC AR 5 values Adding Adaptation as INDC, Means of Implementation, as well as South-South Initiatives Adding an annex to clarify he iNDC Brazil acknowledge the role of local government in their efforts in combating climate change. Brazil used IPCC's scientific analysis in determining its iNDC. It is said that Brazil's iNDC is consistent with emission levels of 1.0 GtCO2-eq (GTP-100; IPCC AR5) in 2025 and 0.8 GtCO2-eq (GTP-100; IPCC AR 5) in 2030.	
Number of pages	11	10	36, bilingual