

Anticipating Indonesia's Climate Policies towards Political Year





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Executive Summary

Throughout 2022, there have been many significant developments related to the climate change agenda. Various international conferences discussing the climate change agenda, from the G20 Summit, UNFCCC COP27, and UNCBD COP15 should be used as a momentum for the Government of Indonesia to strengthen its climate commitments, policies, and actions.

The Indonesian government has increased its greenhouse gas emissions reduction target through the Enhanced Nationally Determined Contribution (ENDC). However, some sectoral policies, particularly in the Forestry and other Land Uses sector (FOLU) and the Energy sector as the two pivotal sectors, still need to be re-evaluated in order to align it with the achievement of Indonesia's ENDC target..

In the energy sector, several policies that continue to encounter challenges in the context of emission reduction include the gradual cessation of coal usage, controversies over bioenergy policies, as well as the intricacies surrounding the adoption of the New Energy and Renewable Energy Bill (EBET). In the FOLU sector, various development policies that have been accelerated after the Omnibus Law on Job Creation such as National Strategic Projects (*Proyek Strategis Nasional/PSN*) and National Economic Recovery (*Pemulihan Ekonomi Nasional/PEN*) pose potentials threats to Indonesia's ambitious plans to protect its remaining natural forests.

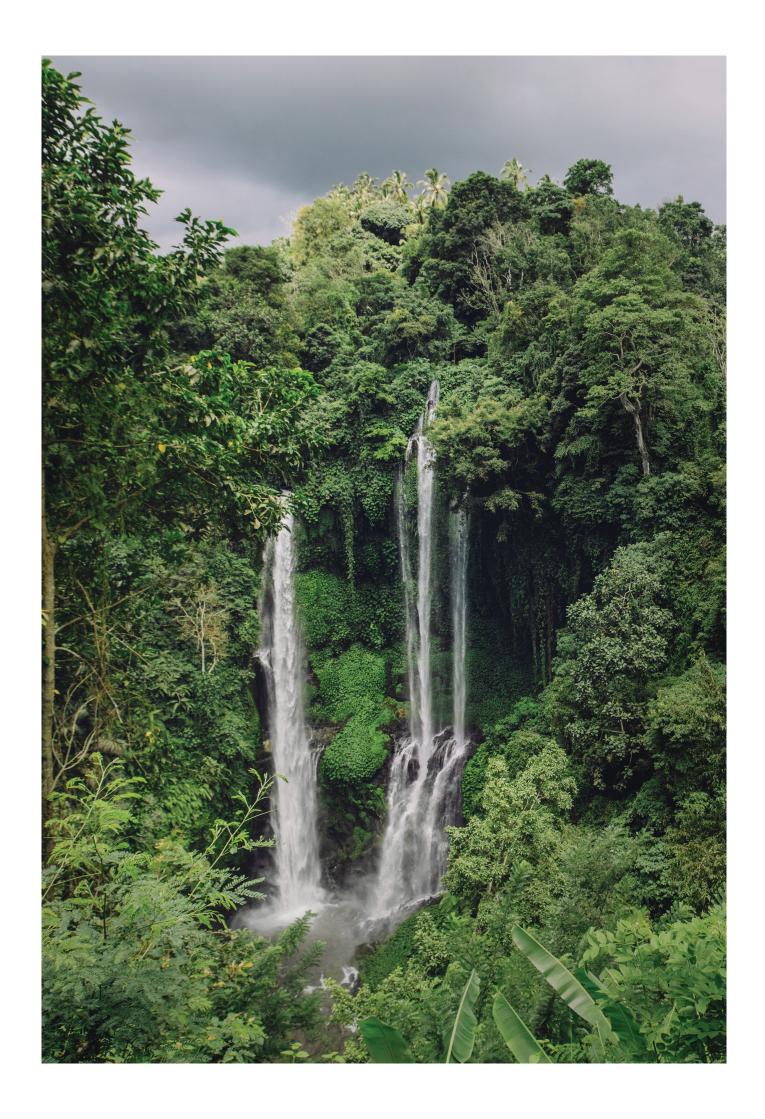
The government has also issued supporting policies to achieve the NDC target, such as Carbon Pricing (*Nilai Ekonomi Karbon*/NEK). However, Madani notes few concerns regarding its implementation plan, particularly related to carbon trading mechanisms; insufficient access for communities' participations and their rights to carbon; ensuring the implementation of social and environmental safeguards; the risk of jeopardizing emission reduction's ambition due to emission offset being allowed, among others..

Entering the political year, there are three crucial aspects that must be anticipated. Firstly, the potential for increased granting of exploitative business licenses that could harm natural forests, both before and after the election period. Secondly, the narrowing space for public participation in the policy-making process over the past few years, resulting in policies in Indonesia neglecting community rights. Thirdly, the continuity of climate policy in the subsequent government period. It must be ensured that various emission reduction policies, protection of natural forests, and safeguards for the rights of indigenous (*adat* community) and local communities are continuously implemented and strengthened in the upcoming government, regardless of who is elected.



Table Of Content

Executive Summary
Table of Content
Background
Climate Actions in Global Events
G20 Bali: Between Celebration and Doubt
COP27: Historic Breakthrough amidst Failed Ambition Increase
UNCBD: A New Chapter in Biodiversity Conservation on Land and Sea
Development of Climate Policy at the National Level
Climate Targets Increase, But Not Aligned with the 1.5C Scenario
Indonesia FOLU Net Sink 2030: Breakthrough or Business as Usual?
Climate Funding in the FOLU Sector: The Long Wait, Will It Have an Impact?
The Winding Road of Equitable Energy Transition
PRKBI: Can It Become a New Direction of Development?
The Tug-of-War in Carbon Economic Value Policy
Weakening of Civil Society Participation and Stagnancy of Indigenous Peoples Bill 24
Climate Commitment Risks in a Political Year
The Importance of Ensuring the Future of Climate Policy





Background

2022 was full of numerous significant moments related to the climate change agenda, both at the global and domestic levels. Indonesia hosted the G20 summit, which gave birth to the Just Energy Transition Partnership (JETP), a climate financing initiative that has the potential to mobilize up to 20 billion US dollars. On various international occasions,, the Indonesian government has consistently demonstrated gestures to support the climate change agenda. President Joko Widodo, for instance, planted mangroves alongside the G20 Leaders in Bali. At the 27th Climate Change Conference (COP27) in Egypt, Vice President Ma'ruf Amin also announced Indonesia's determination to become a leading country in efforts to reduce emissions.

However, our concerns remained. Do those ceremonial engagements suffice to prove Indonesia's commitment in addressing climate change? Have the Indonesian policies in 2022 truly demonstrated a determination to curb global warming in this decisive decade?

This paper provides a brief overview of the outcomes of various aforementioned global events and the progress of national policies concerning climate change throughout 2022 to early 2023 particularly in two key sectors, FOLU and energy. This period is crucial because it is the beginning of the political escalation towards the 2024 Election. In addition, President Joko Widodo's term is nearing the end, making it imperative for the current administration to demonstrate the realization of its climate commitment in the form of policies that can be implemented in the next period. This issue is important to be discussed because the latest Intergovernmental Panel on Climate Change (IPCC) report has revealed that current countries' policies are in fact insufficient to contain the rate of global warming at the 1.5°C threshold.

Emission reduction targets should not merely be empty numbers on paper. Behind them, a series of concrete and consistent policies are still necessary to continually and successfully halt-and-reverse deforestation, phase out the use of fossil fuels, and promote clean and renewable energy based on the principles of justice, all for the sake of restoring Indonesia's societal well-being and a stable world climate.



Climate Actions in Global Events

Throughout 2022, several international forums that specifically addressed the climate change and natural resources agenda were held. These included the 27th Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) and the 15th Conference of the Parties to the UN Convention on Diversity Biological (UNCBD). In addition, climate change and energy transition were crucial topics of discussion during the G20 Summit which Indonesia held, leading to various agreements at both the head-of-state and ministerial levels.

G20 Bali: Between Celebration and Doubt

The G20 Summit has produced several significant political outputs to push the global climate change agenda. First, leaders of the G20 countries have reaffirmed their determination to pursue efforts to limit global temperature increase at 1.5°C. Second, the agreement on a voluntary roadmap for accelerating energy transitions and funding opportunities for energy transitions through the Just Energy Transition Partnership (JETP). Third, a positive signal related to efforts to conserve biodiversity.

The determination of the leaders of the G20 countries to pursue efforts to limit the rate of global warming at 1.5°C is contained in the Bali Leader's Declaration. This can be seen as a good political impetus for global efforts to address climate change, considering that the G20 countries contribute to over 80% of global greenhouse gas (GHG) emissions. However, the realization of this commitment is still questionable. According to Climate Action Tracker 2022, not a single G20 country's climate plans and policies are aligned with the 1.5°C scenario of the Paris Agreement. Indonesia itself received a rating of highly insufficient. Additionally, amidst the energy crisis stemming from Russia's invasion on Ukraine, the leaders of the G20 countries also failed to issue the much-needed political signal to end the use of all fossil fuels.

Nevertheless, the G20 has produced an anticipated output that aims to accelerate the transition from fossil fuel to clean and renewable energy, namely the Bali Energy Transitions Roadmap. This voluntary roadmap is designed to accelerate energy transition by 2030 and is based on the shared principles set out in the Bali Compact. This road map states the intention to uphold inclusivity and equitable access to energy, particularly for Small Islands Developing States (SIDs) and isolated communities. However, both social and environmental safeguards are not explicitly mentioned, including how to ensure respect for the rights of indigenous and local communities (IPLCs). Yet, a sustainable, just, affordable and inclusive energy transition cannot be separated from efforts to ensure the social, economic, and environmental safety of the most vulnerable

G20 Information Center, *Bali Compact*. Accessed onhttp://www.g20.utoronto.ca/2022/220902-bali-compact. html at 12th April 2023.



societal groups.² A similar emphasis has also been reiterated by Indonesian civil society through the document "Values and Principles of Just and Sustainable Energy Transition".³

Another outcome of the G20 summit]was the agreement on funding to support Indonesia's energy transition efforts through the JETP which entails a commitment to mobilize funding of US\$20 billion, equivalent to approximately IDR300 trillion. This funding is intended to be sourced from both public and private investments in the form of grants and low-interest loans. Technically, the types of projects under JETP include early retirement of Steam Power Plants (PLTU), development of renewable energy Power Plants, grid/transmission, renewable energy supply chains, energy efficiency, and fair transitions. Therefore, to ensure an equitable energy transition program through JETP funding, in the process of preparing the current Investment Plan, the Government of Indonesia needs to uphold the principles of inclusiveness, participation, social and environmental safeguards, and ensure respect for the rights of indigenous peoples and locals.

In addition, the hosting of the G20 in Bali provided impetus for a global agreement to halt and reverse biodiversity loss within the UNCBD framework. The Bali Leader's Declaration recognizes the efforts of several G20 countries to achieve the target of 30% land and sea conservation by 2030, a similar target was later adopted at COP-15 UNCBD.⁴ However, there needs to be a strong commitment from the G20 countries to "stop and reverse the rate of forest loss" bearing in mind that stopping deforestation will directly inhibit the rate of loss of biodiversity. Unfortunately, this terminology does not appear in the final output of the G20. What emerges is a commitment to increase efforts to "fight deforestation and degradation," which is weaker than "halting and reversing the rate of forest loss."

Considering that the G20 itself is not a formal forum and the agreements it produces are not legally binding, the output of the G20 can prove to be a positive political signal for the global climate agenda. For this reason, there are points that need to be considered for the G20 countries based on an evaluation of the implementation of the G20 for 2022 in Indonesia. The G20 negotiations are in principle quite participatory negotiations where every stakeholder is given space to participate in negotiations and collect their aspirations - starting from the business sector which is part of the B20 group, civil society in the C20, academics and researchers in the T20, and others known as Engagement. Group. Nonetheless, in terms of holding the discussion space for each Engagement Group with the Ministries and Institutions that hold the final authority

² The upheld principle of energy transition in the Bali Leaders' Declaration

The #CleanIndonesia Coalition. 21 October 2022. Values and Principles of a Fair and Sustainable Energy Transition. 21st October 2022. Accessed on

https://www.walhi.or.id/uploads/buku/Nilai%20dan%20Prinsip%20Transisi%20Energi%20yang%20Adil%20dan%20Berkelanjutan.pdf at 26th May 2023

⁴ Bali Leaders Declaration point 14

This terminology was used in the Glasgow Leaders' Declaration on Forest and Land Use, which the majority of the G20 countries signed except for India, Saudi Arabia and South Africa.



to negotiate with other G20 government agencies, it is very narrow, especially for civil society. Madani sees that the success of the Government of Indonesia in negotiating climate agendas in the G20 forum needs to continue to be echoed in the next G20 events so that taps of synergy and cooperation with various stakeholders including civil society need to be opened.

COP27: Historic Breakthrough amidst Failed Ambition Increase

The Climate Change Conference or Conference of the Parties 27 (COP27) which will be held in Sharm el-Sheikh, Egypt from 6-18 November 2022 carries the theme "turning promises into reality". The emergence of this agenda was driven by the failure of developed countries to fulfil the promise of mobilizing climate finance of 100 billion US dollars annually. Because it is being held on the African continent, COP27 is also expected to produce meaningful breakthroughs to advance the interests of developing countries and the most vulnerable countries such as funding assistance, climate change adaptation, loss and damage, and keeping global warming at 1.5°C.

COP27 is considered a disappointment by some parties such as the European Union⁶, and the leaders of the Pacific island nations for failing to agree on ending or phase out all fossil fuels, including coal, oil and natural gas, which are the main contributors to global greenhouse gas emissions.⁷ Whereas, the IPCC report emphasizes that the use of coal must decrease by 95%, oil by 60%, and natural gas by 45% in 2050 so that the world has the opportunity to restrain the rate of global warming to no more than 1.5°C. COP27 only repeated calls to accelerate efforts to phase down coal plants that are not equipped with emission reduction devices and eliminate inefficient fossil fuel subsidies.

Even so, the COP27 event produced several things that were quite happy. First, the Sharm El Sheikh Implementation Plan (SHIP) recognizes that the impact of climate change on a 2°C temperature increase will be far more severe than 1.5°C. Therefore, the state parties are determined to try to contain global warming at a level of 1.5°C. The SHIP provides a mandate for state parties to review their respective climate commitments and make updates and reinforcements as needed. This mandate can be considered as progress considering that in the Paris Agreement, the obligation to renew climate commitments is only required once every five years.

Second, SHIP also reminds countries of their commitment to slow, stop and reverse deforestation as declared in the Glasgow Leaders' Declaration on Forest and Land-Use in Glasgow, 2021. As part of the 145 countries that signed the declaration, the realization of Indonesia's commitment to stop forest cover loss and land degradation by 2030 is highly anticipated.

Third, the formation of the Rainforest Nations Alliance between Indonesia, Brazil, and the

⁶ Liboreiro, Jorge. COP27: EU Left Disappointed by Lack of Ambition in Final Deal Calling it a 'Small Step Forward.' 23rd November 2022. Accessed on https://www.euronews.com/my-europe/2022/11/21/cop27-euleft-disappointed-by-lack-of-ambition-in-final-deal-calling-it-a-small-step-forwa at 28th May 2023

Laville, Sandra; Zee, Bibi van der. Draft COP27 Agreement Fails to Call for 'Phase-Down' of all fossil fuels. 17th November 2022. Accessed on https://www.theguardian.com/environment/2022/nov/17/draft-cop27-agreement-fails-to-call-for-phase-down-of-all-fossil-fuels at 28th May 2023



Democratic Republic of the Congo. This alliance is aimed at enhancing cooperation as well as the bargaining position of the three countries in accessing funding in the forest and land sector for sustainable forest management, conservation, restoration of forests and other critical ecosystems – including funding from the private sector. Global funding to protect and restore forests urgently needs to be increased. The IPCC report shows that the funds currently available are 571 times smaller than the funds needed to realize the overall climate change mitigation potential in the agriculture, forestry, and land use sector (AFOLU), which amounts to around US\$400 billion per year. It is undeniable that one of the main discussions regarding the main source of financing that will be pursued by the Alliance of Rainforest Nations is through carbon trading. However, this alliance should not only focus on efforts to "sell" carbon assets and environmental services from forests, but also on efforts to increase the recognition and protection of the rights of indigenous and local communities who contribute greatly to maintaining and restoring forests.

Fourth, COP27 also succeeded in making a historic decision to raise funds for loss and damage, which are the negative impacts of climate change that occur even though mitigation and adaptation actions have been carried out.8 The agreement on a plan to raise loss and damage funds after three decades of negotiations is expected to be a springboard for discussions on climate justice issues at COP28 in 2023.

This year, COP28 will be held from 30 November to 12 December in Dubai, United Arab Emirates. COP28 will be a benchmark for the success of countries in the world in limiting the rate of increase in global warming. At this meeting, the first global reporting (global stocktake) of the implementation of the Paris Agreement which began in 2020 will be completed. This report is conducted to assess the world's collective progress in achieving its climate goals and the results of this global report will show whether the implementation of each country's climate commitments is on track in curbing the rate of increase in global temperatures.

There are at least three hopes for COP28. First, the state parties agree on a commitment to drastically reduce or completely end the use of fossil fuels. Many doubt that this will be achieved because the host of COP28 is one of the 10 largest oil producing countries in the world. However, this demand needs to be voiced continuously because the time to act to achieve the target of 1.5 degrees is getting narrower.

Second, state parties strengthen or increase their climate commitments this year. The UNFCCC synthesis report as of 23 September 2022 shows that the earth's temperature at the end of the 21st century will still increase in the range of $2.1 - 2.9^{\circ}$ C, far above the safe limit of 1.5° C. These findings should serve as a reminder and encouragement for countries to further advance their respective climate ambitions.

The consequences or impacts of climate change are beyond what the community can handle or when there are still options to adapt but the community does not have the resources to access or implement these options. Such as loss of settlements due to sea level rise because of climate change.



Third, developed countries fulfil the promise of climate finance for developing countries. The agreement to establish a loss and damage fund may be good news for vulnerable countries and communities. However, while the fund management mechanism is being strengthened, the obligation of developed countries to mobilize climate funding of US\$100 million per year for climate change adaptation and mitigation must still be fulfilled immediately. In addition, the promise of funding initiated by several developed countries and philanthropic institutions to support the recognition of rights and sustainable forest management by Indigenous Peoples and Local Communities⁹ in amount of 1.7 billion US dollars must also be fulfilled immediately. Adequate climate funding will be the key to successful implementation of climate change adaptation and mitigation actions. Climate funding for vulnerable groups such as Indigenous Peoples and Local Communities will also help achieve climate justice.

UNCBD: A New Chapter in Biodiversity Conservation on Land and Sea

Besides the UNFCCC, Indonesia is also a member of the UN Convention on Biological Diversity (UN CBD) whose 15th meeting was held in December 2022 in Montreal, Canada. The conference has a target to agree on a new global biodiversity framework after the 2011-2020 period is over. Among the many issues that were later negotiated at COP15 were infrastructure, agriculture, invasive species, pesticides, the role of business, and government subsidies that damage the environment.

The main output of organizing COP15 is the Kunming-Montreal Global Biodiversity Framework (GBF) or a biodiversity framework which aims to address the loss of biodiversity, restore ecosystems, and protect the rights of indigenous peoples. The GBF has four global goals to protect nature, including stopping the extinction of species threatened by human activity and reducing the rate of extinction of all species tenfold by 2050, as well as the sustainable use and management of biodiversity to ensure that nature's contribution to humans is respected, maintained, and improved.

Within the GBF itself, there are at least two positive things which must then be adopted into conservation regulations and policies in Indonesia. First, the conservation of 30 percent of the land area and 30 percent of the sea area until 2030. The adoption of this target, which is also being pushed by the G20 countries, is quite significant considering that currently only about 16% of the land area that is protected globally, while the area of the sea that is protected is only around 8% only. Until now, the Government of Indonesia does not yet have legal and policy foundations that require a certain percentage of an area to be conserved in Indonesia. Nonetheless, this target has been stated in the Initial Draft National Long-Term Development Plan (RPJPN) 2025-2045 whose implementation certainly still needs to be monitored.

⁹ UNFCCC. COP26 IPLC Forest Tenure Joint Donor Statement. Accessed onhttps://ukcop26.org/cop26-iplc-forest-tenure-joint-donor-statement/ at 12th April 2023

Protected Planet. Protected Planet Report 2020. Accessed on https://www.protectedplanet.net/en at 13th April 2023



Second, GBF provides new hope in strengthening inclusive and human rights-based conservation practices, especially inclusiveness towards Indigenous Peoples and Local Communities (MAKL). GBF explicitly recognizes IPLC's important role and contribution as the main guardian as well as a partner in the conservation, restoration, and sustainable use of biodiversity. For this reason, GBF emphasizes the urgency for each country to ensure IPLC rights, traditional knowledge and good practices related to biodiversity conservation efforts are always respected, documented, and preserved with their knowledge. Respect and recognition of IPLC's traditional knowledge and good practices are key to the success of biodiversity conservation efforts.

In the national context, only 8.7% of important marine areas are legally protected. Unfortunately, increasing the area of marine protected areas by 30% is only targeted to be achieved in 2045 - 15 years later than the 2030 target agreed in the GBF.¹¹ On the other hand, even though Indonesia has designated more than 54% of forest areas as protected areas by 2020, there are still many other essential ecosystems that have not received special attention. The government has also issued Presidential Instruction No. 1 of 2023 concerning Mainstreaming Biodiversity Conservation in Sustainable Development and proclaimed a development concept called "Biodiversity Sensitive Development." Unfortunately, when referring to Law Number 6 of 2023 concerning Job Creation, the forest area requirement of at least 30% (thirty percent) of the area of river basins (DAS) or islands with a proportional distribution has been abolished. These two regulations which are references in efforts to conserve areas that are otherwise contradictory, of course, leave questions about how Indonesia will realize the concept of biodiversity conservation in the future.

As a UNCBD member country, the Government of Indonesia needs to realize the agreed principles and commitments regarding respect for IPLC rights as stated in the GBF into laws and regulations at the national level, including the Bill on the Conservation of Living Natural Resources and Ecosystems (RUU KSDAHE) and Indigenous Peoples Law Bill (RUU MHA). Unfortunately, the KSDAHE Bill, which is currently in the Level I Discussion stage, does not fully reflect meaningful participation in the process of drafting and implementing conservation. In fact, this bill is very important for the adoption of conservation principles that are more inclusive and based on human rights as well as shifting the old conservation model which often overrides traditional knowledge and good biodiversity conservation practices owned by IPLC. Meanwhile, the recognition and protection of IPLC rights, which should be an integral part of the practices of conserving and protecting biodiversity, including cultural and cultural values attached to biodiversity, have so far not had a strong legal basis in form of law because the MHA Bill has not yet been passed.¹³

Press Release Ministry of Environment and Forestry of the Republic of Indonesia. December 20, 2022. Indonesia Asks Developed Countries to Realize Biodiversity Protection at COP15 CBD. Accessed on https://www.menlhk.go.id/site/single_post/5190/indonesia-minta-negara-maju-wujudkan-perlindungan-keanekaragaman-hayati-di-cop-15-cbd at 13th April 2023.

Ministry of Environment and Forestry of the Republic of Indonesia. March 9, 2023. Grounding the Kunming-Montreal Global Biodiversity Framework for Indonesia's Biodiversity 9 Maret 2023. Accessed on https://bsilhk.menlhk.go.id/index.php/2023/03/09/membumikan-kunming-montreal-global-biodiversity-framework-untuk-keanekaragaman-hayati-indonesia/ at 13th April 2023

¹³ Discussions on the MHA Bill until 2023 are still in the harmonization stage even though it has been included



Development of Climate Policy at the National Level

At the national level, there are several important policies related to climate, including the Enhanced NDC policy which is a follow-up effort from the Glasgow COP. Apart from that, in 2022, the Ministry of Environment and Forestry will also issue a Net Sink FOLU Operational Plan which ideally can be a reliable instrument to prevent the opening of new natural forests. In the funding sector, Indonesia receives payments from schemes that have been established several years before. Indonesia also received a new funding scheme through the JETP Partnership which was agreed upon at the G20 event. As one of the important sectors to achieve the NDC target, Indonesia has also made several policies in the energy transition dimension. One of the important policies in the energy sector is the Economic Value of Carbon (NEK), which includes formulating carbon trading scenarios. At a broader level, which is development, the government also has a Climate Resilience Low Carbon Development Policy (PRKBI) although it has not been implemented optimally.

Climate Targets Increase, But Not Aligned with the 1.5C Scenario

In September 2022, Indonesia renewed its climate commitment by submitting Enhanced NDC (ENDC) documents to the UNFCCC secretariat. This document contains Indonesia's GHG emission reduction target with its own ability to increase to 31.89% from the previous 29%, while the target with international support increased to 43.20% from the previous 41%. The FOLU and energy sectors are key sectors in the ENDC with a respective contribution of 55%-59% and 30%-36% to Indonesia's total GHG emission reduction target. This increase in climate commitment by 2030 should be accompanied by increased ambition in the 2050 Net Zero Emissions target which is projected to be achieved in 2060 or sooner.

The Climate Action Tracker (2022) assesses that Indonesia's emission reduction ambitions in the ENDC are still very weak, mainly because the projected baseline GHG emissions are too high compared to current conditions and policies. ¹⁶ In the FOLU sector, the emission reduction target is not as ambitious as Indonesia's FOLU Net Sink 2030¹⁷, a national program to accelerate emission reduction actions in the FOLU sector to achieve Indonesia's Net Zero Emissions target. In the (operational plans) FOLU Net Sink 2030, it is stated that Indonesia will no longer have a

in the Prolegnas since 2013 and has passed two DPR periods.

This means that Indonesia must reduce its own GHG emissions by 915 MTonCO2e up to 1240 MTonCO2e with international support in 2030 from a baseline of 2869 MTonCO2e.

The percentage range refers to self-effort and international support scenarios. The contribution of other sectors, namely agriculture, waste/waste, and industrial processes and product use (IPPU) is relatively small.

¹⁶ Climate Action Tracker. Indonesia Country Summary. 26 Oktober 2022. Accessed on https://climateaction-tracker.org/countries/indonesia/ at 13th April 2023

FOLU Net Sink 2030 is a condition that is to be achieved through reducing GHG emissions in the forestry sector and land use under conditions where the level of absorption of emissions is equal to or greater than the emissions released into the atmosphere.



deforestation quota until 2030. ¹⁸ However, Enhanced NDC still provides flexibility to deforest 359 thousand hectares per year in the 2020-2030 period in a self-effort scenario and 175 thousand hectares per year with international support. In fact, in recent years Indonesia has succeeded in reducing its deforestation rate below this level. Indonesia should be able to set a lower deforestation quota in the ENDC so that the rate of deforestation does not increase again when the government changes. In addition to the large deforestation quota, the target for forest and land rehabilitation and peat restoration in the ENDC has not increased even though the emission reduction target has increased.

From a process standpoint, the preparation and implementation of the NDC is seen as not yet accommodating the principle of meaningful participation. In fact, the Paris Agreement has stated the urgency of inclusivity of various stakeholders, including civil society and indigenous and local communities in the preparation and implementation of climate commitments. The effective involvement of various elements of society in every NDC process is very important to ensure that every climate policy choice is truly in the public interest. Ignoring participatory principles can result in climate actions being carried out that are not in accordance with the needs of local communities. When the involvement of the wider community is neglected in the formation of climate policy, there is a potential for the program and its objectives to not be achieved, thus increasing the vulnerability of the community at the site level, or even endangering the environment. One example is the expansion of mines to supply electrification needs which cause environmental damage and ignore human rights, ¹⁹ forest carbon projects that ignore the rights of indigenous and local communities, ²⁰ the construction of flood prevention infrastructure in Malacca District, NTT which increases the vulnerability of communities to floods, and so on.

In 2023, under the momentum of COP28, Indonesia can continue to increase ambition in its climate commitments to be more aligned with the Paris Agreement. There are several things that can be done to increase this ambition. First, increase the emission reduction target in the forest sector and land use by accommodating the 2030 FOLU Net Sink target and reducing the deforestation quota below the current achievement. Second, increase the emission reduction target in the energy sector by including the early retirement plan for coal power plants and the Just Energy Transitions Partnership (JETP). Third, increase the meaningful participation of civil society, indigenous and local communities, and other vulnerable groups in the preparation and implementation of NDCs.

¹⁸ If referring to actual deforestation data up to 2019.

Business & Human Rights Resource Center. Transition Minerals Tracker. 2022. Accessed on https://www.business-humanrights.org/en/from-us/transition-minerals-tracker/ at 30th May 2023

²⁰ Kainou, Kazunari. Collapse of the Clean Development Mechanism Scheme under the Kyoto Protocol and its Spillover: Consequences of 'Carbon Panic.' 16th March 2022. Accessed on https://cepr.org/voxeu/columns/collapse-clean-development-mechanism-scheme-under-kyoto-protocol-and-its-spillover at 22nd May 2023



Indonesia FOLU Net Sink 2030: Breakthrough or Business as Usual?

In 2022, the Indonesian government issued an Operational Plan ((operational plans)) to achieve the Indonesia FOLU Net Sink 2030 target through Minister of Environment and Forestry Decree number SK.168/2022. Through this target, the absorption rate of emissions in the FOLU sector is targeted to be greater than the emissions produced²¹ so that it can absorb emissions from other sectors, especially the energy sector which is targeted to still release large amounts of emissions. The Indonesian government not only makes FOLU Net Sink 2030 the backbone for achieving the GHG emission reduction target to achieve the Enhanced NDC target, but also to achieve the Net Zero Emissions vision by 2060 or sooner.

To reduce emissions in the FOLU sector, protecting remaining natural forests and restoring damaged peat ecosystems should be top priorities. In Madani's notes, referring to data from the Ministry of Environment and Forestry, Indonesia has lost 4.7 million hectares of natural forest in the last 10 years. Meanwhile, of the remaining 89.7 million hectares of Indonesia's natural forests, there are around 9.7 million hectares of unprotected natural forests.²² Around 3.5 million hectares of this area have even been allocated to grant business permits for new forest utilization or to be included in the Forest Utilization Direction Map (PAPH).

Another fact that also needs to be considered is that there are around 27 million hectares of natural forest under the control of permits and concessions. Of this area, approximately 8.7 million hectares²³ are in a permit/concession whose form of activity is to carry out land clearing, which are oil palm plantations, plantation forests, and mining concessions so that they face the threat of deforestation. The strategy to reduce the rate of loss of natural forest in permits and concessions is important to note because in the 2020-2021 period, most of the reduction in natural forest cover occurred in permit/concession areas, including the Area of Interest for Indonesia's Food Security program, Food Estate. In addition, the increasing demand for global export commodities such as nickel for the energy transition is also increasing pressure on the remaining natural forests.

KLHK data for 2020 also shows that almost all of Indonesia's peat ecosystems (99.19%) are in damaged status with mild to very severe levels of damage. However, the areas designated as Peat Restoration Priorities for 2016-2020 only cover 53.03% of Indonesia's peat ecosystems or around 12.8 million hectares. What needs to be paid more attention to is the small peat restoration target given to the Peat Restoration Agency²⁴ in 2016-2020 and 2021-2024, which is

²¹ Indonesia FOLU Net Sink 2030 targets to achieve GHG emission levels in the Forestry and Land sector in 2030 of -140 million tonnes of CO2e and continue to increase to -340 million tonnes of CO2e in 2050.

Outside areas allocated to the community / indicative map of social forestry areas, indicative map of stopping the issuance of new permits in primary natural forest and peatlands, and outside permits and concessions for oil and gas, minerals and coal, business permits for forest utilization in natural forests and plantation forests, as well as oil palm plantation permits.

²³ Madani Berkelanjutan Foundation. 2023. Safeguarding What Remains: A Review of Declining Natural Forest Cover Areas 2020-2021. 2023.

²⁴ Based on Presidential Regulation 120 of 2020 concerning the Peat and Mangrove Restoration Agency, the mandate of the Peat Restoration Agency has been increased with Mangrove Rehabilitation.



only 2.68 million hectares and 1.2 million hectares.

One of the contributors to peat damage is the granting of business permits that drain the peat and clear the forest on it. The total area of peat ecosystems currently located in oil and gas, palm oil, natural forest and plantation forest concessions/concessions, and mineral and coal reaches 14.25 million hectares or 58.8% of Indonesia's total peat ecosystems.²⁵

(Operational plans) FOLU Net Sink has included several key policies relevant to addressing some of the challenges above, including stopping the issuance of permits in areas of primary natural forest and peatlands, not releasing productive forest areas, conservation of primary natural forests and peat ecosystems with a protective function. in plantation forest areas, providing incentives for forest companies that protect natural forests in their work areas through the REDD+ scheme, establishing protection blocks in business permits in production forests, integrated peatland protection, peat restoration, and forest and land fires control. This (operational plans) also includes social forestry and the strengthening and development of customary forests within its scope of work.

If implemented effectively and transparently, (operational plans) FOLU Net Sink can reduce vulnerability and pressure on natural forests and peat ecosystems after the ratification of the Job Creation Law which makes it easier for forest areas to be released, used and exploited for the benefit of National Strategic Projects and National Economic Recovery, including Food Estate and Energy Estate and various infrastructure projects that require a lot of land.

However, there are several things that can increase the effectiveness of the (operational plans) FOLU Net Sink so that the implementation becomes truly a breakthrough rather than just Business as Usual. First, protect natural forests in oil palm and mining plantation permits, not only in plantation forest permits. This protection must include secondary natural forests which play an equally important role in storing carbon, maintaining biodiversity, as well as being a source of livelihood for indigenous and local communities. Second, expanding the area of Termination of Granting New Permits (PIPPIB) to include secondary forest landscapes that are still in good condition. Third, intensifying the restoration and improvement of peat water systems in forestry and plantation permits and concessions, whose implementation is currently lacking for public monitoring, as well as areas that burn repeatedly in PIPPIB and PIAPS. Fourth, to emphasize that natural forest areas included in the Forest Utilization Direction Map or PAPH will only be intended for the management of environmental services or businesses that are restorative in nature, not for the use of timber which can encourage deforestation and forest degradation.

Regardless of the overlap between permits/concessions. Peat ecosystems in the widest permits/concessions are in oil and gas concession areas (5.34 million hectares), followed by oil palm plantation permits (4.96 million hectares), PBPH HT (2.55 million hectares), PBPH HA (1.01 million hectares), and mineral and coal (357 thousand hectares).



Climate Funding in the FOLU Sector: The Long Wait, Will It Have an Impact?

The 2022 IPCC report reveals that the agricultural, forest and land sectors can contribute to achieving 20-30% of global mitigation actions at a relatively low cost. However, the gap between existing global funding for the FOLU sector and what is needed is huge. In Indonesia alone, for example, to achieve the 2020-2030 FOLU Net Sink target, the funds needed reach IDR 204.02 trillion, while APBN funds for FOLU sector mitigation actions in 2020-2024 are only available IDR 19.61 trillion.

For this reason, it is necessary to mobilize funding, both from the state, private sector and internationally; one of which is through the REDD+ scheme.²⁶ Based on data submitted by the Government of Indonesia to the UNFCCC, from 2013 to 2022, Indonesia has succeeded in reducing GHG emissions from deforestation and forest degradation by 822.3 million tonnes of CO2e. However, of Indonesia's overall emission reduction performance, only a few have received performance-based payments.²⁷

On the one hand, regarding funding for climate change mitigation, Indonesia and Norway have previously had a cooperation agreement since 2010 in the form of a Letter of Intent or Letter of Intent on Reducing Emissions from Deforestation and Forest Degradation and Their Role in Conservation, Sustainable Forest Management and Enhancement of Carbon Stocks (REDD+). in which Norway promised funding of up to 1 billion US dollars if Indonesia succeeded in reducing emissions from deforestation and forest degradation. However, the Government of Indonesia ended this collaboration in September 2021. After a year of being in limbo, in October 2022, the Government of Indonesia entered a new chapter of bilateral cooperation with the Government of Norway through the signing of a Memorandum of Understanding (MoU) to achieve FOLU Net Sink 2030 FOLU Net Sink 2030 funding will focus on five pillars, which are preventing deforestation and forest and land degradation, increasing landscape-based land rehabilitation to increase carbon sequestration, increasing biodiversity conservation, restoring peat ecosystems by involving communities, and strengthening law enforcement and institutional capacity.

Based on the MoU, the Government of Norway has paid US\$56 million for Indonesia's success in reducing emissions from deforestation and forest degradation in 2016-2017. However, based on calculations by the University of Exeter Business School, this funding is considered too small to be able to halt the rate of deforestation in Indonesia.²⁸

On the other hand, Indonesia also receives performance-based payments within the REDD+

In simple terms, REDD+ can be interpreted as a framework for developed countries to provide incentives for developing countries to protect their forests.

²⁷ UNFCCC REDD+ Web Platform. Indonesia Country Submission. Accessed on https://redd.unfccc.int/submissions.html?country=ID at 23rd March 2023.

Farand, Chloe. Norway underpaid Indonesia for forest protection results, study argues. 24th January 2022. Accessed on https://www.climatechangenews.com/2022/01/24/norway-underpaid-indonesia-forest-protection-results-study-argues/ at 14th March 2023



framework through multilateral cooperation such as the Green Climate Fund (GCF) through UNDP and the Forest Carbon Partnership Facility (FPCF) and the BioCarbon Fund through the World Bank. For Indonesia's success in reducing emissions from deforestation and degradation in the 2014-2016 period, Indonesia will receive a performance-based payment from the GCF of USD 103.8 million.²⁹ That way, Indonesia is the largest recipient country of performance-based payments under the REDD+ scheme from the GCF, much bigger than Brazil which only received US\$96.5 million. Most of the funds originating from the GCF will then be managed by the Environmental Fund Management Agency (BPDLH).

In November 2022, the Government of Indonesia has published a national strategy for REDD+ for the 2021-2030 period. Unlike the previous period where REDD+ was the big umbrella for funding in the forestry and land sector, in the 2021-2030 period, FOLU Net Sink 2030 will be the big umbrella for funding.

There are several things that need to be emphasized so that the distribution of international funding for forests and land can be targeted and fair. First, the importance of providing incentives to areas that are not only highly vulnerable to deforestation but also to areas that are still doing good conservation of forest areas, especially those managed by indigenous and local communities. Second, the importance of facilitating access for indigenous and local communities to gain recognition of rights and manage forests in a sustainable manner. Third, the importance of openness and maximum public participation in the implementation of the NDC and FOLU Net Sink 2030 so that the funds distributed are truly targeted, do not have a negative impact on indigenous and local communities, and are not corrupted. Fourth, climate funding should not only be based on project deliverables - for example only for one FOLU Net Sink program, but must be based on a clearer, holistic and synergistic long-term climate management system so that it can truly solve climate problems and mitigate impact.

The Winding Road of Equitable Energy Transition

Indonesia's energy transition commitment can be traced since the issuance of Government Regulation Number 79 of 2014 concerning National Energy Policy. These regulations, among others, contain targets for new energy and renewable energy of at least 23% in 2025 and 31% in 2050. This PP also contains principles for prioritizing and maximizing the use of Renewable Energy by considering the economic level. Unfortunately, this Government Regulation still mentions the use of coal as the mainstay of national energy supply. Indonesia's climate commitments in the energy sector contained in the Enhanced NDC (ENDC) still refer to this PP so that it has not encountered any difficulties.

Considering that Indonesia has communicated a vision to achieve Net Zero Emissions in 2060 or faster, the Ministry of Energy and Mineral Resources (ESDM) together with the International

Green Climate Fund, Decisions of the 26th meeting of the board. 17th September 2020. Accessed on https://www.greenclimate.fund/document/gcf-b26-09 at 14th Macrh 2023



Energy Agency (IEA) have formulated a road map for Indonesia's energy sector's Net Zero Emissions in 2060 with several key mitigation actions, such as the development of renewable energy by focusing on solar, hydro and geothermal power, the phase down of Coal Power Plants (PLTU), the use of low emission technologies such as the development of super grids and Carbon, Capture, Utilization, and Storage (CCS/ CCUS), as well as electric vehicle conversion.³⁰

Even so, the steps taken by the Government must still consider how effective the impact will be. Do not let inappropriate mitigation efforts become new problems, such as the ineffective use of technology as an instrument for climate mitigation efforts. IESR research states that the use of Carbon Capture and Storage/Carbon Capture, Utilization and Storage (CCS/CCUS) technology will not significantly reduce GHG emissions and instead has an expensive investment with a low success rate.³¹ In addition, it must be ensured that the energy transition does not become a new driver for the destruction of natural forests and peatlands to the violation of the rights of indigenous and local communities.

Half-heartedly ending dependency on coal

The most important thing from Indonesia's energy transition is leaving the use of fossil fuels, including coal as a power plant or early retirement of existing coal power plants. Until now, the government has repeatedly expressed its commitment in public to start reducing drastically until it stops using coal-fired power plants.

This commitment was expressed by the Coordinating Minister for Maritime Affairs, Luhut B. Panjaitan at the COP27 event at the end of 2022. Luhut promised to retire several coal power plants early to be in line with Indonesia's target in dealing with the climate crisis. On another occasion, President Joko Widodo also said that Indonesia would retire all coal-fired power plants by 2025, although the Palace later clarified that what Jokowi meant was 2050. The lack of consistency in the Indonesian government's statement illustrates the weakness of the energy transition planning and roadmap owned by the government itself.

Currently, Indonesia is still very dependent on coal to generate electricity considering that coal is still the cheapest energy source. This is reflected in the fact that 62% of PLN's electricity is still supplied by coal-fired power plants.³² Based on data from the Ministry of Energy and Mineral Resources (ESDM), Indonesia has 253 PLTUs as of April 20, 2022, spread across various

D Inspector General of EBTKE, Ministry of Energy and Mineral Resources. Launches the NZE Roadmap for the Indonesian Energy Sector, These are the Results of IEA Modeling. September 2nd 2022. Accessed on https://ebtke.esdm.go.id/post/2022/09/05/3252/luncurkan.peta.jalan.nze.sektor.energi.indonesia.ini.hasil. pemodelan.iea at 10th February 2023

³¹ Uliyasi, Simanjuntak. 30 June 2022. IESR Pushes to Take Advantage of Coal to Accelerate Energy Transition. Accessed on https://iesr.or.id/iesr-dorong-manfaatkan-keuntungan-batubara-untuk-akselerasi-transisi-energi at 10th February 2023

³² CNN Indonesia Team. 13 July 2022. Sri Mulyani: 62 Percent of PLN's Power Plants Are Still Coal-Based. Accessed on https://www.cnnindonesia.com/ekonomi/20220713143354-532-820996/sri-mulyani-62-persen-pembangkit-listrik-pln-masih-berbasis-batu-bara at 10th February 2023



provinces. To retire 118 PLTUs early, Indonesia is estimated to need a transitional fund of \$37 billion or around Rp. 572.6 trillion.³³ This high cost is of course a challenge for the Government and related stakeholders to immediately stop coal power plants.

One of the significant developments that will occur in 2022 is the issuance of Presidential Decree No. 112 of 2022 concerning the Acceleration of Renewable Energy Development for the Provision of Electricity. One of the important points in this Perpres is the mandate to compile a roadmap to accelerate the termination of the operational period of coal-fired power plants for the energy transition by the Minister of Energy and Mineral Resources. However, in the policy of the Electricity Supply Business Plan (RUPTL) there are inconsistencies in policy makers who still allow the construction of new coal fired power plants. The PLTU which has been included in the 2021-2030 RUPTL with a capacity of 13.8 GW PLTU will continue its construction.³⁴ In addition, the construction of new PLTUs that are integrated with the industry to increase the added value of natural resources or are included in the National Strategic Project are still permitted, provided they are committed to reducing GHG emissions and operate until 2050 at the latest. One industry that is still building new PLTUs is by using this gap is the nickel industry. Instead of accelerating the transition, this Presidential Decree increases the use of coal in Indonesia. Seeing the government's ambition to achieve Net Zero Emissions, regulations should be formed to strictly prohibit the operation of new power plants.

The vulnerability of bioenergy policies without diversification

Currently, the government is also boosting the use of bioenergy, especially biofuels or biofuels (BBN) made from palm oil and wood-based biomass. The biofuel policy was born out of anxiety over dependence on imported fuel oil which would burden the state's finances. In the 2020-2024 RPJMN, domestic biofuel utilization is targeted to reach 17.4 million kiloliters by 2024 and the development of palm oil-based green fuel is a strategic priority project (major project). In early 2023, the government increased the mandate for blending biodiesel into diesel fuel to 35% or B35. This decision was much faster than the implementation stages of the biofuel policy mandated by existing regulations. The government is even preparing to increase the blending mandate to 40% or B40.³⁵

The policy of progressively increasing biofuel content is commensurate with the high concern of land expansion for oil palm. This is because the raw material for biofuels is currently still based

³³ Sadya, Sarnita. October 21, 2022. Map of PLTU distribution in Indonesia, mostly in East Kalimantan.. Accessed on https://dataindonesia.id/sektor-riil/detail/peta-sebaran-pltu-di-indonesia-terbanyak-di-kalimantan-timur at 12th February 2023

Greenpeace Indonesia. 8 October 2021. The Latest RUPTL Still Provides Room for the Development of Dirty Energy. Accessed on https://www.greenpeace.org/indonesia/siaran-pers/45392/ruptl-terbaru-masih-memberi-ruang-bagi-pengembangan-energi-kotor/ at 10th April 2023

Muliawati, Firda Dwi. November 2, 2022. Completed Road Test, Ready for RI to Immediately Launch Biodiesel B40. Accessed on https://www.cnbcindonesia.com/news/20221102160412-4-384589/uji-jalan-tuntas-siap-siap-ri-segera-luncurkan-biodiesel-b40 at 10th April 2023



on one commodity, which is palm oil. Without a policy towards diversification of raw material commodities, the demand for palm oil will be even higher. Moreover, the government is also targeting to increase the mandate for blending biofuel made from palm oil (FAME) to 18 million kilolitres by 2030 in the hope of reducing emissions from fossil fuels to achieve the Enhanced NDC target.

In addition to biofuels, the government's policy to encourage the use of biomass as a co-firing agent to reduce coal-fired power plant emissions also needs to be carried out very carefully so as not to encourage deforestation and forest degradation and increase conflicts with the community. The Ministry of Environment and Forestry is targeting the use of wood-based biomass of around 60 million tonnes per year by promoting plantation forests and optimizing wood waste from forests and the timber industry. Even though the government has emphasized that the development of wood-based biomass will utilize production forests and degraded and unproductive land so that there is no need to transfer functions from natural forests, the risk of deforestation remains because there are still around three million hectares of natural forest in the Business Permit for the Utilization of Plantation Forests or PBPHHT³⁷ which has the potential to be converted to expand plantation forests.

To prevent unwanted impacts from bioenergy policies, it is time for the government to encourage diversification of raw materials by prioritizing waste and residues. The option to diversify biofuel raw materials can be done from waste or other non-food plants to avoid the potential for opening new land and competition with food needs. Indonesia has a lot of potential for biofuel raw materials which are very promising and have not been optimally managed, such as castor oil, waste fish washing oil, *nyamplung*, and used cooking oil. Like biofuels, the development of waste/residue-based biomass for energy needs to be prioritized and the use of wood prohibited. The regulation on developing a biomass for energy policy that is reportedly being drafted should strictly prohibit the conversion of natural forests and peatlands for the development of plantation forests as a whole, not just for energy. This is necessary so that land conversion does not occur indirectly due to increased demand for wood for energy. If taken seriously, the diversification of waste/residue-based raw materials combined with the application of strong safeguards can contribute to meeting bioenergy needs without creating new problems.

The energy transition agenda is at stake in the EBET Bill

One of the regulations currently being discussed by the Government and the DPR is the EBET Bill which is also included in the 2023 Priority Prolegnas. This draft law has received a lot of criticism from civil society groups because it still includes dirty and nuclear energy. In the EBET Bill, coal-derived products are normalized as 'new energy'. This is clearly contrary to efforts to

Ministry of Environment and Forestry of the Republic of Indonesia. 7th November 2022. Government Encourages Biomass Utilization in Energy Transition. Accessed on https://bsilhk.menlhk.go.id/index.php/2022/11/07/pemerintah-dorong-pemanfaatan-biomassa-dalam-transisi-energi/ at 14th April 2023

³⁷ Data of 2020.



reduce greenhouse gas emissions and is a setback in the energy transition process.

In addition, coal-derived energy sources not only pose a high risk to the environment, but also burden the state's finances.³⁸

Regarding the EBET Bill which is currently being drafted, the government and the DPR need to pay attention to inputs from civil society to eliminate energy sources that still depend on coal. In addition, it is important to strengthen safeguards or safety signs in the development of bioenergy such as biofuels and biomass so that they meet raw material sustainability standards, not only from an economic standpoint, but also from an environmental and social perspective and so as not to encourage deforestation, peatland destruction, or food insecurity.³⁹

PRKBI: Can It Become a New Direction of Development?

At a broader level, which is controlling emissions in development, the government has launched the Low Carbon and Climate Resilience Development Initiative (PRKBI). Historically, the PRKBI initiative was a combination of the PRK and PBI programs, each of which had a different focus, PRK focused on mitigation actions while PBI focused on adaptation actions. Low Carbon Development (PRK) was born as an implementation of Presidential Regulation 61/2011 concerning the National Action Plan for Reducing Greenhouse Gas Emissions (RAN-GRK). In the regions, it is hoped that the drafters of the RPJPD/RPJMD will incorporate low-carbon policies through the preparation of Regional Low Carbon Development Plans (RPRKD). Since 2021, the PRK program has been expanded by adding the concept of Climate Resilience (PRKBI), which is a transformation of the National Action Plan for Climate Change Adaptation (RAN API).

So far, PRKBI has based its program on SDG's 13th Goal, namely Action on Climate Change. Along with the determination of NDC targets by the Government, Bappenas also includes NDC goals integrated with PRKBI goals. Referring to Presidential Decree 98/2021, NDC targets and GHG emission control through development at both the central and regional levels must work in an integrated manner.

In the RPJMN 2020-2024, the programs in PRKBI are implicitly included in the 6 development agenda priorities in the big themes of environment, disaster resilience, and climate change.⁴⁰ In the 2023 Government Work Plan (RKP), environmental development, disaster resilience, and climate change are focused on efforts to preserve natural resources and the environment to support productivity and quality of life of the people in the context of towards an inclusive and sustainable green economic transformation; as well as development oriented towards

³⁸ ICEL Joint Press Release. 6 February 2023. Eliminate False Solutions from the EBET Bill. Accessed on https://icel.or.id/kabar-icel/siaran-pers/siaran-pers-bersama-hilangkan-solusi-palsu-dari-ruu-ebet/ at 14th April 2023

Madani Berkelanjutan, et al, "Encouraging the Principles of Sustainability and Diversification of Biofuel Raw Materials in the New and Renewable Energy Bill", 14th Februari 2022.

⁴⁰ Presidential Regulation Number 18 of 2020 concerning the 2020-2024 National Medium Development Plan



prevention, risk reduction, and disaster resilience.

Until 2022, there are at least 7 provinces that have entered into MoUs with Bappenas to internalize PRKBI principles in regional level development plans. The positive development that has occurred is the commitment of several regions, which are North Kalimantan, South Kalimantan, and Central Kalimantan, which have begun to carry out the preparation of Low Carbon Development Documents in accordance with the 2020-2024 RPJMN.⁴¹ Apart from the provinces in Kalimantan, Riau has also included emission reduction commitments in the 2019-2024 RPJMD, this spirit was later strengthened in Governor Regulation no. 56 of 202 concerning Low Carbon Development Plans. This commitment is important because the regions are the backbone of PRKBI operations to date. Even so, it is still necessary to encourage other provinces to do the same.

However, there are several challenges to PRKBI implementation that need to be addressed immediately. First, the importance of maximizing the transfer of knowledge to local governments. Some of the difficulties in implementing PRKBI in the regions are the process of adapting it to the regional context, preparing clear plans, and building the capacity of local governments to implement PRKBI. These things happened because the process of transferring knowledge, both formal and material (substance) to administrators in the regions, was not yet optimal. Second, it is necessary to strengthen the commitment of the Regional Government as the program organizer. So far, the implementation of CRP in the regions has been based on an MoU between Bappenas and the Governor, and this basis has not been strong enough to bind the institutions responsible for implementing this program.

Third, stipulate a public fund budget at the center that is sufficient to implement this program. Public funds originating from APBN allocated for new environmental programs cover 2-3% of the total funds needed to implement PRKBI. Fourth, increase the synergy between PRKBI implementation and NDC implementation. The strong inter-agency and inter-agency sectoral egos have made PRKBI implementation and NDC implementation seem to be two separate targets. In this context, the synergy of national and regional programs is also important. Fifth, changes in government, both central and regional, pose a risk of discontinuing PRKBI. For this reason, it is very important to ensure that PRKBI is included in the RPJPN 2025-2045 which is being prepared and will be finalized in September 2023 and the RPJPD of each region.

Regarding these problems, the Government of Indonesia needs to do several things. First, ensure that PRKBI and the NDC program must run in an integrated and sustainable manner in their implementation, especially at the regional level according to the mandate in Article 2 paragraph 7 of Presidential Decree 98 of 2021. Second, ensure that local governments have adequate capacity through compiling a comprehensive action plan and encouraging improvements

⁴¹ LCDI Communications. North Kalimantan, South Kalimantan, and Central Kalimantan Provinces Support Low Carbon Development Goals by Conducting Kick-Off Meetings and Workshops on RPRKD Document Preparation. November 3rd, 2022, Icdi-indonesia.id



capacity of OPD and other actors in the region. Third, drafting regulations/agreements that are more binding between Bappenas or other authorized Ministries/Institutions and Regional Governments, for example with the Regulation of the Minister of National Development Planning/Head of Bappenas which can internalize PRKBI into regional regulations such as the RPJPD. Fourth, ensure the inclusiveness of implementation at the regional and site levels and increase the PRKBI implementation budget. Fifth, Deepen the integration of PRKBI into the next RPJPN and RPJMN.

The Tug-of-War in Carbon Economic Value Policy

Carbon Economic Value, hereinafter abbreviated as NEK, is the value of each unit of greenhouse gas emissions resulting from human activities and economic activities.⁴² In short, it can be said that NEK is a valuation of carbon. NEK is one of the instruments in realizing the Government's obligation to contribute to reducing GHG emissions. NEK arrangements are proposed by policy makers as an efficient, effective, and just mitigation and adaptation action instrument without compromising the achievement of contribution targets set nationally.

The legal basis for NEK implementation in Indonesia is Presidential Decree Number 98/2021 which contains guidelines for reducing GHG emissions through policies, steps, and activities to achieve NDC targets and control GHG emissions in national development. In general, this Perpres regulates the implementation of NDC from the central to district levels and the mechanism of Carbon Economic Value to achieve NDC through carbon trading, performance-based payments, carbon levies, and other mechanisms.⁴³

Perpres 98/2021 is important as a legal basis for NDC implementation down to the regional level and for integrating NDC achievements and low carbon development. However, there are some notes on this Presidential Decree.

First, the ownership of carbon rights by the state as emphasized in this Presidential Decree raises questions regarding the carbon rights of indigenous and local communities who have been protecting forests and land but whose tenure rights have not been recognized. This is reflected in the lawsuit filed by the Cibarani Kasepuhan Indigenous Peoples Unit, the Indigenous Peoples Alliance of the Archipelago (AMAN), and Kasepuhan Cibarani residents against Presidential Regulation 98/2021, which considers that this Presidential Decree does not reflect the principle of justice because it does not involve the participation of indigenous peoples in implementing the NEK.⁴⁴ Despite rejecting the lawsuit filed by AMAN, the panel of judges considered that

⁴² See Article 1 Paragraph (2) of Presidential Regulation Number 98 of 2021 concerning Implementation of Carbon Economic Values

⁴³ Article 47 Presidential Regulation Number 98 of 2021 concerning Implementation of Carbon Economic Val-

Apart from that, the plaintiff also complained about the lack of public participation in the formation of this Presidential Decree. In this case, the Supreme Court rejected the plaintiffs' formal claim and argued that the Presidential Decree was deemed to have opened the widest possible access to the public, but the applicants did not exercise their right to actively participate in providing inputs in the process of forming this regulation.



Presidential Regulation Number 98/2021 did not reflect the principle of justice because it did not involve the participation of indigenous peoples in the implementation of NEK or carbon trading. In addition, this Presidential Decree also does not show respect for indigenous peoples because it does not involve indigenous peoples as subjects in implementing Carbon Economic Values (NEK). Presidential Regulation Number 98/2021 also does not reflect "the right to control the state for the greatest prosperity of the people" because it does not have a direct positive impact on indigenous peoples.

Second, this regulation still allows for cross-sector trade which has the potential to hinder emission reductions in real terms. Instead of reducing emissions from related sectors, cross-sector trade will only patch up carbon emissions through the mechanism of buying offsets from other sectors. Mechanisms like this eliminate the need for potential buyers of carbon credits to reduce their own emissions because they can be replaced by buying carbon credits in other sectors, so this mechanism does not actually reduce carbon emissions. Third, this Presidential Regulation does not include the principles of social and environmental integrity in the implementation of the Carbon Economic Value mechanism. This principle will guarantee that the implementation of the NEK will not result in conflicts and losses for indigenous peoples and environmental sustainability.

The various problems and ambiguities mentioned above were not resolved even though the Government through the relevant sector ministries issued derivative regulations. So far, the technical regulations in the Minister of Environment and Forestry Regulation Number 21/2022 concerning the Procedures for Implementing Carbon Economic Value and the Minister of Energy and Mineral Resources Regulation Number 16/2022 concerning Procedures for Implementing NEK in the Power Generation Subsector have not resolved matters that are still a problem in the NEK Presidential Regulation.⁴⁶ The two Ministerial Regulations regulate technical matters regarding technical approval of limits on GHG emissions by business actors, carbon trading, and GHG emissions from power plants, but still do not regulate and accommodate protection of indigenous peoples and environmental sustainability.

On this issue, Madani noted, First, the government must strengthen the position and role of the community, especially indigenous and local communities, in implementing NEK by accelerating legal recognition of indigenous and local community rights over territories and natural resources, including forests and carbon. The judge's opinion contained in the Decision on the AMAN lawsuit stating that indigenous peoples as NEK administrators should also be reflected in derivative regulations that are inclusive, participatory, and contain social and environmental integrity for indigenous peoples. Communities must be ensured to obtain carbon benefits and receive a fair distribution of benefits with or without legal-formal recognition from the state.

⁴⁵ Article 49 paragraph 3 of Presidential Decree 98/2021

⁴⁶ Currently the government is preparing procedures for carbon trading in the forestry sector.



Second, emission offsets must be limited to address the remaining emissions that cannot be eliminated through self-mitigation actions (residual emissions). If not, the offset will become a perverse incentive that encourages polluters not to seriously try to reduce their emissions. Cross-sectoral emission offsets also need to be strictly limited and should only be done if it can really overcome the risk of impermanence,⁴⁷ additionality,⁴⁸ and reliability.⁴⁹ Third, safeguards to ensure social and environmental safety need to be strictly regulated in NEK implementation, especially carbon trading projects. Currently, explicit mention of safeguards only exists in the context of performance-based payments. Fourth, NEK governance must ensure transparency, accountability, and meaningful public participation.

Weakening of Civil Society Participation and Stagnancy of Indigenous Peoples Bill

Democracy, in which sovereignty is in the hands of the people, has become the guiding principle for the state in most countries in the world. The 1945 Constitution of the Republic of Indonesia regulates people's sovereignty twice. First, at the opening of the fourth paragraph, "then the independence of the Indonesian nation was compiled in a Constitution of the State of Indonesia which is people's sovereignty...". Second, in article 1 paragraph (2) of the 1945 Constitution of the Republic of Indonesia which reads, "Sovereignty is in the hands of the people and carried out according to the Constitution".

Even though democracy has been expressly stated in the Constitution, in the latest EUI (The Economist Intelligence Unit) report, Indonesia's democracy index score is still low – unchanged from 2021, which remains at 6.71.50 Indonesia's ranking has also decreased slightly from 52nd (2021) to 54th (2022) with a flawed democracy status. As a democracy, the role of civil society in various policies is very important. The community's right to be involved in the process of drafting regulations has also been expressly stated in Article 96 Paragraph (1), "The community has the right to provide input orally and/or in writing in the Formation of Legislation." Similar with climate policy, where the community should be at the center of climate policies, especially groups affected by development projects and vulnerable community groups such as indigenous

⁴⁷ Compensating for permanent GHG emissions from burning fossil fuels with carbon credits from the AFOLU sector is problematic because the reduction in emissions in the AFOLU sector may not be permanent. The issue of permanence becomes important in cross-sectoral offsets. According to the IPCC report AR6 WG III on Mitigation, Carbon Dioxide Removal (CDR) from the AFOLU sector can only last for decades, not in the long term because the carbon sinks will eventually become saturated. Reversal risks can also occur in forest carbon projects in the event of policy changes, illegal logging, encroachment, or forest and land fires.

⁴⁸ Offsetting also often does not have added value or additionality from the financial and policy aspects.

The issue of reliability is often an issue in forest carbon projects. According to the Compensate White Paper (2021), carbon credits from the forestry sector are often meaningless because the emission baseline is inflated. Therefore, offset projects often do not produce real climate impacts because they exaggerate impacts, for example by inflating the baseline. Not to mention there is a risk of leakage and double counting.

⁵⁰ Economist Intelligence, Democracy Index 2022 Frontline democracy and the battle for Ukraine, 2022

See Article 96 Paragraph (1) of Law Number 12 of 2011 concerning Formation of Legislation as amended by Law Number 13 of 2022



and local communities to ensure that any climate action determined by the government will not add to the vulnerability of society. Forms of community participation can also take the form of involvement in drafting policies, discussing policies, as well as implementing and monitoring policies.

However, Madani noted that many important policies were drafted without meaningful participation by the public. The formulation and implementation as well as monitoring of NDC policies are seen as not being sufficiently inclusive. In larger policies such as the Job Creation Law and the Minerba Law, the demands and objections of civil society were even completely ignored by the legislators.

In addition, throughout 2022, there will still be many acts of criminalization against environmental and human rights defenders/activists. According to the Consortium for Agrarian Reform (KPA), the agrarian situation throughout 2022 shows a trend of agrarian conflict eruptions that will not decrease but will even tend to increase. This record is reinforced by Komnas HAM's findings which stated that agrarian conflicts were the most reported cases this year.⁵² One example of this was what happened in an agrarian conflict in Wadas Village, Central Java

Meanwhile, at the regulatory level, one of the regulatory discussions that has not been completed in recent years is the Customary Law Community (MHA) Bill. This proposed law has been included in the National Legislation Program since 2013, which means that it has passed two DPR periods but has not yet become law. In 2018, a glimmer of hope arose with the issuance of the Presidential Letter (Surpers)⁵³ regarding Formation of a Government Team to Discuss the MHA Bill with the Indonesian Parliament and 6 other Ministries.⁵⁴ However, in fact this team still has not been able to finalize the MHA Bill. Currently, the Draft Law on MHA has been agreed upon by the Legislative Body of the DPR and the Government to be included in the 2023 Priority Prolegnas.⁵⁵ However, this bill is still in the harmonization stage and has not yet entered the proposal determination and discussion stage.

For indigenous peoples, this bill is important to provide legal certainty regarding the government's responsibility to respect, protect and fulfil the rights of indigenous peoples, including the right to manage nature. This is reflected in the draft of the bill which also regulates prohibitions and criminal sanctions for actions that hinder indigenous peoples from managing and utilizing forests and other natural resources. This provision encourages natural management by indigenous

Hantoro, Jul. December 10, 2022. Komnas HAM: Agrarian Conflicts Become the Most Frequently Reported Cases Throughout 2022. Accessed on https://nasional.tempo.co/read/1666718/komnas-ham-konflik-agraria-jadi-kasus-yang-paling-sering-dilaporkan-sepanjang-2022 at 12th May 2023

⁵³ Sirpres No. B-186/M.Sesneg/D- 1.HK.00.03/03/2018

Consists of the Ministry of Home Affairs, KLHK, Ministry of ATR/BPN, Ministry of Maritime Affairs and Fisheries, Ministry of Village/PDT, Ministry of Law and Human Rights

Pramodhawardani, Jaleswari. October 25, 2022. Directions of the President of the Republic of Indonesia Regarding the Customary Law Community Bill. Presentation at the 6th Congress of Indigenous Peoples of the Archipelago (KMAN).



peoples in accordance with local wisdom.⁵⁶ Of course this in parallel can also increase the role of indigenous peoples in protecting forests, without reducing their rights to the natural wealth in them.

Climate Commitment Risks in the Political Year

The year 2023 is the preparation period for the simultaneous general elections which will be held in 2024, which are elections for the president, members of the legislature, and regional heads. Election candidates and political campaigns will be determined in 2023. Of course, the public understands that the cost of politics in Indonesia is very high. According to KPK records, candidates must have Rp. 20-30 billion in funds to become regents or mayors. Political costs do not only use the personal funds of the related candidates, but are generally also obtained from various sponsors, one of which is corporate donations. Consequently, during their term of office, the elected candidate has the potential to be trapped in a conflict of interest and the politics of reciprocation with donors.

One of the problems in the practice of donations is when the donation is made by a company engaged in the natural resources sector. The conflict of interest between officials and natural resources companies in the management of natural resource commodities has great potential and has been proven in several areas to cause damage to nature. Especially if the related company is engaged in a field where the business process is carrying out land clearing on a large scale. Based on the Tempo report, it was recorded that 262 of the 575 members of the DPR had a background as entrepreneurs, including those involved in the extractive industry sector. If these DPR members will likely run for re-election in this election, this condition has the potential to increase the number of permits in the natural resource extractive industry which will later be used for campaign costs. Furthermore, at least half of the 50 richest people in Indonesia according to Forbes who have enormous influence on power are also directly connected to the extractive businesses of mining, palm oil and timber.

The potential for fraud in the future can also occur through regulatory capture where regulators are influenced by corporate interests in determining the direction of their policies. This is very dangerous because easy access to entrepreneurs is done legally. In addition, the granting of permits to companies that have made donations also has the potential to occur due to political debt during the election period. This potential must be taken seriously because almost all provinces with large remaining natural forest areas will hold simultaneous local elections in 2024.

In addition to the above problems, regime change will also raise question marks for the continuity of programs related to dealing with climate change that have been established by the current



Government. Most of the current climate-related policies in Indonesia are products of policies made by the President, either in the form of Presidential Instructions (Inpres) or Presidential Regulations (Perpres). If the president changes, it must be ascertained whether the policies that have been running well will also be changed. Special attention must be given to government policies in this period that have not been completed, especially policies that utilize large amounts of land (land exhaustive). Some of the policies that Madani noted include:

Policy	Legal Grounds	Status
Termination of Issuing New Permits in Natural Forest and Peatlands	Inpres (Presidential Instruction)	Not safe because instructions can become invalid when the President, Ministers and Governors/Regents change. It is necessary to issue regulations with the same substance. The substance of the current Inpres needs to be locked in by permanently protecting natural forests and peatlands from new permits in spatial planning.
FOLU Net Sink Operational Plan 2030	Ministerial Decree	Not safe because SK level can become invalid when changing institutions. Although, the FOLU Net Sink target itself is mentioned in the Presidential Decree.
NEK and NDC	Perpres (Presidential Decree)	Safe
Power plant retirement	Perpres	Safe
REDD+	Permen (Ministerial Regulation)	Safe
BRGM	Perpres	Not safe because this Perpres is only valid until 31 December 2024

Regarding the conditions in this political year, Madani provided several recommendations. First, the licensor must commit to no longer granting permits for land exploitation efforts that can increase the rate of deforestation, especially permits for natural forests and peatlands. Second, the relevant Ministries/Institutions must ensure the continuity of existing climate-related programs. If the nature of the rules is backchecking or decisions made by policy makers, it must be ensured that programs related to climate change control will continue in the following period.



The Importance of Ensuring the Future of Climate Policy

From various climate policies that have been described in the previous sections, several conclusions can be drawn. First, global agreements throughout 2022 generate positive impetus for the climate change agenda even though they are not enough to reach the target of 1.5 degrees. This should be a momentum for Indonesia to increase its climate commitments in 2023, especially with Indonesia's strategic position as a tropical country and having various natural characteristics. Indonesia can also be able to encourage other countries, especially developed countries that are members of the G20 to commit to the global targets that have been announced. If not, the global climate agreement will only be a blank slate that allows the rate of global warming to increase beyond a threshold.

Second, various national policies related to climate still show a lack of synchronization. On the one hand, the Government has increased the GHG emission reduction target in the NDCi. However, various other policies still provide space for the occurrence of natural damage for business interests, especially deforestation. Climate policy is a multi-sectoral policy that touches on the forestry, mineral and coal sectors, plantations, and electricity. If the government is serious about tackling climate issues, related policy makers must be consistent in aligning all development programs with regulations related to the environment and commitment to dealing with climate change.

Third, the political year is a crucial period because learning from previous political periods proves that the political year is vulnerable to granting exploitative business licenses. Apart from that, the change of leaders also poses a risk to the sustainability of various climate policies, which currently are still heavily reliant on executive regulations or policies. For this reason, various climate-related policies that have been running well must be ensured to be continued by providing a strong legal basis. In addition, it requires the commitment of the candidates so that the change of leadership does not change good policies towards controlling climate change.



References

Regulations and Policies

Enhanced Nationally Determined Contribution Republic of Indonesia. 2022.

Decree of the Minister of Environment and Forestry of the Republic of Indonesia Number SK.168/MenLHK/PKTL/PLA.1/2/2022 concerning Indonesia's Forestry and Other Land Use (FOLU) Net Sink 2030 for Climate Change Control.

Presidential Regulation Number 120 of 2020 concerning Peat and Mangrove Restoration Agency

Presidential Regulation Number 18 of 2020 concerning the 2020-2024 National Medium Development Plan

Presidential Regulation Number 98 of 2021 concerning Implementation of Carbon Economic Value

Indigenous Peoples Law Bill version 6 July 2020. Accessed on https://www.dpr.go.id/uu/detail/id/394

Reports

G20 Bali Leaders' Declaration. November 2022.

G20 Energy Minister's Meeting. 2 September 2022. Bali Compact.

IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. A Report of the Intergovernmental Panel on Climate Change. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland.

IPCC, 2022: Climate Change 2022: Mitigation of Climate Change. A Report of the Intergovernmental Panel on Climate Change. Contribution of Working Groups III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva, Switzerland.

The #CleanIndonesia Coalition. 21 October 2022. Values and Principles of a Fair and Sustainable Energy Transition.

Agrarian Reform Consortium. 31 December 2022. PTPN Untouched, Criminalization of the People Increases. Jakarta, KPA

Sustainable Civil Service, et al. 14 February 2022. Encouraging the Principles of Sustainability and Diversification of Biofuel Raw Materials in the New and Renewable Energy Bill.

Muthmainah, Demadevina, Nadya. 2020. Huma Outlook: Attitudes of the Government and the DPR in National Legislation Regarding the Rights of Indigenous Peoples in 2020. HuMa, 2020.

Pramodhawardani, Jaleswari. October 25, 2022. Directions of the President of the Republic of Indonesia Regarding the Customary Law Community Bill. Presentation at the 6th Congress of Indigenous Peoples of the Archipelago (KMAN).



Institutional Sites

Climate Action Tracker. 26 October 2022. Country Summary. Accessed on https://climateactiontracker.org/countries/indonesia/ at 13th April 2023

Director General of EBTKE, Ministry of Energy and Mineral Resources. 2 September 2022. Launches the NZE Roadmap for the Indonesian Energy Sector, These are the Results of IEA Modeling. Accessed on https://ebtke.esdm.go.id/post/2022/09/05/3252/luncurkan.peta.jalan.nze.sector.energi.indonesia.ini.hasil.pemodelan.iea at 10th February 2023

GreenClimate Fund. 17 September 2020. Decisions of the 26th meeting of the board. Accessed on https://www.greenclimate.fund/document/gcf-b26-09 at 14th March 2023

Greenpeace Indonesia. 8 October 2021. The Latest RUPTL Still Provides Room for the Development of Dirty Energy. Accessed on https://www.greenpeace.org/indonesia/siaran-pers/45392/ruptl-terbaru-masih-memi-ruang-bagi-pengembangan-energi-kotor/ at 10th April 2023

Ministry of Environment and Forestry of the Republic of Indonesia. March 9, 2023. Grounding the Kunming-Montreal Global Biodiversity Framework for Indonesia's Biodiversity. Accessed on https://bsilhk.menlhk.go.id/index.php/2023/03/09/membumikan-kunming-montreal-global-biodiversity-framework-untuk-keanekaragaman-hayati-indonesia/ at 13th April 2023

Ministry of Environment and Forestry of the Republic of Indonesia. 7 November 2022. Government Encourages Biomass Utilization in Energy Transition. Accessed on https://bsilhk.menlhk.go.id/index.php/2022/11/07/Government-dorong-peuntungan-biomassa-dalam-transisi-energi/ at 14th April 2023

Protected Planet. Protected Planet Report 2020. Accessed on https://www.protectedplanet.net/en at 13th April 2023

ICEL Joint Press Release. 6 February 2023. Eliminate False Solutions from the EBET Bill. Accessed on https://icel.or.id/kabar-icel/siaran-pers/siaran-pers-bersama- Elikan-solusi-palsudari-ruu-ebet/ at 14th April 2023

Ministry of Energy and Mineral Resources Press Release Number: 082.Pers/04/SJI/2023. February 16th, 2023

Press Release Ministry of Environment and Forestry of the Republic of Indonesia. December 20, 2022. Indonesia Asks Developed Countries to Realize Biodiversity Protection at COP15 CBD. Accessed on https://www.menlhk.go.id/site/single_post/5190/indonesia-Minta-negara-maju-Manifesto-perlindungan-keanekaragaman-hayati-di-cop-15-cbd at 13th April 2023.

Press Release No. B-186/M.Sesneg/D-1.HK.00.03/03/2018

The Norwegian Government. 19 October 2022. Contribution Agreement Concluded: Norway Delivers US\$ 56 Million in Results Based Support for Indonesia's FOLU Net Sink 2030 Climate Goals. Accessed on https://www.regjeringen.no/en/aktuelt/norway-delivers-us\$-56-million-in-results-based-support-for-indonesias-folu-net-sink-2030-climate-goals/id2936675/ at 14th March, 2023



Uliyasi, Simanjuntak. 30 June 2022. IESR Pushes to Take Advantage of Coal to Accelerate Energy Transition. Accessed on https://iesr.or.id/iesr-dorong-untungkan-keuntungan-batubara-untuk-akselerasi-transisi-energi at 10th February 2023

UNFCCC. COP26 IPLC Forest Tenure Joint Donor Statement. Accessed on https://ukcop26.org/cop26-iplc-forest-tenure-joint-donor-statement/ at 12th April 2023

UNFCCC REDD+ Web Platform. Indonesia Country Submission. Accessed on https://redd. unfccc.int/submissions.html?country=ID at 23rd March 2023.

Online News

Cahyadi, Firdaus. 19 April 2023. Energy Transition and Potential for JETP Funding. Accessed on https://www.mongabay.co.id/2023/04/19/transisi-energi-dan-potensi-rasuah-dana-jetp/ at 9th May 2023

Farand, Chloe. 24 January 2022. Norway underpaid Indonesia for forest protection results, the study argues. Accessed on https://www.climatechangenews.com/2022/01/24/norway-underpaid-indonesia-forest-protection-results-study-argues/ at 14th March 2023

Firmansyah, Amanda. July 1, 2022. KPK: Indonesian Politics is Expensive, Cost to become Governor of IDR 100 Billion. Accessed on https://assumption.co/post/67196/kpk-politik-indonesia-mahal-cost-jadi-gubernur-rp-100-miliar/ at 14th May 2023

Hantoro, Jul. December 10, 2022. Komnas HAM: Agrarian Conflicts Become the Most Frequently Reported Cases Throughout 2022. Accessed on https://nasional.tempo.co/read/1666718/komnas-ham-konflik-agraria-jadi-kases-yang-paling-frequently-reported-throughout-2022 at 12th May, 2023

Ho, Jane, Karmali, Naazneen. December 7, 2022. Indonesia's 50 Richest. Accessed on https://www.forbes.com/lists/indonesia-billionaires/?sh=40e270072ff7 at 15th May 2023

Laville, Sandra; Zee, Aunt van der. 17 November 2022. Draft COP27 Agreement Fails to Call for 'Phase-Down' of all fossil fuels. Accessed on https://www.theguardian.com/environment/2022/nov/17/draft-cop27-agreement-fails-to-call-for-phase-down-of-all-fossil-fuels at 28th May 2023

Liboreiro, Jorge. 23 November 2022. COP27: EU Left Disappointed by Lack of Ambition in Final Deal Calling it a 'Small Step Forward.' Accessed on https://www.euronews.com/my-europe/2022/11/21/cop27-eu -left-disappointed-by-lack-of-ambition-in-final-deal-calling-it-a-small-step-forwa at 28th May, 2023

Muliawati, Firda Dwi. November 2, 2022. Completed Road Test, Ready for RI to Immediately Launch Biodiesel B40. Accessed on https://www.cnbcindonesia.com/news/20221102160412-4-384589/uji-jalan-tuntas-prepared-ri-segera-luncurkan-biodiesel-b40 at 10th April 2023

Rahayu, Arfyana Citra. 17 February 2023. Minister of Energy and Mineral Resources: Implementation of Carbon Capture Technology (CCS/CCUS) Not Funded by JETP. Accessed on https://industri.kontan.co.id/news/menteri-esdm-implementasi-technology-carbon-capture-ccsccus-ntak-didanai-jetp at 15th April 2023



Sadya, Sarnita. October 21, 2022. Map of PLTU distribution in Indonesia, mostly in East Kalimantan. On https://dataindonesia.id/sector-riil/detail/peta-sebaran-pltu-di-indonesia-terbanyak-di-kalimantan-timur at 12th February 2023

Sedayu, Great. 17 April 2023. Jokowi's Speech Clarification Palace in Germany: Closure of All PLTUs in 2050, Not 2025. Accessed on https://business.tempo.co/read/1716125/istana-klarifikasi-pidato-jokowi-di-jerman-penutupan- all power plants-in-2050-not-2025 at 20th May, 2023

Setiawan, Verda Nano. 2022. Not a Hoax, This is Evidence that RI has excess electricity supply. Accessed on https://www.cnbcindonesia.com/news/20220922143516-4-374199/bukan-hoax-ini-proof-ri-kelebihan-pasokan-listrik at 20th March 2023

Homeland. 2 May 2023. Becoming a Jetp Priority Program, CCS Energy Transition False Solution. Accessed on https://tanahair.net/id/jadi-program-prioritas-jetp-ccs-solusi-palsutransisi-energi/ at 15th April 2023

CNN Indonesia Team. 13 July 2022. Sri Mulyani: 62 Percent of PLN's Power Plants Are Still Coal-Based. Accessed on https://www.cnnindonesia.com/economy/20220713143354-532-820996/sri-mulyani-62-persen-pembangkit-listrik-pln-masih-berbasis-batu-bara at 10th February 2023



Manusia dan Alam untuk Indonesia Berkelanjutan (MADANI Berkelanjutan) is a non-profit foundation moving to address climate crisis through research and advocacy. Founded in 2016, MADANI Berkelanjutan strives to bring about equitable and sustainable development, that balances social, economy and ecological aspects. We formulate and promote innovative solutions for the climate crisis by bridging collaborations among many parties. Currently, the work focus of MADANI Berkelanjutan includes the issues of climate and forestry, sustainable commodities, sub-national sustainable development and biofuel.

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