



PRAKARSA
Welfare Initiative for Better Societies

Analysing Indonesia's Policies and Financing for Climate Change Resilience and Adaptation



2023

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This report was prepared as part of efforts to encourage sustainable development, one of which is through the provision of an evidence base that can be used as a basis for advocating sustainable finance policies. The contents of this report are fully the responsibility of the author. This research received funding support from Action Aid.

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Foreword

Over the past few years, discussions regarding climate change have continued to surface, including its financing. This issue is a priority agenda discussed in Indonesia's G20 presidency.

The discussion on climate change shows Indonesia's commitment to immediately suppress the adverse effects of the climate crisis, such as reducing deforestation and implementing an energy transition to reduce greenhouse emissions.

Indonesia has the third-largest tropical rainforest in the world. Also, it has small islands vulnerable to climate change's effects, and its carbon emissions are mainly due to deforestation and peatland burning. Many financing facilities are available to Indonesia and channeled through the government, industry, and society. However, due to the complex project planning and implementation procedures required to qualify for these funds, more is needed to know whether and how communities can access them.

The Indonesian government has allocated around 4.1 percent of the state budget for efforts to reduce emissions. Between 2018 and 2020, around IDR 102.6 trillion was set aside from the state budget, although it only covers one-third of the projected cost of emission reduction projects. The current condition of the potential crisis we will face next year is not far-fetched. Sustainable business development and a sustainable financial system can also produce results. The sustainable finance approach can still create and improve a better environment.

The report that is in your hands today is a research report prepared for our encouragement and commitment to continue contributing to sustainable development, especially in the process of a just energy transition and sustainable finance. This report not only wants to invite readers to know the schemes and financing flows related to adaptation, mitigation, and resilience to climate change in Indonesia but also to provide critical notes regarding policies and access to funding for the public. This report will likely become one of the pieces of evidence that can be read directly by policymakers, practitioners, CSOs, and academics. This report must be expected to be the latest source of information on aspects of climate change financing in Indonesia.

Furthermore, this report seeks to map how climate change policies and funds in Indonesia can be accessed and how these funds can benefit the wider community. Although several financing schemes via multilateral cooperation and private entities can be accessed in Indonesia that has been published, it is not yet clear what mechanisms are needed to make them accessible to the public.

Finally, thank you to the entire PRAKARSA research team and the various parties preparing this report. This report will enrich existing sources of knowledge and reinforce so that each stakeholder can contribute more to supporting climate change resilience in Indonesia.

Jakarta, 15 Februari 2023

Ah Maftuchan

Direktur Eksekutif The PRAKARSA

Executive Summary



Tropical rainforests are important carbon stores, but deforestation and forest degradation have led to them emitting more carbon than they capture.

REDD+ policies aim to reduce deforestation and enhance forest carbon stocks in developing countries. Indonesia has significant rainforests and is vulnerable to climate change impacts, emitting a lot of carbon due to deforestation and peatland burns. Various financing facilities are available, but it is unclear how communities can access and implement activities financed by climate change mitigation, resilience, and adaptation funds. This study aims to identify the landscape of climate change resilience and adaptation financing in Indonesia and explore success stories of communities accessing and implementing these funds.

This research in Indonesia used two methods of data collection. The first method is to collect and analyse secondary data such as policy documents, official websites, and other publicly available information related to climate change resilience and adaptation policies and programs in Indonesia. The second method is to conduct semi-structured interviews with key informants from community members, government officials, financial institutions, CSOs, and businesses. The research will also focus on identifying whether policies and funds target industries or communities, and will compile data on good practices from communities through official sources of information.

The policy landscape on climate change financing in Indonesia is complex, with national policies aimed at fulfilling the country's commitments to the UNFCCC and lower-level policies



to strengthen Indonesia's commitment. There are various ministerial agencies responsible for designing, supervising, and monitoring climate financing pipelines in Indonesia, including the Ministry of Finance, Ministry of Environment and Forestry, and National Development Planning Agency. The institutional landscape is multifaceted, involving various actors and institutions for decision-making and check and balance mechanisms. The disbursement and utilization of climate funds require a high level of transparency, participation of multi-stakeholders, and accountability. Different international funds require different structures to channel money to local institutions and populations.



The financing of climate change in Indonesia from international sources is complicated and involves four main funding sources: multilateral and bilateral funding, MDBs funding, private philanthropy, and domestic budget. Each international entity has its own structures and authorization levels, and some use national or local entities as sub-structures. For example, the GCF distributes its funds through Accredited Entities (AE), which can be public agencies, private sector organizations, NGOs, government agencies, national development banks, commercial banks, or other financial institutions



The Indonesian government has set up the Indonesian Environment Fund Management Agency (BPD LH) to distribute climate change funds to local communities using a variety of sources and instruments. This public service agency focuses on critical sectors such as forestry, energy and mineral resources, carbon trading, environmental services, industry, transport, agriculture, marine and fisheries. NGOs or communities can access these funds by submitting proposals for programs or projects through a call for proposal mechanism

advertised by BPDH. BPDH works with CBOs or CSOs who submit proposals to ensure their quality and accountability

Local communities usually access climate change funds through intermediaries like CBOs or NGOs to fulfil financiers' accountability requirements. NGOs that have been successful in accessing climate change funds for local communities must submit concept notes or proposals to financiers, and there are limits to how much grants can be accessed through calls for proposals. Success in accessing climate financing is determined by NGOs' good track records in working on similar issues, working closely with local communities, having experience in similar projects, accompanying projects in nearby sites to complement climate financing grants, and having a network of organizations or persons to provide information about accessing funding.

The implication of these main findings is the importance of coordination and cooperation between sectors as well as between the government and private sector in implementing policies and funding for climate resilience and adaptation in Indonesia. Although Indonesia has various policies and action plans related to climate change, there are still challenges in implementing policies and funding for climate resilience and adaptation. Better cooperation is needed between sectors as well as between the government and private sector to achieve the goal of climate resilience and adaptation in Indonesia.



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1 Background

The role of tropical rainforest as carbon store for greenhouse gases is significant and has been recognized by scientists and the international community. Nevertheless, recent data showed that due to high level of deforestation and forest degradation, tropical rainforest now emitting more carbon than capturing it (Baccini et al, 2017). To reduce the rate of deforestation and forest degradation, the international community agreed to have collective policies called REDD+ (Reducing Emissions from Deforestation and Degradation, role of conservation, sustainable management of forest and enhancement of forest carbon stocks in developing countries). In short, REDD+ framework provides incentives for developing countries in tropical and sub-tropical areas with significant rainforest areas to reduce deforestation and to increase reforestation.

Because Indonesia has the third largest tropical rainforest in the world, consisted of small islands that are prone to climate change impacts, and its carbon emission primarily due to deforestation and peatland burns, a large number of financing facilities are available for Indonesia and are channelled through government, industry and communities. Some of the largest climate-related financing schemes from multilateral cooperation and private entities available for Indonesia to access are, for instance, Green Climate Fund (GCF), a fund established within UNFCCC (United Nations Framework Convention on Climate Change) as an operating entity of the Financial Mechanism to assist developing countries in adaptation and mitigation practices to tackle climate change, Global Environmental Facility (GEF), an environmental-focused financial organization that provides grants for projects related to biodiversity, climate change and other environmental issues, or Adaptation Fund (AF), an international fund that finances projects and programs aimed at



helping developing countries to adapt to the harmful effects of climate change established under the Kyoto Protocol of the UNFCCC. All these funds aiming at tackling climate change impact as well as increasing resilience and adaptation to climate change, coordinated by the Indonesian Ministry of Finance and Ministry of Environment and Forestry (MoEF, 2019). However, with complicated procedures of planning and implementation of projects or mechanisms required to qualify to receive these funds, little is known about whether and how communities can access them.

Therefore, this study aims to identify the landscape of climate change resilience and adaptation financing in Indonesia and to learn whether there are any success stories of communities who were able to access and implement activities financed by climate change mitigation, resilience and adaptation funds.

2 Purpose

This research aims to map how climate change policies and climate funds in Indonesia can be accessed and how these funds can provide benefits to the wider community.

3 Research Method

This research is conducted in Indonesia with following methods of data collection:

- a. Secondary data (policy documents, official websites etc.) collection and analysis on climate change resilience and adaptation policy and program in Indonesia. A desk review study, by collecting secondary data of policies, programs and funding relevant to climate change resilience and adaptation policy and program in Indonesia are collected from official sources such as the financing entities (e.g. multilateral organisations, bilateral cooperation, private philanthropic, NGOs etc.), Indonesian government (ministries and departments) websites and other publicly available information on the internet and the media (credible media outlets). An important demarcation will be made according to whether the policies and funds will address industry or communities (or both, simultaneously). Data on good practices from community will be researched also through official sources of information, for instance government, local government or NGOs, which will be compiled, synthesized and written as a section in the report.
- b. Primary data collection: semi-structured interview with key informants including representatives of community member, national/local government, financial institution, CSOs and business.



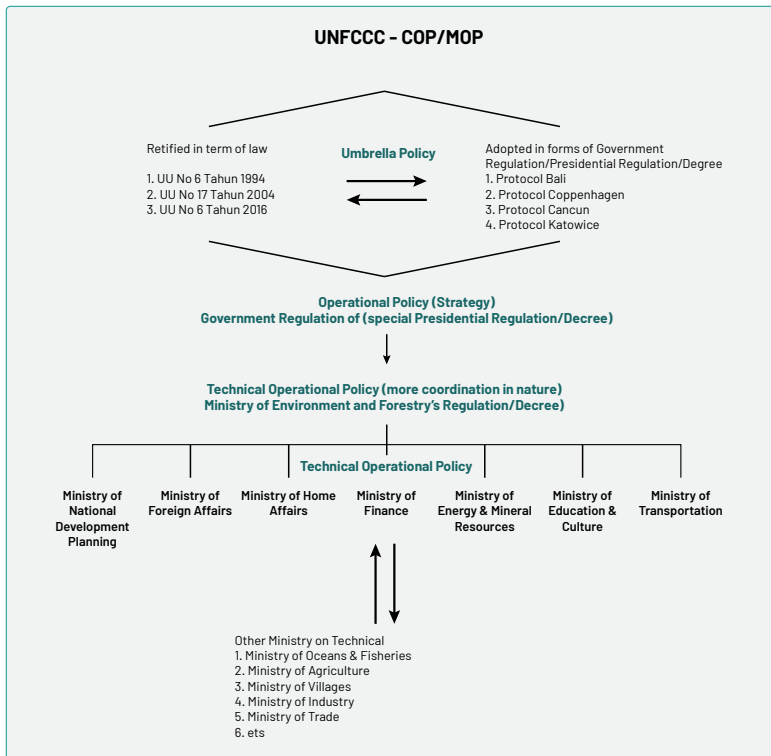
4 Landscape of Climate Change Policy in Indonesia

The policy landscaping begins with the identification of policies related to climate change in Indonesia. In general, there are 2 (two) categories in the policy landscape, first, the umbrella policy, which is a policy of ratification of international agreements by Indonesia, in the form of a law. In addition, there are international agreements that are formed into laws, and then adopted in a more operational directives. Second, is the 'derivative' policy, which is the operational policy of the ratification of international agreements, at the government level, it became Government Regulation and at the technical ministry level it became Ministerial Decree or Regulation.

There are other types of policy, in the form of Presidential Decrees or Regulations, which are equivalent to Government Regulations. However, because it is special and or must be implemented immediately, a Presidential Decree or Perpres is issued instead of a Government Regulation. In addition, the Government appointed the Ministry of Environment and Forestry as the technical coordinating ministry in the context of climate change control for 7 (seven) other ministries, namely: the Ministry of National Development Planning/Bappenas, Foreign Affairs, Home Affairs, Finance, Education and Culture, ESDM and the Ministry of Transportation.



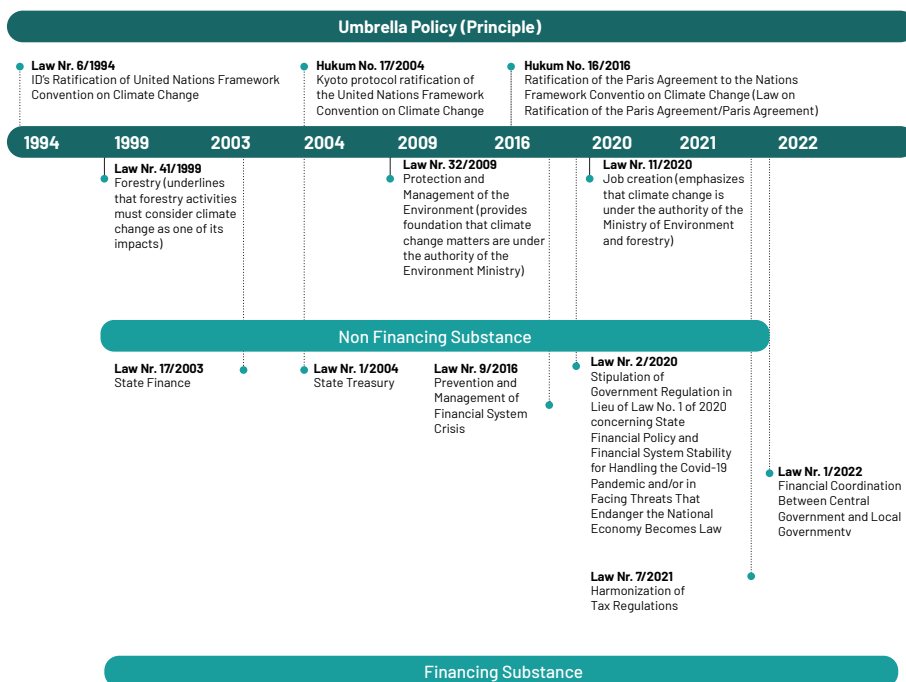
Figure 1. Regulatory Framing of Climate Change in Indonesia



Source: Author's analysis

In terms of Law, with the publication of Law No. 6/1994, Indonesian government would be able to add legal instruments to ensure the implementation of environmentally sound and sustainable development. Additionally, it would also open opportunity for Indonesia to collaborate and communicate with other nations or international organisations in terms of multidisciplinary scientific and technology exchange. The law of forestry No. 41/1999 emphasizes the importance and strategic value of forestry activities and provides foundation in which forestry activities must care to climate change as one of its impacts. Moreover, law No. 32/2009 was established in order to better ensure legal certainty and give protection for everyone's right to a good and healthy living environment as part of the preservation of the entire ecosystem from the impact of global warming. Indonesia ratified the Paris Agreement through Law No. 16/2016 as a follow-up to COP21 and the signing of the agreement as a step up in national commitment to decreasing emissions from diverse sectors, conserving forests, boosting renewable energy, and involving local communities in climate management. In 2020, Job Creation Law was published. It is presented in this description as it emphasizes that the Environment and Forestry Ministry is in charge of topics related to climate change.

Figure 2. Umbrella Policy in Climate Change and Its Financing



Source: Author's analysis

The differences in the organizational hierarchy of governments from each country that ratifies international agreements, coupled with the fast dynamics and growth of various global institutions and initiatives in the context of climate change, have made the implementation hierarchy of various international agreements in Indonesia varied. In the case of Indonesia, the (now) Ministry of Environment and Forestry (MoEF) was de facto appointed as the PIC for technical coordination in the context of climate change control in Indonesia. It also serves as a focal point of climate change policy planning but has limited influence on climate action and sectoral plans as line ministries oftentimes act independently. It may be because in the previous Presidents era, the Ministry of National Development Planning (Bappenas) together with the National Council on Climate Change (DNPI) and the REDD+ Implementation Agency were de facto appointed as PICs for the technical coordination, and hence, some multilateral/bilateral cooperation that had been built previously could not be transferred immediately to the Ministry of Environment and Forestry.

Indonesia has put in place key climate legislation as early as 2007, and established a climate action coordinating agency, the National Council for Climate Change (DNPI), as early as 2008 (Climate Action Tracker, 2021). After taking office in 2014, President Joko Widodo dissolved several non-governmental institutions, such as National Council of Climate Change (DNPI) and the REDD+ Implementing Agency, but cannot dissolve the Ministry of



National Development Planning (Bappenas). Thus, various cooperation initiatives that have been built with bilateral/multilateral partners cannot be terminated/closed or transferred to the current focal point. But, he then merged the Ministry of Environment and the Ministry of Forestry as Ministry of Environment and Forestry, and created the Directorate General of Climate Change, which replaced the National Council for Climate Change, but has lower authority. In 2017, the government also put in place some legislation to operationalise the monitoring and reporting of greenhouse gas emissions, international funds the country receives, as well as climate action towards its NDC.

It is more unique that other technical ministries are still able to carry out bilateral or multilateral cooperation with various global institutions in the context of climate change control, including financing cooperation or funding for climate mitigation and adaptation activities endorsed by each of these ministries. Thus, these conditions makes the policy landscape and more technically, the landscape for climate finance schemes in Indonesia also varies widely. However, in principle, the main climate finance actors are (Center for Climate Finance and Multilateral Policy, 2021):



Ministry of Finance (MoF)

MoEF is responsible for ensuring the availability of adequate funding for climate change programs and activities, including monitoring the results of the implementation of these programs and activities to see their effectiveness. To support this, the Ministry of Finance tracks the current existing funding, develop fiscal policies relating to climate change management, including the development of potential fiscal transfer instruments – Ecological Fiscal Transfer (EFT), which could be implemented both from the centre to the regions and provinces to districts/city.



Indonesia's national planning agency, Bappenas

It coordinates planning and policy development amongst ministries as well as amongst provinces. Notably, Bappenas has translated the national climate mitigation target into sector-level mid-term targets and policies collectively reaching an emissions reduction of more than 27%, and pursues the development of Regional Low-Carbon Development Plans (RPRKD). In accordance with their mandate on RAN-GRK and RAN-API, Bappenas has authorization to coordinate with all institutions at the central and regional levels, as well as monitor the implementation of the activities contained in the action plan. Bappenas together with the Ministry of Finance has the responsibility to be able to mainstream climate change policies into the work and budget plan of the ministries and institutions.



Ministry of Environment and Forestry (MoEF)

As sectoral and implementing institution, MoEF carries out the functions of coordination, synergy, integration and leadership, including monitoring, reporting, verification (MRV), both at the national central and regional) and international level, as the National Focal Point (NFP) for the UNFCCC. MoEF together with the Ministry of Finance has formed a Public Service Agency (BLU) for the environment; fund's management called the Environmental Fund Management Agency (BPDH).

Regional Governments

Regional governments increasingly have more and more important role in implementing national policies and planning, such as the mandate of Presidential Regulation Number 61 Year 2011 concerning RAN-GRK, where the Provincial Government is required to prepare Sub-national Action Plan for Reducing GHG Emissions (RAD-GRK) that is in line with RAN-GRK, and Sub-national Long Term Development Plan (RPJPD) and District/Province Spatial Zoning Plan (RTRWP/K). In the RAD-GRK, the Regional Government needs to prepare a baseline for GHG emissions, a proposed mitigation action plan and its priority scale (including estimated funding needed), and determine the implementing agencies and funding sources to support the implementation of activities/ programs. The Regional Government also has a role in allocating Sub-National State Budget for the implementation of activities that focus on controlling the largest GHG emitters or sectors that play a role in reducing GHG emissions. In addition, the Regional Government has the authority to implement policies related to regional revenues (such as land permits, taxes and user charges, etc) that can support climate change management.

The more detailed mapping of all related regulations in the climate change policy and financing is presented in Attachment 1 of this report. From our effort to map out policy and regulation on climate change in Indonesia, a snapshot of the strategies and plan are presented here, as has been defined well by the Climate Action Tracker (n.d.):

- National Action Plan to Reduce GHG emissions Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca (RAN-GRK) [outdated]. The Plan sets out the emissions reduction strategy to achieve Indonesia's 2020 target and was regulated by Presidential Regulation no 61/2011.
- The National Medium-Term Development Plan for 2020-2024
The Plan is regulated by Presidential Regulation No 18/2020. It outlines the government's development priorities and strategies until 2024 for all sectors. Of nine "missions", the government aims to reach "environmental sustainability" and proposed targets and measures to reach that goal. One of the Priority Programmes (PP3) specifically

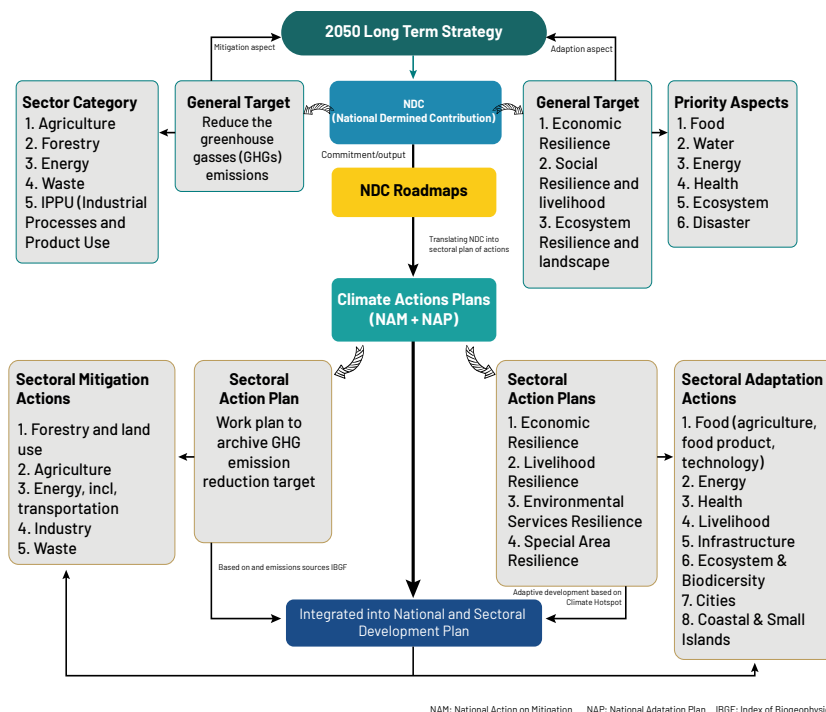
aims for a Low Carbon Development and lays the foundation for Indonesia's emissions pathways.

- **Indonesia Vision 2045: Sovereign, Progressive, Just and Prosperous (Indonesia 2045: Berdaulat, Maju, Adil, dan Makmur)**
The strategy sets a long-term development vision for the country. It is built around four pillars: human development and mastery of science and technology, sustainable economic development, equitable development, strengthening of national resilience, and governance.
- **Long-term Strategy on Low Carbon and Climate Resilience (LTS-LCCR) 2050**
The Directorate General of Climate Change, under the Ministry of Environment and Forestry, submitted Indonesia's long-term low greenhouse gas emissions development strategy (LTS) in July 2021. It puts forward a Paris Agreement compatible scenario that peaks emissions by 2030 and reaches net zero emissions by '2060 or sooner'.
- **Low Carbon Development: A Paradigm Shift Towards a Green Economy in Indonesia**
The report is the result of Indonesia's Low Carbon Development Initiative (LCDI) in which several long-term emissions pathways were developed based on an inter-sectoral effort. Bappenas released the report based on the scenario aiming for carbon neutrality by 2045, which informed the Medium-Term National Development Plan (RPJMN) 2020-2024.
- **NDC Implementation Strategy**
The Ministry of Environment and Forestry published the NDC Implementation Strategy in 2017. It serves as a guideline for relevant stakeholders to reach national commitment on GHG emissions reduction and low carbon development and climate resilience in line with Indonesia's NDC.

Ministry of Environment and Forestry (MoEF) elaborated in its Long-term Strategy on Low Carbon and Climate Resilience (LTS-LCCR) that climate change mitigation and adaptation cannot be seen as alternatives to each other, because they are not independent activities, but have a complementary role in responding to climate change which is carried out at different spatial, temporal, and institutional scales, as presented in Figure 2. If mitigation is successful in reducing greenhouse gas emissions substantially, the effects of climate change will continue because the lag time remains between the reduction in greenhouse gas concentrations and the reduction in the rate of warming. This means that adaptation is very important, regardless of the impact of mitigation (UNFCC, 2021). Perhaps because of this, more attention at least at the moment is put on the adaptation; as reflected by the existence of policy, strategy, projects as well as projected financing needs, even though the number is an appropriation.



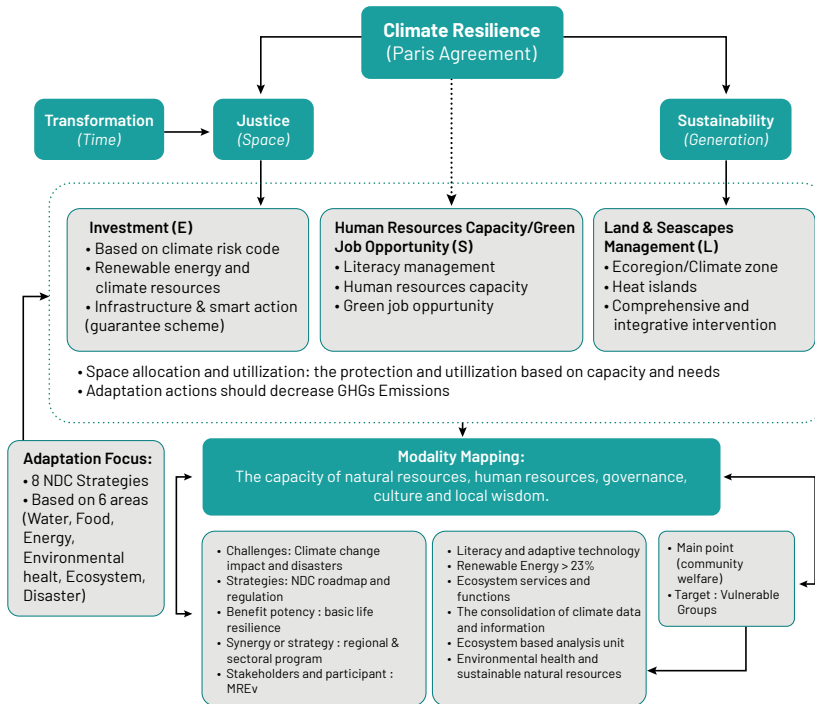
Figure 3. Connectivity between mitigation and adaptation in LTS, NDC, Climate Action Plans, and their integration to National and Sectoral Development Plans



Source : Author's analysis

Stated in Indonesia's updated NDC document, adaptation commitment is the strengthening of climate resilience by increasing economic, social and livelihoods, as well as ecosystem and landscape resilience. The UNFCCC defines adaptation as adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change. In simple terms, countries and communities need to develop adaptation solution and implement action to respond to the impacts of climate change that are already happening, as well as prepare for future impacts. It bears an understanding that climate change has been happening, so adaptation efforts in all means and forms are dedicated so that climate resiliency can be achieved; this is confirmed in Indonesia's climate change policy literature as well, and hence, a discussion about climate resilience as ToR of this research suggested, cannot be sliced as an exclusive issue; climate resilience is a condition; it will be achieved when measures adapting to climate change are fulfilled. MoEF in its LTS LCCR document specifically address this, shown in Figure 3, below:

Figure 4. The LTS-LCCR 2050 scheme on climate adaptation



Source: Authors Analysis



5 Overview of Climate Finance in Indonesia

The UNFCCC defines climate finance as local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change. Meanwhile, according to Nakhoda et al. (2014), climate finance refers to the financial resources mobilized to fund actions that mitigate and adapt to the impacts of climate change. Gupta et al. (2014) define climate finance more specifically for developing countries as a financial resource used to tackle climate change globally and serve as a financial flow to developing countries

to assist them in coping with climate change. This last definition is in line with Watson & Schlatsek (2021), who defined climate finance as financial resources mobilized by developed countries to fund climate change mitigation and adaptation actions, including public climate finance commitments by developed countries (Suroso et.al., 2022).

In accordance with the principle of “common but differentiated responsibility and respective capabilities” set out in the Convention, developed country Parties are to provide financial resources to assist developing country Parties in implementing the objectives of the UNFCCC. The Paris Agreement reaffirms the obligations of developed countries, while for the first time also encouraging voluntary contributions by other Parties. Developed country Parties should also continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds, through a variety of actions, including supporting country-driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilization of climate finance should represent a progression beyond previous efforts. Overall, efforts under the Paris Agreement are guided by its aim of making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. The Paris Agreement also places emphasis on the transparency and enhanced predictability of financial support (UNFCCC, n.d.).

The UNFCCC has emphasized that efforts to control climate change are carried out taking into account national circumstances (including state conditions and capacities) and state sovereignty (UN, 1992). The state provides direction and is obliged to ensure the development needed to meet the welfare of the people while taking into account the protection of environmental and social aspects. Indonesia’s commitment and contribution in reducing greenhouse gas emissions is carried out on a voluntary basis, full of responsibility, and in accordance with the capabilities of each country (in accordance with the principles of “*common but differentiated responsibilities – respected capabilities/CBDR-RC*”) (UNFCCC, 2015).

The Indonesian government has also issued Law No. 16 of 2016 concerning the Ratification of the Paris Agreement. The Government of Indonesia came up with 9 (nine) priority actions for national development as outlined through the Nawa Cita; that can be seen as a national commitment towards a low-carbon and climate-resilient development direction, with climate change adaptation and mitigation as an integrated and cross-sectoral priority in the National Development agenda. The commitments contained in the Nawa Cita became the basis for the preparation of Indonesia’s first Nationally Determined Contribution (NDC) document which was submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in November 2016. Indonesia’s First NDC outlines Indonesia’s transition to a low future. Emissions and climate resilience.

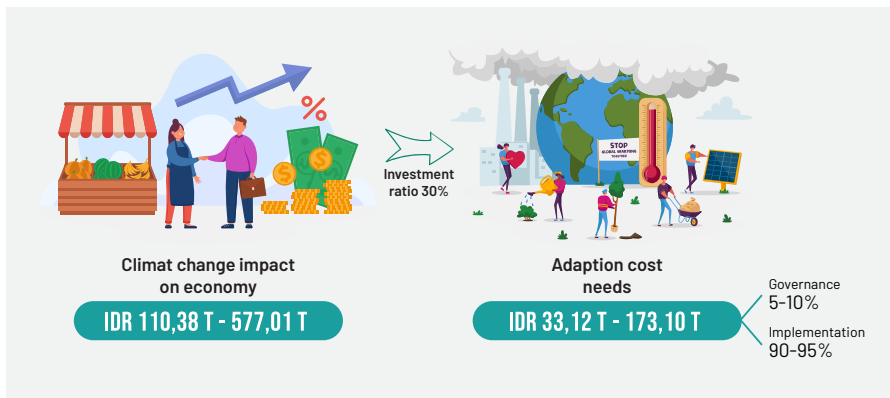
NDC is used as a reference for implementing climate change mitigation commitments with a plan to reduce emissions by 2030 by 29% to 41% if with international support, with

the proportion of emissions for each sector which includes: forestry (17.2%), energy (11%), agriculture (0.32%), industry (0.10%), and waste (0.38%). As for adaptation, Indonesia's commitments include increasing economic resilience, social security and livelihoods, as well as ecosystem and landscape resilience. In this effort, in accordance with state obligations/commitments, the NDC is planning climate change mitigation and adaptation efforts as an integrated action to build resilience in maintaining food, water, and energy resources (European Commission, 2020). In the Updated NDC document, Indonesia estimated that the amount of funding required to achieve the NDC target by 2030 is US\$322.86 billion. A significant amount of funding is needed mainly by the energy and forestry sectors, which are the main target sectors for NDCs.

5.1. Fiscal Policies on Climate Change

From a fiscal perspective, Indonesia has included elements of climate change control in its fiscal policy and is doing it more progressively, as depicted in the figure 2. Minister of Finance Sri Mulyani stated, the emissions reduction target needed fund, like any other government project and that to reach the 2030 NDC target alone, the country would need at least 4.52 quadrillion rupiah (USD310 billion). The government had earmarked around 4.1 percent of the state budget for emissions reduction efforts. Between 2018 and 2020, some 102.6 trillion rupiah was set aside from the national budget, although it only covered one-third of the projected emissions reduction project costs (NDC Partnership, 2021). This is in line with the LTS LCCR's description, pictured below:

Figure 5. Illustration of funding requirements for climate change adaptation

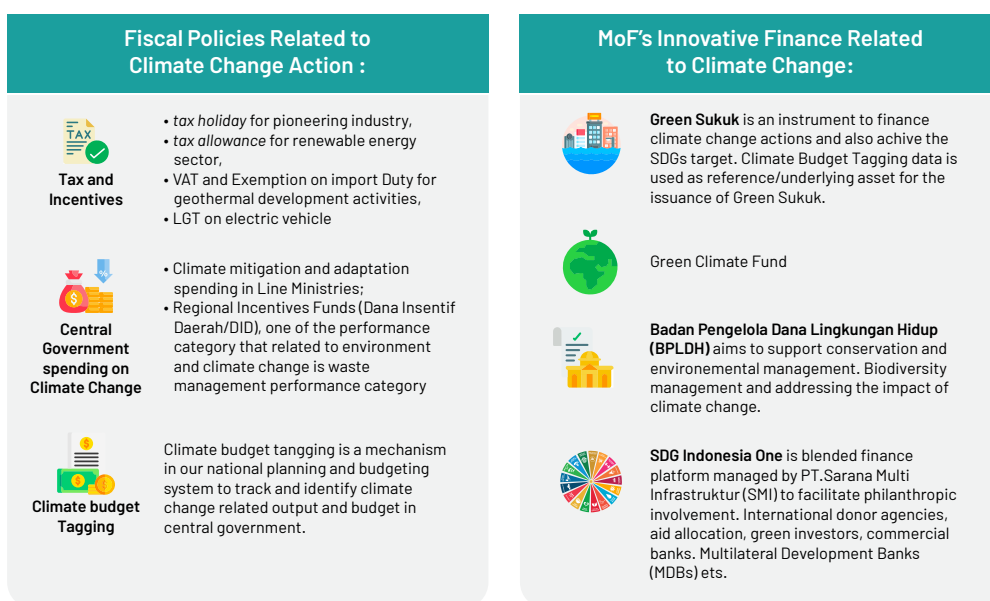


Sumber: NDC Partnership, 2021

The Ministry of Finance is developing the climate budget tagging system for local government budget of climate change activities. Further, our informant from the Fiscal Policy Agency, Dr. Joko Tri Haryanto added, a climate budget tagging from the state budget resources aims to monitor and evaluate the state budget allocation and the effectiveness of activities. It is done as a form of transparency and accountability of climate activities to

the community. All parties who involved in the climate budget tagging, are the government institutions with state budget resources. Each government institution should tag all climate programs, activities, and outputs into the Ministry of Finance website. Thus, all local governments can tag climate change programs and activities on the Ministry of Finance website, directly. This activity will support government's effort to raise fund through the issuance of Green Sukuk; as the data derived from climate budget tagging is then used as reference, and will be presented in the Impact Report; which then will be scrutinised by the investors. Started in 2021, MoF is developing Climate Change Fiscal Framework that will set out fiscal policy strategy to meet the NDC, SDG and Low Carbon Development Initiative. It is in line with Presidential Regulation on Carbon Pricing.

Figure 6. Fiscal Policies and Climate Finance



Source: NDC Partnership, 2021

5.2. Sources of Climate Change Funding in Indonesia

The sources of climate change funding in Indonesia are varied and dynamic, with the latest finding also including the efforts of sustainable finance by private sectors, such as banks and other financiers, as depicted in Figure 7, by Center for Climate Finance and Multilateral Policy Fiscal Policy Agency, Ministry of Finance, 2020. As this is by far the most comprehensive description on the topic, this research report will refer to it for the rest of the section.

Figure 7. Sources of Climate Change Funding in Indonesia

Public Finance			
Domestic		Internasional	
<ul style="list-style-type: none"> • Government spending on climate change • Green SUkuk (Global & retail) • SOEs (PT, SMI) 	<ul style="list-style-type: none"> • BPLDH • Sub-national govt. spending on climate change • ICCTF 	<ul style="list-style-type: none"> • Green Climate Fund • Adaptation Fund • Multilateral Development Banks 	<ul style="list-style-type: none"> • Global Environment Facility • Regional and Bilateral Agency
Private Finance			
<ul style="list-style-type: none"> • Sustainable finance (bank & other financial institutions) • Philanthropy 	<ul style="list-style-type: none"> • Private green bonds • Domestic private investment • Foreign direct investment 		

Source: Center for Climate Finance and Multilateral Policy Fiscal Policy Agency, 2020

5.3. Domestic Public Finance

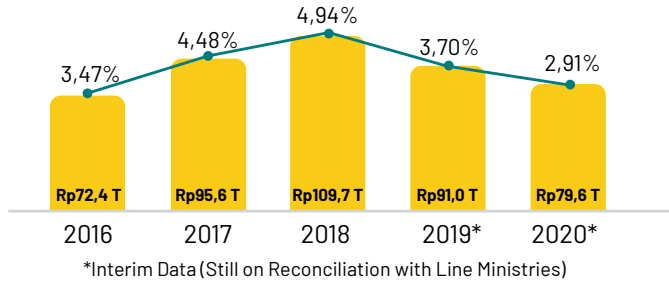
5.3.1. Government Spending on Climate Change

The National State Budget (APBN) is an important instrument for funding climate change adaptation and mitigation programs in Indonesia. Domestic fund mostly came from state budget, sub-national government spending, revolving fund investment, and SOE's equity fund and green bonds. In 2011, the Government of Indonesia contributed by far the largest share, disbursing at least IDR 5,526 billion (USD 627 million) or 66% of public climate finance, through budget transfer instruments.

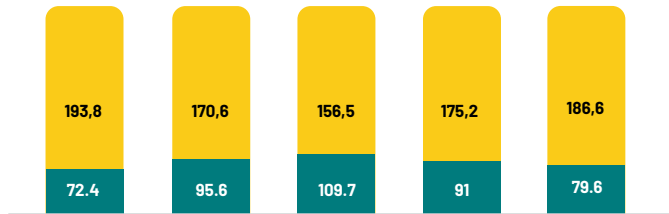
Based on the 2018 *Second Biennial Update Report* (BUR), Indonesia submitted an estimated financing needs to achieve the emission reduction target in 2030 reaching USD 247,2 billion or around Rp 3.461 trillion (Rp 266,2 trillion/year). Climate budget tagging is a process of marking, tracking and identify climate change outputs and budgets in planning and budgeting documents. Over the past 5 years, the average climate spending was IDR 89,6 trillion per year or 3,9% allocated from the State Budget per year. State budget have funded 34% of the total climate financing needs based on Second Biennial Update Report which is valued IDR 3.461 trillion (IDR 266,2 trillion per year) to achieve NDC target in 2030. In 2020, the climate spending decline due to budget reallocation and refocusing policies. In 2020, climate spending consists of 55% of mitigation, 45% of adaptation.

Figure 8. Central Government Spending on Climate Change

Climate Spending (Trillion Rupiah) and Portion on State Budget (%)



Climate Financing Needs per Year Based on Second BUR (Trillion Rupiah)



Source: NDC Partnership, 2021

Sub national governments, in their own efforts, have initiated projects of renewable energy. Bali proposed the development and use of clean energy by 2020. In 2019, Bali Provincial Government issued two regulations to realize a clean energy supply by 2022: the ‘Bali Clean Energy’ and the ‘Use of Battery-Based Electric Motorized Vehicles’ acts. As a result, PT. PERTAMINA, the state-owned oil and gas company, stated its interested to increase the clean energy mix in the province by developing an electric vehicle ecosystem in tourist areas, constructing solar power plants, and waste power plants. The government of Central Java encouraged all sectors in Central Java to develop solar rooftops as it was declared ‘Jawa Tengah Solar Province’ in 2019; he issued a Circular Letter in 2019 promoting the construction of solar rooftops to all regional institutions and several private companies in Central Java to build solar rooftops on their facilities. As a result, the biggest solar rooftops in Central Java of 2.919 kWp were installed in 2020 in Klaten Regency. The Governor of East Nusa Tenggara initiated some renewable energy projects with the help of the public and private sectors such as Sumba Iconic Island and Flores Geothermal Island (ERIA, 2022); even though they are not without controversies.



Figure 9. Fiscal Transfer to Encourage Green Development in Sub-National Level



Source: Center for Climate Finance and Multilateral Policy, 2021

5.3.2. Green Sukuk

As Indonesia still faces obstacles closing the gap between climate finance availability and the required funds to achieve the NDC target, the GoI established an innovative financing scheme by issuing state debt securities or green sukuk based on programs for alleviating or reducing greenhouse gases or known as green sukuk. The issuance of Indonesia's green sukuk has become an important milestone, not only in Indonesia, but also at the global level (MoF, 2021). Issued on March 2018, the country has borrowed USD1.25bn with the issuance of a five-year sukuk bond, which is designed to comply with Islamic law. One banker working on the deal said that due to "remarkable demand", pricing was tightened by 30bps, reducing the yield to 3.75 per cent (Financial Times, 2018). According to MoF (2019), the first issuance of Green Sukuk was utilized to refinance completed projects from the 2016 budget onward (51%) and to finance new projects from the 2018 budget onward (49%).

The government consistently issues Green Sukuk with a tenor of 5 years every year. The issuance of The 3rd Global Green Sukuk in June 2020, in the midst of pandemic Covid-19, raising a total of USD2.75 billion from three global green sukuk issuance (since 2018 to 2020). In 2021, the government introduced a thirty-year Green Sukuk term, the first in the world. However, differences between green instruments and conventional instruments were starting to become invisible. For this reason, financing through instruments such as green bonds should be reflected in the yield. For green sukuk issuance, Indonesia received 10 international awards, including from IFR Asia, Islamic Finance News, Finance Asia, Euro Money, and the Climate Bonds Initiative. Indonesian millennials are more aware of climate change programs by becoming Green Sukuk investors. By providing investment opportunities, their investment actions can be linked to climate change and green instruments (MoF, 2021).

Green Sukuk has enabled the development of renewable energy projects, even though according to the 2020 Green Sukuk Report, financing in the renewable energy sector has decreased from 2018 to 2019. Furthermore, and according to the same report the next year, no funding was allocated for the renewable energy sector in 2020. Nevertheless, the energy projects financed by Green Sukuk had contributed to increasing the electrification ratio and reducing emissions amounting to 1,319,620.41 tonnes from NRE Projects in 2017 (MoF, 2020). This contribution shows that Green Sukuk can have a significant role in facilitating the achievement of Indonesia's 29% reduction target contributed by the energy sector (Suroso, et.al., 2022).

Table 1. Green Bond and Sustainability Bond

Green Bond			
Issuer Name:	Amount Issued	Issuance Date	Use of Proceeds
Republic of Indonesia Green Retail Sukuk	IDR 5tn (USD350m)	Nov 2021	Energy, Waste, Water
Republic of Indonesia Global Green Sukuk	USD750m	Jun 2021	Energy, Waste, Water
Republic of Indonesia Green Retail Sukuk	IDR 5.4tn (USD378m)	Dec 2020	Energy, Waste, Water
Republic of Indonesia	USD750m	Jun 2020	Energy, Waste, Water
Republic of Indonesia Green Retail Sukuk	IDR 1.4tn (USD 98m)	Nov 2019	Energy, Waste, Water
Republic of Indonesia	USD750m	Feb 2019	Energy, Waste, Water
Republic of Indonesia Global Green Sukuk	USD1.25bn	Mar 2018	Energy, Waste, Water
Total	USD4.326bn		
Sustainability Bond			
Republic of Indonesia (SDG Bond)	EU500m (USD573m)	Sep 2021	

Source: Ministry of Finance, 2021

5.3.3. Indonesia Climate Change Trust Fund

At the G-20 Summit in September 2009, the President of Indonesia pledged to reduce GHG emissions unilaterally by 26% and up to 41% with international support by 2030. Considering the size of investments needed to successfully implement Indonesia's climate change strategy and considering the high demand for coordination and harmonization of

funding, the Government of Indonesia (GoI) launched the ICCTF on September 14, 2009. It is a national funding entity which aims to develop innovative ways to link international finance sources with national investment strategies (ICCTF, n.d.). The ICCTF receives non-refundable contributions from bilateral and multilateral donors. The main funding mechanism of the ICCTF is the 'Innovation Fund', which provides grants to line ministries to support climate change related projects within the GoI. Indonesia's National Development Planning Agency (Bappenas) is the administrating organisation with UNDP currently serving as the interim Trustee for the ICCTF (Climate Funds Update, n.d.).

The ICCTF aims to:

- Achieve Indonesia's goal of a low carbon economy and greater resilience to climate change
- Enhance the GoI's effectiveness in the leadership and management of addressing climate change. The design of the ICCTF is to be implemented in two stages:
- In the first step, the ICCTF will be created as an "Innovation Fund", which involves grant funding (mainly public finance) from development partners and other contributors to be used for activities without financial returns.
- At a later stage, the ICCTF may advance by establishing a "Transformation Fund" which involves available funding such as public-private partnerships, loans, and world capital market sources that could harness private-sector finance. The introduction of a carbon market is also under consideration.

ICCTF focuses on 3 priority windows:

- Land Based Mitigation – The reduction of GHGs emissions from deforestation and forest degradation, while moving towards efficient land uses and sustainable management of forest resources.
- Energy Contribution to the improvement of energy security in Indonesia and reduction of emissions from the energy sector.
- Adaptation and Resilience – Preparation of Indonesia's national and local institutions, as well as vulnerable communities, to the impacts of climate change.

Entities which are eligible to submit proposals to the ICCTF are Government institutions such as Line Ministries, Government Agencies and Local Government as Executing Agencies (EAs). EAs may partner with other institutions including universities and CSOs to implement the project. With projects administered through UNDP, acting as the interim fund manager, eligible project duration was set to one year, while project budgets were capped at USD3 million. In addition to project selection criteria such as impact, sustainability, scalability and synergy, the capacity and experience required to conduct large and innovative projects in a short time frame, and whether the projects were high

priority for the Ministries concerned, were also considered.

Decision Making Structure

A program management unit consisting of a Steering Committee, a Technical Committee and a Secretariat and a Trustee are responsible for the programmatic and technical oversight of the ICCTF in collaboration with development partners and other contributor-supported programs.

Steering Committee

The Ministerial Steering Committee on Coordination of the ICCTF provides overall policy guidance and direction to the ICCTF process. The main responsibilities of the Steering Committee are for: policy and operational guidelines, management, and monitoring and evaluation. To achieve these tasks the SC will be divided into two forums; the Policy Forum and Management Forum.

Technical Committee

The Technical Committee (TC) consists of staff from the National Development Planning Agency (Bappenas), Ministry of Finance and other line ministries. The main job of the TC is to advise the Steering Committee (SC) in all technical matters of the ICCTF. The Director of Environment of National Development Planning Agency/ Bappenas is the chair the TC.

In 2010, the ICCTF organized two Civil Society Organisation (CSO) workshops in Jakarta to discuss the involvement of civil society stakeholders in the decision making process of the ICCTF. At the first workshop, the role, the structure and the governance mechanisms of ICCTF were discussed. The second workshop started a selection process to select two CSO representatives who would participate in the ICCTF Steering Committee and created a CSO forum to discuss the role of the CSO representatives. Approximately 18 CSOs involved in climate.

Nature of Recipient Country Involvement

The ICCTF is entirely country-driven, with all funding decisions devolved to the country level. While UNDP acts as interim Trustee, there is a process in place to identify and establish a national Trustee to replace UNDP in the long term.

Figure 10. Tonggak Perjalanan ICCTF

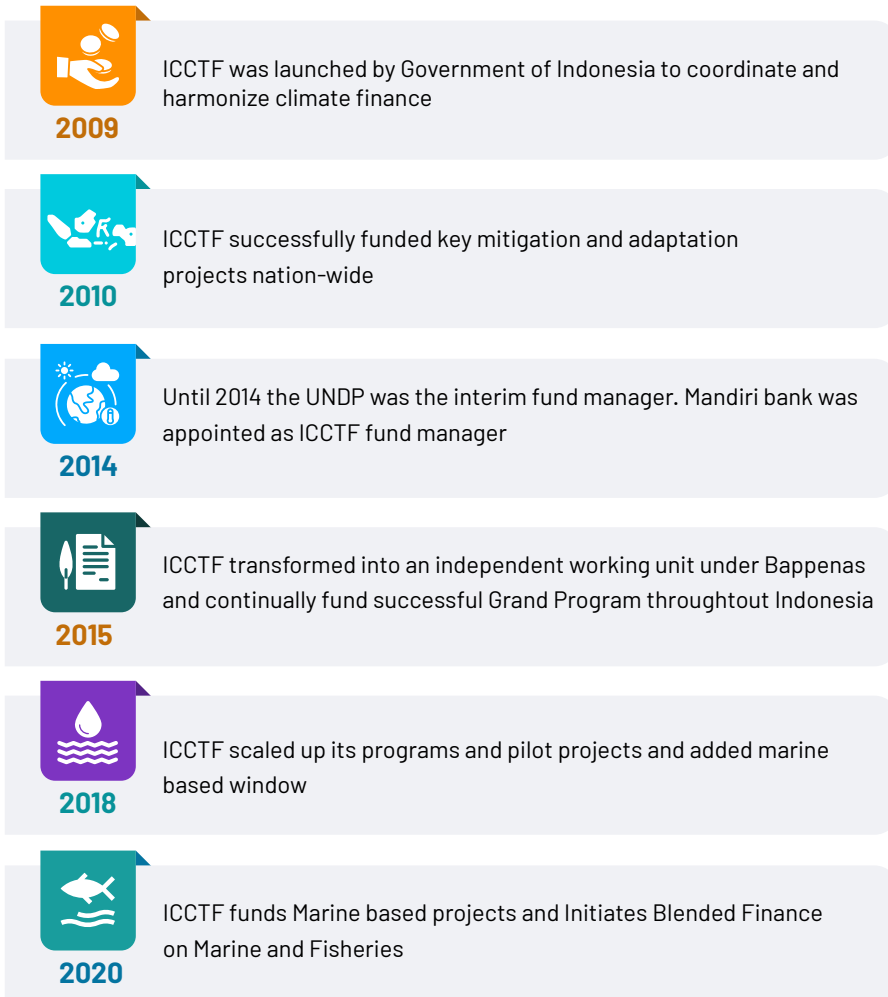
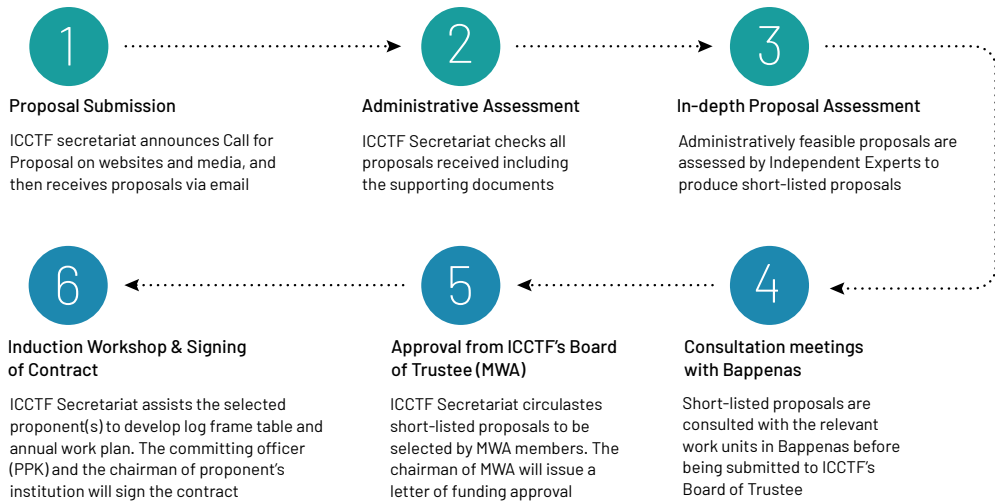


Figure 11. Process of Proposal Selection



Source: ICCTF, n.d.

5.3.4 PT. Sarana Multi Infrastruktur Indonesia's SDG Indonesia One ('PT. SMI')

The Government of Indonesia through the Ministry of Finance and PT Sarana Multi Infrastruktur Indonesia ('PT. SMI') seeks to achieve the SDGs through the establishment of an integrated platform called "SDG Indonesia One" which combines public and private funds through blended finance schemes to be channelled into infrastructure projects related to the achievement of SDGs. With support from the Government of Indonesia through the Ministry of Finance, PT SMI will be the implementing agency of this platform. In nature it operates as creditor, and PT SMI has managed a total project cost of IDR 703.83Trillion, 6.04 times on multiplier effect to its financing commitment and 23.06times on multiplier effect to its paid up capital, as of *March 2021*.



Figure 12. PT.SMI's Performance based on its business pillars, 2020



Source: PT SMI, 2021

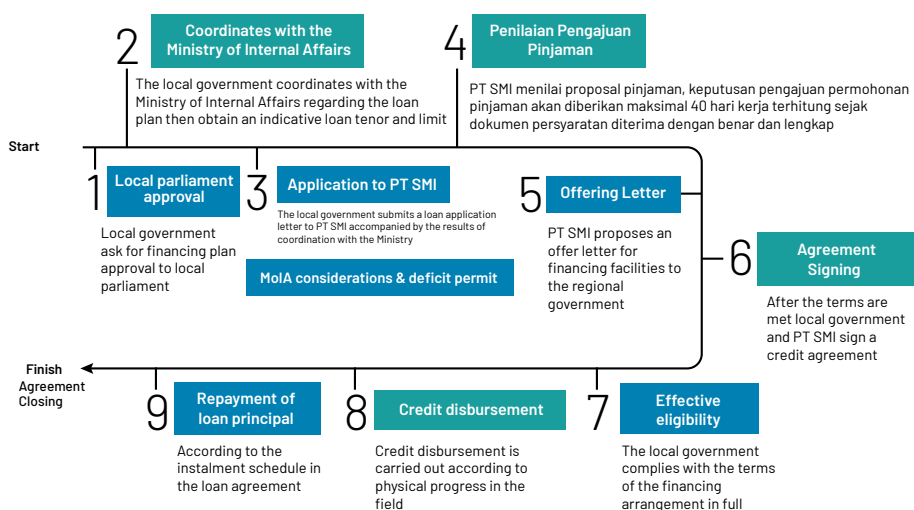
Though not specifically mentioned in their official documents, recently, PT. SMI seemingly is focusing on providing the facilities for sub-national level governments, as reflected in their portfolios. As governed by Gol's Economic Recovery Program, PT. SMI also required to provide an ad hoc facilities in year 2020 and 2021, in the form of support to sub-national Governments for regional economic recovery, due to Covid-19 pandemic. Here are the requirements for a loan application, as obtained from the website of the Directorate General of Fiscal Balance, Ministry of Finance:

- Submitting a loan application letter attached with: Considerations and Recommendations from the Ministry of Home Affairs.
- Gain permit for Exceeding the maximum limit of the deficit (if the loan will result in exceeding the maximum limit of the Sub-National Budget/APBD deficit in a fiscal year).
- Filling out the Regional Loan Initiation Form (format from PT SMI).



- Submitting the current year’s budget.
- Submitting a Feasibility Study on the proposed project to be financed based on the latest General Cost Standard.
- Submitting Detailed Engineering Design (DED).
- Submitting a Regional Loan Work Plan, with format from PT.
- Submitting a Memorandum of Planning, with format from PT SMI.
- Submitting BPK’s Audit Results Report (LHP) on regional financial reports (along with notes/explanations on LHP) for the last 5 (five) years with the last 3 (three) years getting a minimum opinion with Exceptions (WDP) from BPK.
- A valid Regional Medium Term Development Plan (RPJMD), which at least contains information that the proposed project has been included in the regional development priority program.

Figure 13. Flow of Regional Approval



Source: PT SMI, 2021

5.3.5. Badan Pengelola Dana Lingkungan Hidup ('BPDLH')

The Environmental Fund Management Agency (Badan Pengelola Dana Lingkungan Hidup/ BPDLH) was officially formed in September 2019 and launched in October 2019 to channel funds through a variety of instruments to specific projects and activities that support its overall objective to improve management and protection of the environment, support environmentally friendly economic activities and reduce GHG emissions. BPDLH is a public service agency (BLU), a non-echelon unit that is accountable to and structurally operationalized under the Minister of Finance of the Republic of Indonesia. A BLU is a government entity that has the legal flexibility and autonomous authority to manage its

operations and is not dependent on the state budget (APBN) but can source funds from it. The BLU structure allows BPDH to receive grants and loans, and to disburse them alongside several other economic instruments. BPDH is governed by the Steering Committee whose membership includes ten line ministries related to the environment. Several other groups can participate in the governance of the BPDH through an ad hoc Advisory Group (BPDH, 2020).

Based on Minister of Finance Regulation Number 137/PMK.01/2019 concerning Organization and Work Procedures of BPDH and Minister of Finance Regulation Number 124/PMK.05/2020 plays a role in funding following activities:

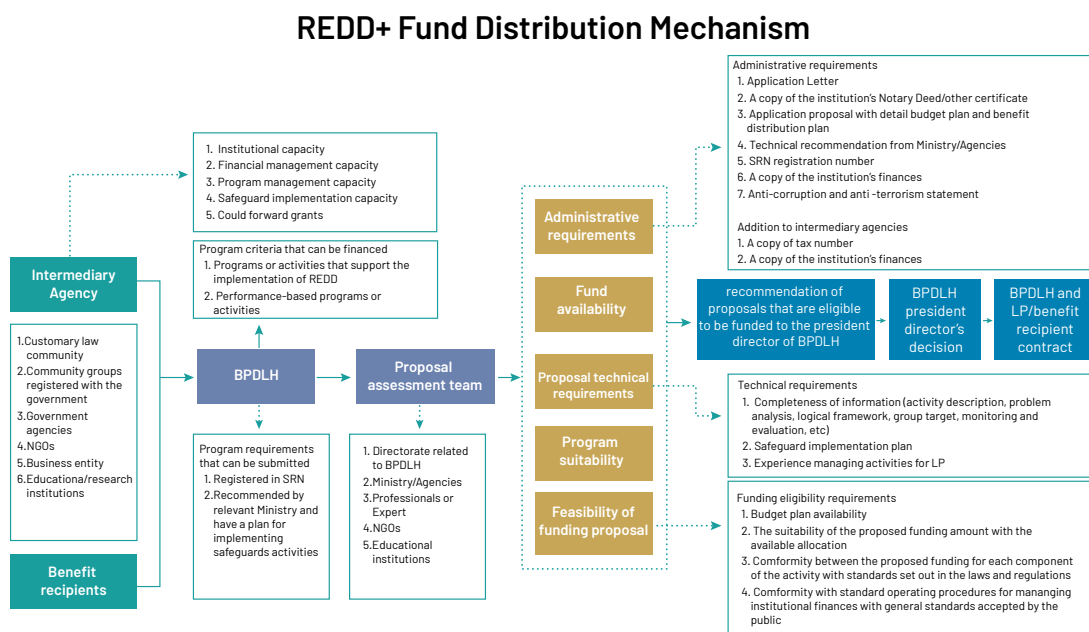
- a. Climate change control;
- b. Sustainable forest management;
- c. Forest and land fire control and peatland restoration;
- d. Social forestry and environmental partnerships;
- e. Forest and land rehabilitation activities and other supporting activities;
- f. Conservation of biodiversity and ecosystems;
- g. Control of pollution and/or environmental damage;
- h. Increasing the competitiveness of natural resource-based industries;
- i. Treatment of solid, liquid, and toxic hazardous wastes;
- j. Use of environmentally friendly and low-carbon materials and technologies;
- k. Increasing the application of energy efficiency, new renewable energy, and energy conservation;
- l. Reduction of disturbances, threats, and violations of law in the field of environment and forestry;
- m. Other environmental protection and management activities in accordance with the provisions of laws and regulations; and
- n. Supporting activities for environmental programs that can facilitate the achievement of the objectives of the distribution of Environmental Program Funds in accordance with the distribution plan.

BPDH will channel its fund via intermediary institutions focusing on REDD+ activities for financing results-based activities or Result Based Payment (RBP), as a form of cooperation and contribution from the Government of Norway and the Green Climate Fund (GCF) in supporting the reduction of greenhouse gas emissions in Indonesia. Since it is rather newly established organization, quite limited information can be gathered from its website; however the BPDH has already initiated a request for proposal, under the theme of *Funding Program For The Welfare And Sustainable Economy Of Indigenous People And Local Communities*, which is directed for research projects by academes, for community

project which will be executed by community/non-individual organizations as intermediary institution; as well as for universities under its community service programs. The deadline for this proposal submission is end of May, 2022.

BPDLH is aware that to reach out its ultimate beneficiaries: the communities, it requires the role of intermediary organizations, and hence, BPDLH carried out an Intermediary Institution Capacity Assessment (PENTAS LEMTARA) to manage program funds, particularly related to REDD+ activities in Indonesia. It assessed the capacity of intermediary institutions to manage funds and programs related to the environment and natural resources, as well as ensured the improvements in environmental conditions as a step in anticipating the impact of climate change.

Figure 14. BPDLH's fund disbursement, under REDD+ Pipeline



Source: BPDLH, 2022

The assessment of the capacity of the intermediary institution is carried out covering the following aspects:

1. Administration, ensuring the completeness and conformity of the required administrative documents.
2. Institutional, ensuring that intermediary institutions are supported by an institutional system that is legally adequate and is considered capable of carrying out good and correct programs and cooperation.

3. Finance, ensuring that the financial management of intermediary institutions is carried out properly and correctly.
4. Program, ensuring that program management by intermediary institutions is carried out properly and correctly.
5. Safeguards, ensuring that the planning, implementation, and reporting of safeguards are carried out properly and correctly.

BPDLH's social media platform is used highly for information dissemination, including for when it send out an RFP. However, to gain more information about the proposal submission, any interested parties are required to submit a Letter of Interest pertaining the guidance, scope and the format of proposal. Twenty (20) provinces are selected as project location, with as of June 6, 2022, some 103 proposal for community service and 33 proposal for CSO/CBOs have gone through first selection process (BPDLH, 2022). The proposal's asking range is from IDR 500 million – IDR 1.5 billion and with project period of maximum 2 years.

5.4. International Public Finance

Apart from Government and the private sector, the international community also plays a key role in climate change action. However, Indonesia still experienced difficulties in tapping this type of fund. Currently, ICF in Indonesia only contributes 34% of the total climate change funding. Of this total ICF, 58% is used for climate change mitigation, 9% is used for climate change adaptation, and 33% is used for the cross-sector projects (mitigation and adaptation). It is even harder for grants because of its status as a middle-income country and the 15th largest economy globally. This statement is in line with the findings obtained from the MoF report that from 2007 to 2019, Indonesia received ICF support in loans and grants of USD 6.416 million. Moreover, based on the agreement on Foreign Grants and Loans (Pinjaman dan/atau Hibah Luar Negeri, or PHLN), the loan instrument dominates climate change funding (Suroso et.al., 2022).

5.4.1. Green Climate Fund (GCF)

Green Climate Fund (GCF) is an example of international climate fund; which has demonstrated its commitment to assist developing countries, including Indonesia, in tackling climate change. GCF was established by the United Nations Framework Convention on Climate Change (UNFCCC) in 2010. It became fully operational in 2015 as a dedicated fund to help developing countries shift to low-emission and climate-resilient development pathways. While the GCF is an operating entity of the Financial Mechanism of the UNFCCC and serves the Paris Agreement, it remains a legally independent institution hosted by South Korea. The GCF has its own Secretariat with the World Bank as its Trustee. The 24 GCF Board members, with equal representation of developed and developing countries and support from the Secretariat, have been working to operationalise the Fund and implement its vision since their first meeting in August 2012.

In 2020 the GCF's long-overdue work to address gaps in essential policies and frameworks came largely to a halt due to the Covid-19 pandemic. The GCF Board could not agree on some of the more controversial policies via virtual meetings. However, the Secretariat moved ahead with efforts to speed up the development and approval of proposals and disbursement of approved funding. It also issued guidelines and improved operational procedures intended to drive up the overall quality of GCF projects and programmes, both approved and in the pipeline.

As of November 2020, the GCF had accredited 103 implementing entities as partners to deliver projects (with eight added since 2019), and had approved USD 7.2 billion for 159 projects. The 27th virtual meeting of the GCF Board in mid-November 2020 approved 16 of these project proposals worth USD 1.01 billion in GCF resources. Despite the disruptions caused by Covid-19, the GCF programmed more than USD 2.2 billion for 37 projects and programmes as well as readiness and preparatory support, with commitment authority under its first replenishment period (GCF-1, 2020–2023).

With close to three quarters of the USD 9.9 billion in pledges by 31 contributors confirmed as of November 2020, the GCF is thus on track to reach its annual programming goals set for GCF-1. An updated strategic plan, which was approved after much haggling in the final hours of the Board's 27th meeting, will guide the Fund's overall contribution to reaching the goals of the Paris Agreement.

Since January 2018, the GCF has established 7 (seven) special funding instruments that can be accessed by the parties. Of the seven instruments, the GCF offers a variety of financial mechanisms, including soft loans (senior and subordinated), equity, guarantees, and grants. This financial mechanism allows the GCF to tailor its financial support to the project needs of public, private and non-governmental entities. The seven specific funding instruments are:

Table 2. The type of instrument financed by the GCF

Program	Objective	Beneficiaries	Amount
Readiness and Preparatory Support	To strengthen the capacity and institution of the NDA and national entities	NDA NDA can decide partners to implement activities approved under this program.	<ul style="list-style-type: none"> Up to USD 1 million/year/country (grant). Up to USD 3 million for preparing adaptation measures (without addition, grant)
Project Preparation Facilities (PPF)	To support the preparation of projects and programmes, from the initial stages of project identification, concept and development and building an enabling environment, to the intermediate and final stage processes, including project due diligence and structuring.	Accredited Entity This funding window is open to any request from an Accredited Entity. However, this funding is primarily intended to support Direct Access Entities (DAEs) and micro to small category projects.	Up to USD 1.5 million is available from each request in the form of grants and paid for private sector projects.
Program or Project Funding	To support climate change mitigation and adaptation projects	Accredited Entity	Based on the Accredited Entity's project size category.

Simplified Approval Process	Small-scale and low-risk projects or programs. They must be prepared to scale up, and have the potential to change, adapt to, and/or mitigate the impacts of climate change.	NDA and Accredited Entities Direct Access Entities (DAEs) and NDAs are primarily encouraged to file Concept Notes	Up to USD 1 million (funds requested to GCF).
Private Sector Facility	To open up private sector investment in climate finance.	Private sector players and intermediaries Entity must have accreditation or must cooperate with Accredited Entity.	Based on the Accredited Entity's project size category.
REDD+ Result-Based Payments Pilot Program	Countries that have completed the first two phases of REDD+ for outcomes in late 2013 to late 2018 are eligible to apply for phase 3 funding through this pilot facility.	Accredited Entity in close consultation with NDAs and REDD+ entities/focal points	Based on the Accredited Entity's project size category. Allocation: USD 500 million, according to the last GCF Board Meeting in 2022.

Enhancing Direct Access	State-based pragmatic approach. There will be no individual project/ program submissions to the GCF as decision making will be decided upon on the country level.	Direct Access Entity (DAE) or candidate DAE nominated by the NDA to implement the program. Entities will be required to first submit a Concept Note for further input and guidance before working on a complete proposal. In addition, applicants must obtain accreditation before being able to access funds.	Based on the Accredited Entity's project size category. Allocation: USD 200 million
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Source: GCF, n.d.

National Designated Authorities (NDAs) are government institutions that serve as the interface between each country and the Fund. In Indonesia, it is at the Fiscal Policy Agency of the Ministry of Finance. They provide broad strategic oversight of the GCF's activities in the country and communicate the country's priorities for financing low-emission and climate-resilient development. GCF does not implement projects directly itself, but through partnerships with Accredited Entities (AE). In Indonesia, there are only two Accredited Entities at the moment, they are: PT. SMI and Kemitraan.

AE comprises the core of GCF's funding proposal cycle. They are responsible for presenting funding applications to GCF, and then overseeing, supervising, managing and monitoring the overall GCF-approved projects and programmes. It is not necessary for Accredited Entities to act as the direct implementer of funding proposals. Executing Entities can also do this on behalf of Accredited Entities by channelling funds and carrying out the funded activity. In these cases, Accredited Entities will continue to be important as they maintain oversight of Executive Entities' GCF-related activities. Accredited Entities develop funding proposals, in close consultation with NDAs or focal points, based on the differing climate finance needs of individual developing countries. Accredited Entities can also respond to Requests for Proposals issued by GCF to fill current gaps in climate financing. In issuing some Requests for Proposals, GCF may accept proposals from entities it has not yet accredited. However, non-accredited entities will have to team-up with Accredited Entities when formally submitting funding proposals to GCF. Entities that submit proposals through the Requests for Proposals can be prioritized when applying for accreditation (GCF, n.d.).

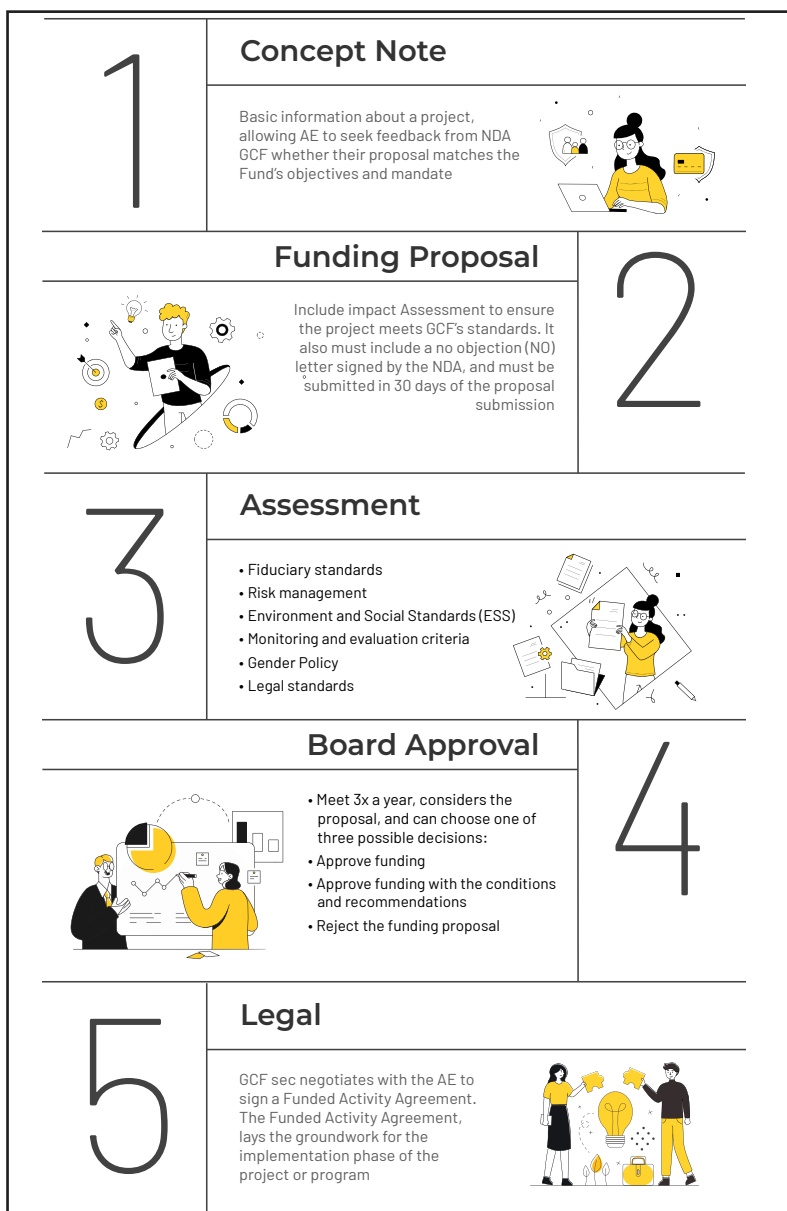


Revealed from discussion with NDA GCF Indonesia team, as at the moment, there is no 'seasonal' period for submitting a request of financing. In its website, it is indeed stated, the GCF is actively seeking high quality project proposals on climate change adaptation and mitigation, under 3 (three) types of submissions:

- Concept Note (CN). It is a presentation of project idea, still in the early stages of development and can be further discussed with the NDA.
- Project Preparation Facility (PPF), or Project Preparation Facility. It is a presentation of solid project idea but need additional resources to undertake various preparatory activities – such as a feasibility study, risk assessment and ESS study – to develop the idea into a full project proposal.
- Funding Proposal (FP), or Funding Proposal. It is a presentation of a fully ready for funding project.



Figure 15. Project Approval Flow



Sumber: GCF, n.d.

In August 2020, Indonesia received a result-based payment facility for Reducing Emissions from Deforestation and Forest Degradation (REDD+) of US\$ 103.78 million from the GCF for the results of reducing emissions of 20.25 million tons of CO₂eq. This funding is provided for Indonesia's success in reducing emissions in the 2014–2016 period (Center for Climate Finance and Multilateral Policy (2021).

It is obvious that the facility is aiming at players who have the capacity to run manage a project worth at minimum GEF Agencies create project proposals and then manage these projects on the ground. In so doing, they help eligible governments and non-governmental organizations (NGOs) to develop, implement and execute their projects.

As of March 2021, Indonesian NDA has issued 12 No-Objection Letter (NOL). Five of them has been approved by the GCF, they are: Geothermal Resource Risk Mitigation (GREM), Climate Investor One (CIO), REDD+ Results-Based Payment, Sub national Climate Fund, ASEAN Catalytic Green Finance Facility (ACGF) and one approved Project Preparation Facility for BRT Semarang. Currently, the NDA in collaboration with GGGI is implementing the Readiness and Preparatory Support Program (Center for Climate Finance and Multilateral Policy, 2020). The NDA GCF Secretariat admitted that the number is still relatively low, and some efforts and innovation have been made to invite more successful proposal. It is aware that coordination among all climate change funding agencies in Indonesia needs to be improved so that more climate projects can be realised. The Secretariat team share a similar aspirations, that more Indonesian entities could access the fund, *“the Indonesian elements should not be used just as sweeteners”*, emphasised the Chairman of the Indonesia NDA GCF, Dr. Tri Joko Haryanto.

5.4.2. Global Environment Facility (GEF)

GEF was initiated by the World Bank in 1991, and became the main donor of the 1992 Earth Summit in Rio de Janeiro, Brazil. After the 1992 Earth Summit, the GEF was developed and managed jointly by the World Bank and the UN, through UNEP and UNDP. Later, several international financial institutions joined, such as ADB, IMF and so on. GEF has always been the main donor for convening global conventions, such as UNCBD, UNFCCC, UNCAD, Stockholm Convention on POPs, and so on. This is different from the GCF or AF which are specifically dealing with global climate change issues, as the mandate of each COP. GEF is more general in dealing with global environmental issues (which are broader) while at the same time encouraging support for sustainable development at the national level, climate change issues are also funded by the GEF, but will be of a more general nature.

GEF funding is provided by participating donor countries and is available to developing countries and countries with economies in transition to meet the objectives of international environmental conventions and agreements. Board-approved funds are transferred through

the 18 GEF Agencies to government agencies, civil society organizations, private sector companies, research institutes, among a wide variety of potential partners, to implement projects and programs in recipient countries. In general, GEF funding is intended for the implementation of global-scale environmental and development conventions.



How Projects Work

In most cases, the GEF provides funding to support government projects and programs. Governments decide on the executing agency (governmental institutions, civil society organizations, private sector companies, research institutions).



Eligibility Criteria

- **Eligible country:** Countries may be eligible for GEF funding in one of two ways: a) if the country has ratified the conventions the GEF serves and conforms with the eligibility criteria decided by the Conference of the Parties of each convention; or b) if the country is eligible to receive World Bank (IBRD and/or IDA) financing or if it is an eligible recipient of UNDP technical assistance through its target for resource assignments from the core
- **National priority:** The project must be driven by the country (rather than by an external partner) and be consistent with national priorities that support sustainable development.
- **GEF priorities:** to achieve the objectives of multilateral environmental agreements, it is required that the GEF support country priorities that are ultimately aimed at tackling the drivers of environmental degradation in an integrated fashion. For this reason, the focal areas (Biodiversity, Climate Change Mitigation, Land Degradation, International Waters and Chemicals and Waste), which remain the central organizing feature in the GEF-7 Programming Directions, provide countries with the opportunity to participate in selected “Impact Programs” focusing on 1) Food Systems, Land Use and Restoration; 2) Sustainable Cities; and 3) Sustainable Forest Management
- **Financing:** The project must seek GEF financing only for the agreed incremental costs on measures to achieve global environmental benefits.
- **Participation:** The project must involve the public in project design and implementation, following the Policy on Public Involvement in GEF-Financed Projects and the respective guidelines.





Choice of GEF Agency

The GEF has 18 Partner Agencies. The Operational Focal Point decides which Agency would be best suited to develop and implement the project idea. This is an important decision since the Agency will be the partner at all stages of the project or program.



Types of Projects

The GEF provides funding through four modalities: full-sized projects, medium-sized projects, enabling activities and programmatic approaches. The selected modality should be the one that best supports the project objectives. Each modality requires completion of a different template.

- Full-sized Project (FSP): means a GEF Project Financing of more than two million US dollars.
- Medium-sized Project (MSP): means a GEF Project Financing of less than or equivalent to two million US dollars.
- Enabling Activity (EA): means a project for the preparation of a plan, strategy, or report fulfill commitments under a Convention.
- Program: means a longer-term and strategic arrangement of individual yet interlinked projects that aim at achieving large-scale impacts on the global environment.

5.4.3. Global Environment Facility's Small Grant Programme (GEF SGP)

Established in 1992, following the Rio Earth Summit, the Global Environmental Facility Small Grants Programme (GEF/SGP) is a corporate programme of the Global Environment Facility. The GEF/SGP is implemented by United Nations Development Programme (UNDP) on behalf of the World Bank, United Nations Environment Programme (UNEP) and UNDP; executed by United Nations Office for Project Services (UNOPS).

After the signing of the Convention on Biological Diversity and Climate Change in 1992, Indonesia began to develop initial projects under the umbrella of the Global Environmental Facility-Small Grants Program (GEF-SGP). Since 1997 GEF SGP has started to operate regularly by hosting an environment-based NGO called Yayasan Bina Usaha Lingkungan. In the mechanism for providing grant funding facilities, GEF SGP also cooperates with UNDP and the Ministry of Environment and Forestry.

Dalam bidang kerjanya, SGP menyadari pentingnya peran masyarakat, baik dalam In its field of work, SGP is aware of the important role played by the community, both in the household



and broader scope, as well as non-governmental organizations, which understand the real situation so that they can participate in saving biodiversity, reducing the impact of climate change, and protecting international waters. These important roles are based on the idea that the community has great power in taking action, controlling the use of natural resources, having sufficient information and knowledge, and believing in increasing their social and economic welfare through sustainable natural resource management. . Within its scope of work, SGP tries to provide alternative activities that are expected to break the chain of environmental problems originating from the community. If the community directly receives the SGP-funded intervention, the sustainability of the project and its long-term goals will improve.

GEF SGP Indonesia is part of a network of natural resource management communities and nurtures at least 200 Non-Governmental Organizations and Local Communities that meet the criteria. GEF SGP Indonesia currently manages various activities together with more than 40 Non-Governmental Organizations and Local Communities, both recipients of Planning Grants and Full Grants from SGP. The activities carried out are also in collaboration with networks of indigenous peoples and humanitarian organizations, donors and other community organizations. Each partner will receive US\$ 2,000-5,000 for a Planning Grant with a project duration of 3 – 6 months or up to US\$ 10,000-50,000 for a full grant with a project duration of 12 – 24 months.

The theme of GEF SGP Indonesia is strengthening natural resource management by communities for forest, coastal, clean water and marine ecosystems, mountain ecosystems, agro-biodiversity, renewable energy and conservation and energy efficiency.

Support given to local community initiatives is more directed at dialogue with local and/or provincial governments, collaboration between communities and the government in protecting their territories (as happened in the cases in Bali, Southeast Sulawesi, and South Sulawesi); clean water communities, improvement of coastal and coastal ecosystems and resources, management (in Bali, North Sulawesi, South and Southeast Sulawesi, Pulau Seribu) and other renewable energy development (in East Java and West Java).

Grants facilities are in the form of Planning Grants (US\$ 2,000-5,000) and Full Grants (US\$ 10,000 – US\$ 50,000). Technical assistance includes financial management training, proposal development, project management, outreach strategy, institutional development, as well as various small-scale expertise experiences. Funding facilities provided are in the form of planning grants, capacity building, pilot projects, monitoring and analysis, policy dialogue, information dissemination and networking. Ready-to-use project and aid management (5 years piloted in Indonesia, and 10 years globally). The information provided on the website of GEF SGP is quite complete and consistent, hence public can have clearer expectation and anticipation of when an organization can access the fund and how.

5.4.4. Adaptation Fund

In addition to initiating the GCF in 2010, the UNFCCC has actually initiated a special funding mechanism for climate change adaptation, namely the Adaptation Fund (AF) at COP 7 in 2001 in Marrakech, Morocco. However, AF funding scheme has not yet been launched and operationalized, until the members of the AF board were formed in a decision at COP 13 of 2007 in Bali, Indonesia. Thus, AF is a pioneer in public funding mechanisms for concrete activities to help vulnerable communities in developing countries adapt and build resilience to the negative impacts of climate change (Climate Funds Update, n.d.).

By 2017, on the anniversary of AFs 10th anniversary, this special funding had helped developing countries build national capacity to adapt to climate change, disbursing up to US\$462 million in 73 countries. Funding has been provided to concrete and local projects that help vulnerable communities meet urgent adaptation needs in sectors such as food and water security, coastal management, sustainable agriculture, disaster risk reduction, rural development, and forestry.

However, for 5 (five) years from 2017–2021, AF has slightly reduced its role in order to reflect on its performance according to its achievements over the past ten years, as well as develop better future plans. Starting in 2022, AF will return to its optimal role. For Indonesia, in May 2022 together with its partner in Indonesia (Kemitraan Foundation), AF launched a new mechanism for funding climate change control to the public.

As explained in the launching of AF-Kemitraan (in May 2022) that AF funding is intended for directly affected communities in the form of non-profit institutions, or local government institutions or universities. AF funding is entirely grants, so they lead to businesses or the private sector to access funding from the GCF; as AF funding is not intended for them.

The Adaptation Fund is a financial instrument under the UNFCCC and its Kyoto Protocol (KP) and has been established to finance concrete adaptation projects and programmes in developing country Parties to the KP, in an effort to reduce the adverse effects of climate change facing communities, countries and sectors. The Fund is financed with a share of proceeds from Clean Development Mechanism (CDM) project activities as well as through voluntary pledges of contributing governments as well as non-governmental or individual contributors. The share of proceeds from the CDM amounts to 2% of Certified Emission Reductions (CERs) issued for a CDM project activity.

The AF aims to increase resilience through concrete adaptation projects and programmes that reduce the adverse effects of climate change facing communities, countries, and sectors. The Adaptation Fund programmes primarily cover food security, agriculture, water management, and disaster risk reduction.

Activities supported by the Fund include:

- Water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems
- Improving the monitoring of diseases and vectors affected by climate change, and related forecasting and early-warning systems, and in this context improving disease control and prevention
- Supporting capacity building, including institutional capacity, for preventive measures, planning, preparedness and management of disasters relating to climate change
- Strengthening existing and, where needed, establishing national and regional centres and information networks for rapid response to extreme weather events, utilising information technology as much as possible..

Developing countries that are Parties to the Kyoto Protocol are eligible. The full list is available at: <https://unfccc.int/process/parties>.

In addition, these countries must be particularly vulnerable to the adverse effects of climate change. This includes: low-lying coastal and other small island countries, and countries with fragile mountainous ecosystems, arid and semi-arid areas, and areas susceptible to floods, drought and desertification.

Decision Making Structure

In the AF, decisions are taken by the Adaptation Fund Board and Accreditation Panel.

Adaptation Fund Board

The Adaptation Fund Board is the governing body and is established to supervise and manage the Adaptation Fund under the authority and guidance of the Conference of the Parties, serving as the meeting of the Parties to the Kyoto Protocol. It is fully accountable to the Conference of the Parties, which decides its overall policies in line with relevant decisions.

The Adaptation Fund Board meets at least twice a year. The meetings generally take place usually in Bonn, Germany unless the Board decides to convene in conjunction with meetings of the parties to the Kyoto Protocol (CMP) or the subsidiary bodies of the UN Framework Convention on Climate Change.

The Board is composed of 16 members and 16 alternates representing Parties to the Kyoto Protocol. Board members serve for a two-year term, renewable once. The composition is equitable with a majority of members (about 69%) representing developing countries. Board members are selected as follows:

- Two representatives from each of the five United Nations regional groups
- One representative from Small Island Developing States

- One representative from the Least Developed Country Parties
- Two other representatives from Annex I Parties
- Two representatives non-Annex I Parties.

An alternate is elected for each representative.

Decisions of the Adaptation Fund Board are taken by consensus. If all efforts at reaching a consensus have been exhausted, and no agreement has been reached, decisions are then taken by a two-thirds majority of the members present at the meeting on the basis of one member, one vote. The list of actual Board Members and Board Alternates is available at: <https://www.adaptation-fund.org/about/governance/board/>.

Accreditation Panel

In order to ensure that organisations receiving Adaptation Fund; to meet the fiduciary standards, the Board has established an Accreditation Panel. The Accreditation Panel reviews applications from organisations for receiving and managing Adaptation Fund monies. It consists of three independent experts and two board members, who serve on the panel for two-year terms.

5.4.5. Adaptation Fund in Indonesia

Indonesia received additional funding from the Adaptation Fund, however, currently there is only one National Implementing Entity (NIE) who can access the funds in Indonesia: Kemitraan. In the future it is hoped that other NIE candidates can meet the requirements of the Adaptation Fund Board (AFB) to be accredited by the AFB in order to be able to distribute AF funds in Indonesia; from the experience of the Partnership to get Accreditation. To ensure that AF funds in Indonesia are truly in line with and support the achievement of targets and are in line with the Climate Change Adaptation Program in Indonesia, the MoEF c.q Director General of Climate Change Control as the NDA for the AF has developed a mechanism to access AF funds through the Partnership as NIE AF in Indonesia.

For better governance of the use of AF funds in Indonesia, criteria and SOPs related to Concept Notes and SOPs for Adaptation Funds have been agreed upon between the MoEF as NDA and Kemitraan as NIE in Indonesia to be used as references in the selection of concept notes / proposal.

In accordance with the government's commitment to controlling climate change as stated in the Nationally Determined Contribution (NDC) document, in particular supporting the achievement of the NDC target of adaptation elements, namely to realize economic, social and livelihood resilience, and ecosystems and landscapes. The panel also acts as a catalyst for the acceleration of the implementation of Presidential Regulation No. 98/2021, where one of the mandates is the implementation of climate change adaptation from national to regional (provincial and district/city) levels involving all stakeholders, including business

actors and the community, with a focus on the fields of food, water, energy, health, and ecosystems.

Directives of Adaptation Fund

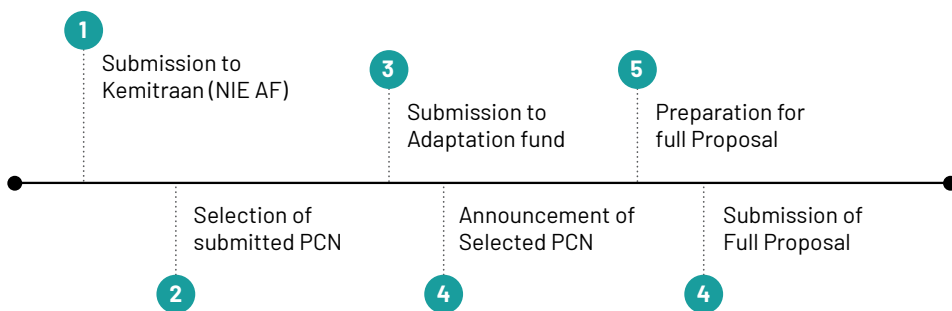
In accordance with the government's commitment to controlling climate change as stated in the Nationally Determined Contribution (NDC) document, AF should support the achievement of NDC target of adaptation elements, namely to realize economic, social, livelihood, ecosystems and landscapes resilience.

In accordance with government programs and activities, in particular supporting the targets as laid out by Strategic Plan of the Ministry of Environment and Forestry which are then detailed in the Strategic Plan of the Directorate General of Climate Change Control, climate change adaptation activities must support the Disaster Resilience and Climate Change program, with activity indicators, namely:

1. Provision of climate change vulnerability, risk data and recommendations for regional climate change adaptation strategies.
2. Number of climate-resilient villages.

AF to support the expansion of the implementation of community-based climate change adaptation and mitigation actions through the Climate Village Program (Proklim) which is targeted to reach 20,000 locations by 2024. For the concept note of ecosystem-based adaptation activities in coastal areas, the results of the mangrove ecosystem vulnerability study conducted by the DG of Climate Change Control in 2021 can be one of the references in designing adaptation activities.

Figure 16. Process of Concept Notes Submission financed by Adaptation Fund (AF) through Kemitraan (Indonesia NIE)

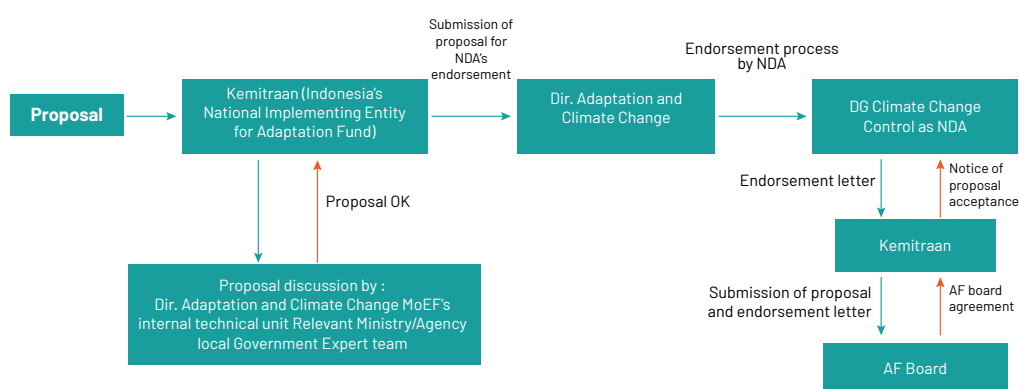


Source: Kemitraan, 2022

The requirements for project concept notes:

1. Draft no more than 50 pages including appendices (Annexes).
2. Letter of support from local government and/or relevant ministry.
3. Institutional Documents (Deed of Establishment of Organization, Last Audit Result), Project Environmental Social Management Plan/Framework/ Strategy.
4. Project Gender Assessment.
5. Submission only for non-profit activities/programs.

Figure 17. Process of Proposal Submission financed by Adaptation Fund (AF)



Source: Kemitraan, 2022

Most recent AF project in Indonesia:

- Embracing The Sun: Redefining Public Space as a Solution for the Effects of Global Climate Change in Indonesia's Urban Areas (October 2021)
- Enhancing the adaptation capability of coastal community in facing the impacts of climate change in Negeri (village), Asilulu, Ureng and Lima of Leihitu District Maluku Tengah Regency Maluku Province (October 2021)
- Safekeeping-Surviving-Sustaining towards Resilience: 3S Approach to Build Coastal City Resilience to Climate Change Impacts and Natural Disasters in Pekalongan City, Central Java Province (September 2020)
- Adapting to Climate Change through Sustainable Integrated Watershed Governance in Indigenous People of Ammatoa Kajang Customary Area in Bulukumba Regency, South Sulawesi Province, Indonesia (September 2020)

- Community Adaptation for Forest-Food Based Management in Saddang Watershed Ecosystem (July 2019)
- Partnership: Building resilience in coastal communities (September 2017)

5.4.6. Multilateral and Bilateral Funding in Indonesia

The UN Framework Convention on Climate Change Article 11.5 states that the developed country Parties may also provide and developing country Parties avail themselves of, financial resources related to the implementation of the Convention through bilateral, regional and other multilateral channels (UNFCCC, 2016). Sources of MDB climate finance are split between the MDBs' own accounts and the external resources channelled through and managed by the MDBs. External resources include trust-funded operations, such as those funded by bilateral agencies and dedicated climate finance funds such as the Climate Investment Funds (CIF), Green Climate Fund (GCF) and climate-related funds under the Global Environment Facility (GEF), EU blending facilities and others. As bilateral reporting may already cover some external resources, those managed by the MDBs are presented separately from the MDBs' own accounts (MDBs, 2021).

The Multilateral Financial Institutions that have long been funding for climate related issue in Indonesia are the **Asian Development Bank (ADB)**. In October 2021, ADB committed to elevating its ambition to \$100 billion in cumulative climate financing from its own resources to its DMCs for the period 2019–2030. Investment in all developing countries for climate mitigation is estimated to be between \$140 billion to \$175 billion per year by 2030. Climate adaptation cost estimates for Asia and the Pacific are in the order of \$40 billion per year between now and 2050. Through mechanisms such as the Climate Investment Funds, multilateral development banks have mobilized \$7.0 billion for climate action in developing countries, with more than \$2.5 billion earmarked for Asia and the Pacific. For the massive financing required to combat climate change, the key will be using limited public sector funds to leverage significant amounts of private capital (ADB, n.d.).

The World Bank Group is stepping up climate investments. Its Climate Change Action Plan 2021–2025 is taking effect in July 2020. The Bank is working with Ministers of Finance, Budgeting and Planning through the Coalition of Finance Ministers for Climate Action, to help countries design and implement climate policies, coordinate efforts, and bring climate considerations into the mainstream of economic policy. Indonesia's Minister of Finance, Sri Mulyani acts as its Co-Chair for the period 2021–2023. Finance Ministers agreed to help countries mobilize and align the finance needed to implement their national climate action plans and meet the ambitious targets set in their NDCs (World Bank, 2020). Bank initiatives using carbon finance – investments in programs that reduce or avoid greenhouse gas emissions – have made \$2 billion in emission reduction payments since the first carbon fund was launched in 1999. The effort includes work to reduce greenhouse gas emissions from the forest and land-use sectors across more than 50 countries (World Bank, 2020).

The government of Indonesia and the **European Investment Bank (EIB)** will focus on key investment in green infrastructure sectors that will increase the country's resilience to natural disasters in the medium and long term, and improve the lives of people in an immediate way. Areas of potential collaboration notably encompass: renewable energy, transport, including urban transport and waterways, lower carbon and efficient energy generation, forestry, waste and water management as well as low carbon technologies (EIB, 2014). In 2021, the share of EIB investments that went to climate action and environmental sustainability projects rose to EU27.6 Billion (51%) (EIB, n.d.). EIB is set to finance bus rapid transit (BRT) system in Batam and Makassar and is interested in financing expansion of the urban rail system and urban regeneration of areas along the transport routes (EIB, 2019).

International Financial Corporation (IFC), a member of the World Bank Group, is providing a four-year debt facility of \$150 million to PT Bank BTPN Tbk. The proceeds of the facility will be used by the bank to expand green financing and increase lending to micro, small, and medium enterprises with a focus on two areas – addressing the financing gaps through supply chain finance and promoting lending to women-owned MSMEs (IFC, 2019).

The 2020 Joint Report on Multilateral Development Banks' Climate Finance, published on June 30, showed that climate finance to low- and middle-income economies committed by major multilateral development banks (MDBs) rose to US\$ 38 billion. In addition to this, \$28 billion was committed to high income countries by MDBs focused on developed countries.

The World Bank Group accounts for more than half of this climate finance for developing countries; and over two-thirds of climate adaptation finance. Over the last five years, the World Bank Group delivered over \$83 billion in climate finance, including a record \$21.4 billion in 2020. Results included over 48 GW in low-carbon and renewable energy to help businesses and communities thrive, as well as support to countries to mitigate disaster risks, building resilience in people, infrastructure and economies (MDBs, 2021).

Figure 18. Key Figures of MDB Climate Finance



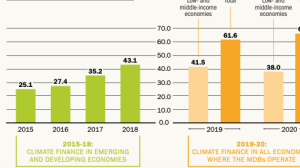
MDB CLIMATE FINANCE 2020 KEY FIGURES

In 2020 the multilateral development banks (MDBs) listed below committed a total of **US\$ 66 billion** in climate finance in all economies where they operate. Of this total, **US\$ 38 billion** was for low-income and middle-income economies.

CLIMATE FINANCE COMMITMENTS BY MDB

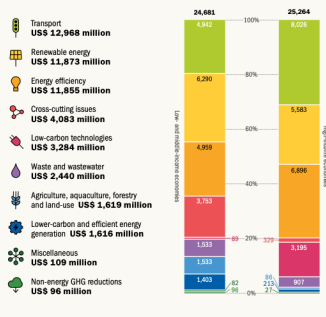
MDB	Total Commitment (US\$ million)	For low- and middle-income economies (US\$ million)
African Development Bank	2,095	2,062
Asian Development Bank	5,326	5,310
Asian Infrastructure Investment Bank	1,199	1,115
European Bank for Reconstruction and Development	3,859	2,283
European Investment Bank	27,856	3,230
Inter-American Development Bank Group	3,431	2,498
Islamic Development Bank	261	259
World Bank Group	22,016	21,252

TOTAL REPORTED MDB CLIMATE FINANCE COMMITMENTS, 2015-20 (IN US\$ BILLION)

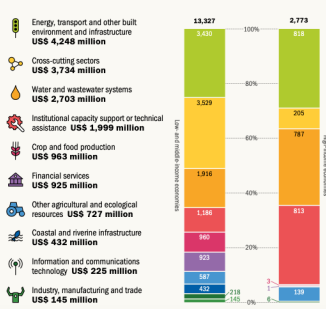


TOTAL MDB CLIMATE FINANCE BY ACTIVITY

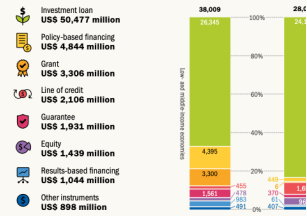
MITIGATION FINANCE US\$ 49,945 million



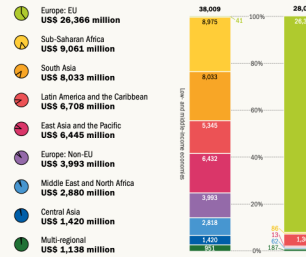
ADAPTATION FINANCE US\$ 16,100 million



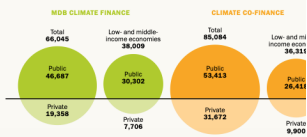
TOTAL MDB CLIMATE FINANCE BY INSTRUMENT



TOTAL MDB CLIMATE FINANCE BY REGION



MDB CLIMATE FINANCE AND CO-FINANCE (IN US\$ MILLION)



Source: MDBs, 2021

Some of the names of Bilateral Development Cooperation Agencies funding climate projects in Indonesia include Australian Aid, Belgian Development Cooperation, Canadian International Development Agency, Danish Development Agency, European Commission, Finland's Ministry of Foreign Affairs, France's Department for International Cooperation, Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH Kreditanstalt fuer Wiederaufbau (KfW), Japan's Ministry of Foreign Affairs (MOFA) Japan Bank for International Cooperation (JBIC), Japan International Cooperation Agency (JICA), Netherlands Development Cooperation, New Zealand Aid Programme, Norwegian Agency for Development Cooperation (NORAD), Swedish International Development Cooperation Agency, UK's Department for International Development (DfID), United State Agency for International Development (USAID).

We will briefly discuss three of these cooperation. The most aggressive and long standing ones are the **USAID**. As part of the U.S.-Indonesia Comprehensive Partnership, the United States has pledged more than \$450 million towards environment and climate change cooperation (US Embassy and Consulates In Indonesia, n.d.).



DfID through The UK Climate Change Unit (UKCCU) helps Indonesia meet its emission reduction targets by promoting sustainable land use and better management of forests. This has contributed to saving over 2.8 million hectares from deforestation, led to 130 illegal mining licences being revoked, and has also led to the development of a better land use plan for Papua that is being used as a model for the other provinces. The UKCCU has helped ensure that 100% of all Indonesian exports of timber and wood products are certified as legal, enabling Indonesia to become the first country in the world to qualify for streamlined access to EU markets through the EU timber import scheme. This has facilitated trade by removing EU compliance checks on Indonesian timber imports, worth \$1 billion a year. The UKCCU is working with five ministries to improve the way climate change is integrated into national planning and budgets, and helping to tackle corruption and reduce conflict. Total budget for the projects is 26mGBP for 2018-2020 (UK Government, 2018).

The **Norwegian Embassy** in Indonesia supports a number of projects that aim to support the implementation of Indonesia's climate and forest agenda, as a part of Norway's International Climate and Forest Initiative. It has invested 644.45million NOK for 9 projects spanning from 2016-2024 and disbursed to various non-governmental organisations (The Norwegian Embassy in Indonesia, n.d.). **The Norway and Indonesia Government** under framework of Results based payments and verified emission reductions Indonesia and Norway work towards a phase of the partnership where Indonesia receives annual contributions for independently verified emission reductions. It will be channelled through a national funding mechanism. With the new peat regulation (PP57/2016) is expected to reduce the emissions from conversion of peat and peat fires. After this regulation was legally Norway has provided 25 million USD to support its implementation. These funds are currently channelled via the UN Office for Project Services (UNOPS). Norway will disburse an additional 25 million USD once the monitoring and enforcement plan for the new peat moratorium is ready.

In 2021, Indonesia **ended a deal with Norway** on cooperation to reduce carbon emissions from deforestation, due to lack of payment, the foreign ministry said in a statement. In the statement late on Friday, Indonesia's Foreign Ministry said it decided to terminate the agreement due to "the lack of concrete progress on the implementation of the obligation of the government of Norway," after the Southeast Asian country met its commitment to cut greenhouse gas emissions by the equivalent of 11.2 million tonnes of carbon-dioxide emissions in the 2016-2017 period. In 2020, Norway announced a \$56 million contribution to Indonesia, based on its 2016-2017 results on curbing deforestation under a United Nations-backed forest-conservation scheme known as REDD+. "The decision to terminate the Letter of Intent will in no way affect the Indonesian Government commitment to reduce greenhouse gas emissions (Reuters, 2021).

5.5. Private Finance for Climate Change Funding

Participation from private sector in climate change funding was encouraged by OJK through the issuance of the Sustainable Finance Roadmap (2014) and OJK Regulation no.51/2017 regarding the Implementation of Sustainable Finance for Financial Service Institutions, Securities Issuer, and public companies.

5.5.1 Private Green Bond

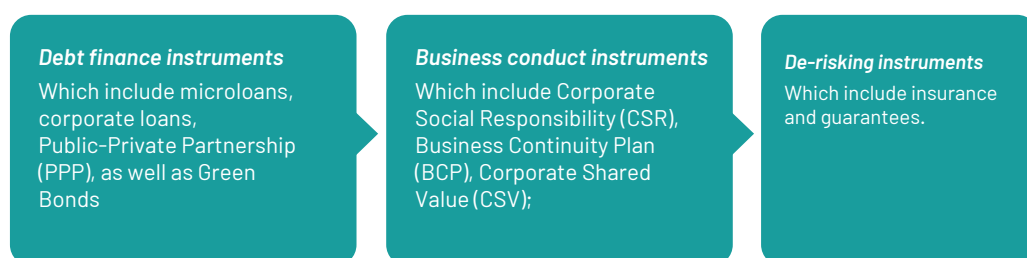
To date, Indonesia has issued 17 green, social and sustainability bonds to the value of USD7.7bn. In 2022 green bond issuances by two major energy State-Owned Enterprises are anticipated, i.e. PLN and Pertamina. These will be used to finance renewable energy assets. Green infrastructure projects, as identified in the report, can propel Indonesia's green stimulus; promoting green job creation whilst also addressing climate change. In 2022 green bond issuances by two major energy State-Owned Enterprises are anticipated, i.e. PLN and Pertamina. These will be used to finance renewable energy assets. Especially for **private green bonds** issuance related to climate and sustainability in Indonesia is presented in a table below:

Table 3. Private Green Bond Issuance in Indonesia

Green Bonds			
Star Energy Geothermal (Darajat II) Tbk.	USD 320 Juta	Okt 2020	Energy
Star Energy Geothermal (Darajat II) Tbk.	USD 790 Juta	Okt 2020	Energy
OCBC NISP	USD 150 Juta	Agu 2018	Energy, transport, water
P. SMI	USD 35th	Jul 2018	Energy, transport, water, waste, land use
Star Energy Geothermal (Wayang Energy) PT	580 juta	Apr 2018	Energy
Tropical Landscape Finance facility I Pte	USD 96 Juta	Feb 2018	Land use
Total	USD 1.936.035		
Sustainability bond			
PT Indonesia Infrastructure Finance	USD 150 Juta	Jan 2021	
Bank Mandiri	USD 300 Juta	Apr 2021	
Bank Rakyat Indonesia	USD 500 Juta	Mar 2019	
Total	USD 950 Juta		

Source: Climate Bonds Initiative, 2022

Aware that participation of private sector in climate funding is not yet as expected, The Fiscal Policy Agency of the Ministry of Finance conducted a study on the provision of enabling environment to encourage private sector engagement in climate change adaptation projects (Center for Climate Change and Multilateral Policy, 2021). Based on the insights gained throughout the study, the type of private sector actors that can be engaged in climate change adaptation projects ranges from Multinational Companies (MNCs) to Micro, Small, and Medium Enterprises (MSMEs). The instruments that are deemed potential to attract private sector engagement in climate change adaptation in Indonesia are categorized as follows:



The study carved and presented as a roadmap toward an enabling environment for private sector engagement in climate change adaptation projects and include:

- Enhancing awareness and technical capacity among the different stakeholders, both public and private;
- Refining the legal and regulatory framework;
- Facilitating access to finance for the private sector; and
- Improving the coordination and collaboration among the relevant actors and activities.
- Coordinate blended financed stakeholders (Center for Climate Change and Multilateral Policy, 2021)
- Strengthen the linkage between de-risking instruments and project pipeline

5.5.2 Philanthropy

There are leading philanthropists who are supporting social, education, women empowerment, health and other issues in Indonesia, but less is known in the area of climate change, so far there is limited reference about their roles in climate projects in Indonesia, nor the fund spent in the effort. We are featuring five of them here:



Ford Foundation has been actively support the environment activism in Indonesia, from research to advocacy to community empowerment. In Indonesia it is implementing Natural Resources and Climate Change Program, with clear intended impacts: secured land rights, local community will have a seat at the table, equitable benefits and good governance.



David and Lucille Packard Foundation through The Climate and Land Use Alliance (CLUA) has prioritized the specific high conservation value provinces of in their jurisdictional approach. The funds is used to strengthen the capacity and networks of local organizations and leaders at the existing local organizations that have limited access to large funders and whose size limits their scope. It stated that early grant making has indicted a need for technical assistance in financial management, strategic planning, and fundraising, among others.

Bloomberg Philanthropies

Together with PT SMI, they developed a pipeline of investable solar projects in Indonesia Through their renewed partnership, Bloomberg Philanthropies and PT SMI will pilot financial levers and technical support to scale-up investment in Indonesia's solar power. They are also working together to strengthen economic and environmental resiliency in traditional coastal communities in Central Indonesia, assisting economic improvements while strengthening environment resilience by creating economic opportunity for women, restoring local mangroves, and protecting coral reefs (Bloomberg Philanthropies, 2021).

IKEA Foundation



The IKEA Foundation in collaboration with ClimateWorks Foundation are launching a new \$12 million partnership to speed up climate action in Indonesia. It will focus on supporting policy progress in the economic sectors that use the most energy: transportation, buildings, appliances and heavy industries. These sectors currently do not receive philanthropic support in proportion to their potential to reduce emissions. They can also



deliver tremendous benefits in terms of pollution reduction, improved health and comfort, climate resilience and economic competitiveness. The project will engage the business and investment communities to show that ambitious climate action is the best way for Indonesia to attract investment and jobs, reduce risk and boost competitiveness (IKEA Foundation, 2017).



The
GOLDSMITHS'
Company Charity

Very little information is available about this organization. When working for TuK Indonesia, the author received a small grant funding in the area of capacity building of sustainable finance in Indonesia in 2018, aiming to train both activist and bankers in accountability and sustainability, so that the finances will move away from forests risk commodities .

6 Story from the Isles

6.1. Elang Foundation, Recipient of Indonesia Climate Change Trust Fund (ICCTF) – Riau Province, Sumatra Island

Perkumpulan Elang (“Elang”) is a non-governmental organization in Riau was established in April 2001, initially worked on water resources issues. In its development, Perkumpulan Elang works with community groups to disseminate information and build awareness of saving the environment as well as influencing policy changes at the local and national levels (Perkumpulan Elang, n.d.).

Riau province is the home of palm oil, pulp and paper industry—Industrial Plantation Forest (HTI)— so deforestation, peat destruction, forest and land fires and social conflicts occur intensely in this region. In addition to the threat of deforestation, HTI corporations are also benefited from the ease of doing business through Government Regulations (PP) in the forestry sector for period of 180 years, including tax breaks. The policies above will only hinder the realization of Indonesia’s commitment to fulfil fulfil the Paris Agreement.



Elang received funding from a collaboration between the ICCTF and UK UCC for a project on *Land and Forest Fire Mitigation & Community-Based Restoration Efforts through the TORA Scheme to Realize Sustainable Peatland Management Practices & Support the Green Siak Program*. The Siak Peninsula is the location for this project, and the period is June 2018 – March 2019, and the budget is IDR1.5b (equals to USD107.2th). Janes Sinaga ('Janes'), the Coordinator of Perkumpulan Elang, stated that he received the information of this funding opportunity from his networks in Green Siak Program, and the proposal is relatively easy, as format, project outputs and even activity have been designated by the ICCTF. Though limited in budget and time line, outputs of the projects are ambitious but achieved, such as:

- Emission reduction baseline document
- Baseline document of the project site's social and economic peat ecosystem
- There are 6 villages that use complicated procedures and rules
- Construction of 18 canal blocks
- Construction of 18 boreholes
- Construction of 1 forest and land fire monitoring tower
- Planting as a revegetation activity for peat restoration activities of 3000 local plant seeds
- There are 4 agroforestry villages developing agroforestry demonstration plots
- Establishment and facilitation of 6 Community Fire Preparedness (MPAs)
- Socialization of forest and land fires in schools and the dangers of forest fires for health in schools
- Preparation of 6 SOP and Early Warning System (EWS) documents

Janes mentioned, the **success of the project** is due to several factors::

- Elang has been in dealing with the project for a while, so there is expertise
- Though top-down in design, the project meets the need of the community
- Format of project documents, including reporting are workable.
- There are other accompanying projects in the location. This is because the project is quite limited to cover the area
- Throughout project implementation phase, interaction with local communities can be maintained, so that there is awareness to protect the forest, leave the use of fire, to choose more land friendly vegetations to cultivate.

Janes mentioned that all the boxes for the intended outputs are ticked, which means Elang has been successfully complete the project; however, he mentioned it is rather difficult to mention an exclusive success story of the ICCTF as there are other projects that Elang

took at the same time, to meet the needs of the community. He mentioned the challenge for CBOs to secure funding, and feared that once the project is accomplished, nothing else happen to secure the sustainability. Above that, at the moment another threat posed by the pulp and paper giant in the area, who has increased its production capacity to whose supply is undoubtedly met by production forests. The existence of projects within the community has to be addressed wisely, so as not to shift the harmony, the *gotong royong* or *mutual hand lending tradition* into project-based everything.

6.2 Wisnu Foundation, Penerima Small Grant Program Global Environment Facility (SGP-GEF) – Pulau Nusa Penida, Provinsi Bali

Wisnu Foundation (Wisnu) was founded in 1993, in response to the environment problems in Bali, especially the waste produced by tourism industries. After reform in Indonesia, since 1999 Wisnu has focused on environment management and community empowerment. Today, the focus of Wisnu's programs are research and mapping, community empowerment, and information management of community resources (Wisnu Foundation, n.d.).

Made Denik Puriati ('Denik'), the Director of Wisnu Foundation, mentioned that on the surface, Bali, especially for visitors, looks just beautiful, developed – as the infrastructure is better than in other provinces in Indonesia, and hence, overlooked by many, thinking that it is just The Isle of Goddess, as its long-standing brand. In actuality, Bali and its orbiting small islands, including Nusa Penida, where the project is located – have been highly exploited by the tourism industry, not only in nature, but the socio-cultural aspect of the community, also has to conform to the need of industry.

Wisnu wishes to bring back the reality before the boom of tourism happened, when the people of Bali were prosperous from different livelihoods, such as farming (especially sea-grass); the proceeds can send the children getting higher education, often to other island such as Java. Wisnu wants to restore and regenerate the nature, so the community can grow back the seagrass, vegetables, flowers for the rituals, the trees and the woven materials with natural colouring, etc, so that they will not be too dependent on the existing business model of tourism. Another example is *gotong royong* or *mutual hand lending* tradition in the community, which has gone as commercialism takes place.

This aspiration matches with what Small Grant Program of GEF offers, and hence, Wisnu willed to apply. It is for *Increasing Socio-Cultural - Ecological Resilience of Communities in Facing the Pressure of Globalization on Small Islands*, and has been on its 6th phase, 2019-2020; it exclusively received a IDR600m (equals to USD43th) for 2 years period, according to Denik. Wisnu act as intermediary organization, and work with other 8 Community Based Organization (CBOs) to achieve these outcomes (GEF SGP Indonesia, n.d.):

- Community-based institutional governance structures and networks exist
- Effective participatory decision-making to achieve landscape resilience.
- Ecosystem services in the target landscape are increased through multi-functional land-use systems.
- The sustainability of production systems in the target landscapes is strengthened through integrated agroecological
- Livelihoods of communities in coastal and marine landscapes and target forest landscapes are increased by developing environmentally friendly small-scale community enterprises and increase market access.
- Multi-stakeholder partnership to manage the development and implementation of an integrated community-based low emission system.
- Adoption (for development, demonstration and finance) of energy-efficient and renewable technologies and mitigation options at the community level increases.

Denik underlined that **the success of the project** is due to factors such as:

- An intermediary organization, in this case Wisnu, as coordinator of 8 other CBOs to implement the PMEL. It requires **trust, meaningful collaboration and integrity** among all involved.
- Village mapping need at the project design phase; this process can't be left out, to capture the actual need of the community, and participation of stakeholders.
- Flexibility on adjusting project activities based on actual need of the community, which was identified from interactions with its stakeholders, post proposal approval. The flexibility did not cost the intended outcome, in fact it made the project more impactful.
- The project is really implemented by local community. Participation of youth is ensured, in making sure of project ownership and sustainability.
- The project document format is relatively workable, and there is active assistance from the SGP GEF staffs throughout project implementation and reporting.

In particular, Denik proud to mention the Ecologic Nusa Penida Learning House, who is activated by local contractual teachers and seaweed cultivators. She hopes there is sustainable funding for community works; she mentioned the access of information (and networking) is what makes it hard for CBOs to sustain the project. There were collaborations with local government office via direct appointment, but this is also case by case basis. The Covid pandemic recovery is what worries her, as the tourism is booming again, and no better business model is put in place, as if no one learnt the lesson. Another threat is mixed messages from the government, she mentioned an example, "today we are encouraged to protect the mangrove and coral reef, the next day, we learnt the government issued a permit for LNG terminal development in the same mangrove area."

Figure 19. Documentations of Wisnu Foundation's Activities

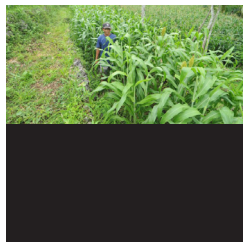
Natural coloring for woven material: tenun cepuk and geringsing



Solar energy is utilized for electrical system in the Learning House, with a total power of 1,000 wh



Land preparation for vegetables and its harvesting



Source: Author's documentation



7 Conclusion

Indonesia's policy landscape on climate change financing is rather complex, following the national policy landscape which objective is to fulfil the country's commitments to UNFCC down to technical level. For this purpose, the Indonesian government already has an umbrella policy that ratified UNFCC law i.e., Law No. 16 of 2016 regarding the Ratification of the Paris Agreement, an update of Law No. 6 of 1994 on UNFCC and a number of lower-level national policies in accordance to strengthen Indonesia's commitment to the UNFCC. On the lower level of Indonesian regulatory hierarchy, the government has issued Government Regulation (*Peraturan Pemerintah*) No.46 of 2017 regarding Environmental Economic Instruments or Presidential Decree (*Peraturan Presiden*) No. 77 of 2018 regarding Environmental Fund Management, among others. Climate change actions have also been incorporated into the country's National Mid-term Development Plan (RPJMN) 2020-2024 (Presidential Decree No. 18 of 2020). At the lower regulatory hierarchy, hundreds of regulations have been issued since the 1990's to support the implementation of climate change mitigation and adaptation activities.

The institutional landscape of climate change financing is highly multifaceted, with a variety of ministerial agencies working through different independent and interrelated institutional structures to channel funds from international to national and local structures. The three leading program and budget decision makers at the national level are the Ministry of Finance (the Fiscal Policy Agency or *Badan Kebijakan Fiskal*), Ministry of Environment and Forestry (KLHK) and National Development Planning Agency (Bappenas). These ministerial agencies are responsible to design, assign, supervise and monitor the climate financing pipelines in Indonesia. Under the three ministries lie more complex institutional structures as the disbursement and utilization of the climate fund require a high level of transparency, participation of multi-stakeholders and accountability, inevitably involving more actors and institutions for decision making and for check and balance mechanisms. As different international funds for instance, demands different structures to channel money to local institutions and population .

The international climate change financing in Indonesia is also complex, with each entity or instrument having its own structures and authorization levels. AThere are four main sources of funding i.e. multilateral and bilateral funding, MDBs (multinational development banks) funding, private philanthropy and domestic (national) budget. Some entities that were established due to international mandates to fill the financial gap required for





developing countries to achieve Paris Agreement for instance, established new agencies to roll down and disburse their funds. Some other entities used extant national or local entities as their sub-structures, thus making these entities could possibly have overlapping tasks and responsibilities. For instance, the international climate financing entities such as GCF (Green Climate Fund) disbursed their funds through Accredited Entities (AE). Because AE could be public agencies, private sector, NGOs, government agencies, national development banks, commercial banks or other financial institutions, they could also channel climate funding from other pipelines.

Among the complexity of the climate financing structures, the Indonesian government established an integrated hub to channel funds through a variety of instruments and sources to specific projects and activities down to local community level. This hub is called the Indonesian Environment Fund Management Agency (*Badan Pengelola Dana Lingkungan Hidup/BPDLH*), a public service agency (BLU) which focuses on critical sectors such as forestry, energy and mineral resources, carbon trading, environmental services, industry, transport, agriculture, marine and fisheries). NGOs or communities can access climate funds by submitting program/project proposals as per the call for proposal mechanism by BPDLH which is advertised to public. The submitters are usually CBOs or CSOs, which BPDLH capacitated to meet the quality and accountability of the proposals and projects.

Although local communities can access climate change adaptation and mitigation funds, they usually access the funds through intermediaries such as CBOs or NGOs to address financiers' accountability requirements. There are also limits to how much grants can be accessed by organisations through calls for concept note or proposal. The case studies in this research exemplify that the NGOs that have successfully accessed climate change funds for local communities must go through concept note or proposal submission stages of financiers. Different financier has different level of difficulties and both case studies showed that NGOs chose to propose for grants which cover issues they are already familiar with or have long history of community-based work in that issue. Key issues to successful access to climate financing are rather 'classic': NGOs need to have a good track record in working on similar issues, they work closely with local community, they have experience working on similar type of project and proposal, they have accompanying projects in nearby project sites to complement the climate financing grants (which in some cases, are too low) and lastly, they have network organisations or persons that could provide information about access to funding.

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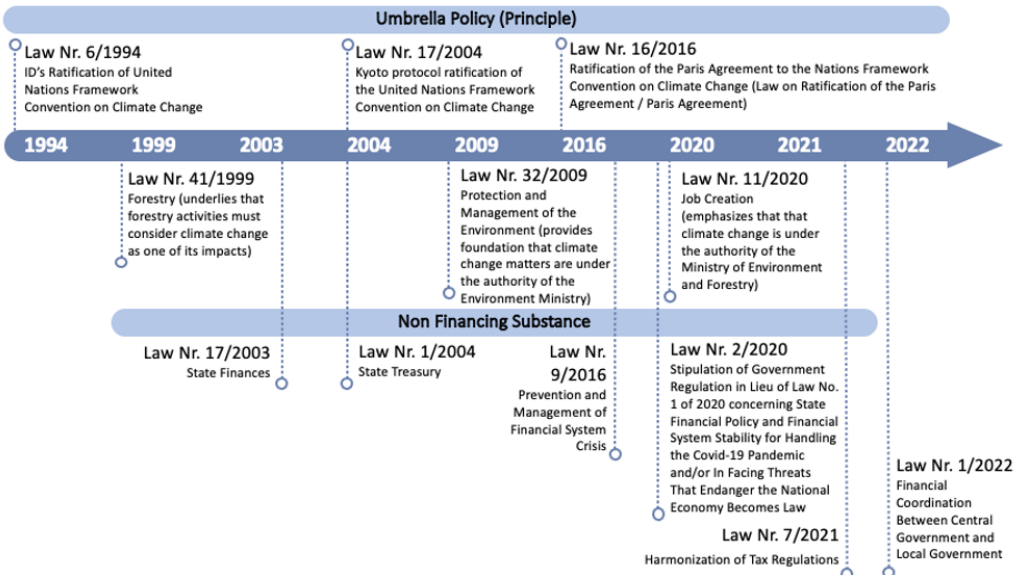
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Appendix

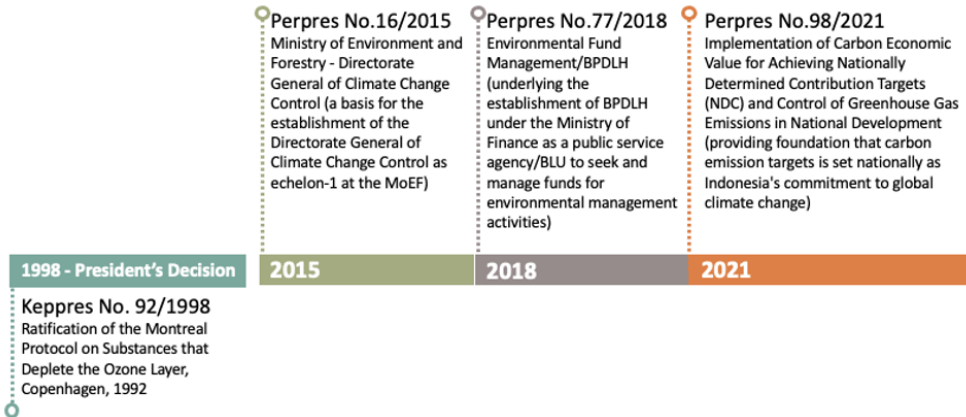
Appendix 1. Mapping of Law, Regulation and Relevant Document on Climate Change and Its Financing in Indonesia



Government's Regulation



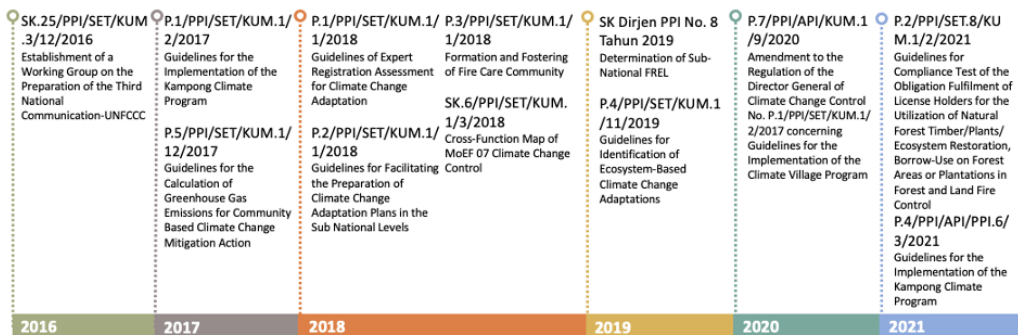
President's Regulation and Decision



Minister of Environment and Forestry's Regulation/Minister of Environment's Decision Letter



Relevant Documents, Governed by the Climate Change Control Directorate General of the MoEF



RI Delegates Report and Glasgow Climate Pact



Appendix 2. Summary of interview with Dr. Tri Joko Haryanto, Chairman of Indonesia NDA GCF, at the Fiscal Policy Agency, Ministry of Finance

Upon in-depth interview on 18th April 2022, Mr. Tri Joko of Fiscal Policy Agency explained the available climate change financing scheme in Indonesia, future development to meet the financing supply and demand, and strategy to expand the reach of financing to the district regional level. Although there are lots of effort to be done, but the future of climate change financing in Indonesia is looking both bright and green.

The first national vocal point of climate change financing in Indonesia started with the appointment of Kemitraan as Accredited Entity for GCF. Additionally, Kemitraan also appointed as National Implementing Entity for AF. Another accredited NDA for GCF is PT. SMI. PT. SMI is a special purpose vehicle for Ministry of Finance focusing on infrastructure financing. The Environmental Fund Management Agency (BPD LH) under the Ministry of Finance also involved to determine a harmonious climate change policy across Ministry and Agency in Indonesia. Mr. Tri Joko also emphasised the need to remove an organisational barrier across those agencies. One of the solutions to this organisational barrier is to create a MoU between agencies to unifying investment areas and portfolio sharing. Top-down approach from the Vice Ministry of Finance has been done to help smoothen this transition.

Climate change national finance dashboard is being made to accommodate the alignment of project financing. For example, most of the portfolio of BPD LH are education financing and they are lack of adaptation financing. To complete the portfolio as a whole, ICCTF or

SMI could make up with the adaptation financing. GCF portfolio restructuring is also being carried on. At the moment, GCF proposals that have been submitted mostly are multi-country project where Indonesia only get a small part of the funding, if not being left out. In the future, project initiator should clearly state funding allocation for Indonesia, in order to get the No Objection Letter from NDA. To support, Indonesia's domestic AEs are also being improved to match International AE, in terms of capacity. Indonesian bank, CIMB Niaga and Artha Graha, have been offered to become domestic AE to broaden the range in implementing projects and might have the multiplier effect due to the nature of the business.

Supply and demand if climate change financing in Indonesia have to be matched and prepared. Recently there are big projects, such as geothermal power project, which World Bank or UNDP has taken the role as AE. This is in line with the GCF layered project classification. For SME, the first layer of extra small is funding below 10 million USD, then 10 to 50 million USD for small, 50 to 250 million USD for medium, and large funding layer for above 250 million USD. The bigger the project it is expected to be managed by the AE with bigger capacity to ensure a successful project. Indonesia's domestic AE will need to be upgraded to be able to manage bigger project such that. On the other hand, there are lots of community-based funding demand that can be channeled with the collaboration between international and domestic AEs, for example between World Bank and PT SMI, to ensure community can get the benefit of the funding.

BKF is developing multi-level strategy to distribute and outreach funding to broader region, such as district area. LPKL, WRI or Prakarsa, which they have district branch office can be appointed to partner with BKF as consolidator and affiliating agency to the end beneficiary. Regional People's Representative (DPRD) and District Head have shown interest to be facilitated for their project with the help of the domestic AE, such as PT SMI or BPD LH. It is hoped that this concrete step can have a real impact on society. Collaboration in the shape of consortium across district or region is also expected to get a better impact on the society. It is also important to take into consideration the issue of GEDSI (Gender Equality, Disability and Social Inclusion) in determining the impact to the society. Both program and project level have to be check whether they consider this issue. Additionally, in order to confirm that the project is inclusive, random checks of its execution at the project level will also be undertaken.

Appendix 3. List of Informants

No	Name	Organization	Position	Date of Interview	Time of Interview
1	Joko Tri Haryanto	Fiscal Policy Agency	NDA GCF (National Designated Authority – Green Climate Fund) Pimpinan	Monday, June 16, 2022	19.00 – 21.00 Jakarta Time (GMT+7)
2	NDA GCF Secretariat Team	Fiscal Policy Agency	-	Friday, June 24, 2022	09.00 – 11.30 Jakarta Time (GMT+7)
3	Made Denik Purianti	Wisnu Foundation	Executive Director	Tuesday, June 28, 2022	14.00 – 16.00 Jakarta Time (GMT+7)
4	Janes Sinaga	Perkumpulan Elang	Executive Director	Wednesday, June 29, 2022	15.00 – 17.00 Jakarta Time (GMT+7)



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