

# CLIMATE FINANCING ACCESS GUIDEBOOK FOR LOCAL GOVERNMENTS







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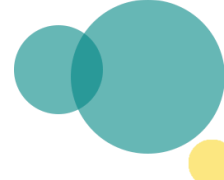
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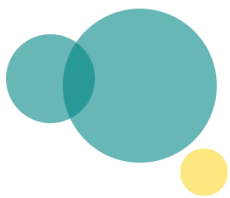


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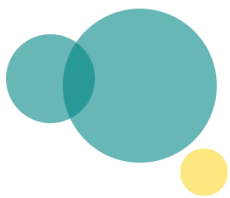
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## LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ADD	<i>Alokasi Dana Desa</i> or Village Allocation Fund
ADFD	The Abu Dhabi Fund for Development
AE	Accredited Entities
ALAKe	<i>Transfer Anggaran Kelurahan Berbasis Ekologi</i> or Ecology-Based Urban Village Budget Transfer
AMM	Armstrong Asset Management
APBD	<i>Anggaran Pendapatan Belanja Daerah</i> or Local Budget
APBN	<i>Anggaran Pendapatan Belanja Negara</i> or State Budget
BAU	Business as Usual
BEC	Breakthrough Energy Coalition
BLPS	<i>Biaya Layanan Pengelolaan Sampah</i> or Waste Management Service Fees
BLU BPLDH	<i>Badan Layanan Umum Pengelolaan Dana Lingkungan Hidup</i> or Environmental Fund Management Public Service Agency
BUMD	<i>Badan Usaha Milik Daerah</i> or Local Owned Enterprises
BUMN	<i>Badan Usaha Milik Negara</i> or National Owned Enterprises
CCF	Climate Change Fund
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
CEFPF	Clean Energy Financing Partnership Facility
CER	Certified Emission Reduction
CIF	Climate Investment Funds
COP	Conference of Parties atau Konferensi Para Pihak
CSR	Corporate Social Responsibility
CTP	Clean Technology Fund
DAE	Direct Accredited Entities
DAK	<i>Dana Alokasi Khusus</i> or Special Allocation Fund
DAS	<i>Daerah Aliran Sungai</i> or River Flow District
DBH-SDA	<i>Dana Bagi Hasil Sumber Daya Alam</i> or Natural Resources Revenue Sharing Fund
DEPIK	<i>Dana Insentif Pembinaan Kampung</i> or Village Construction Incentive Fund
DID	<i>Dana Insentif Daerah</i> or Regional Incentive Fund
DPL	<i>Dana Perlindungan Lingkungan</i> or Environmental Protection Fund
DPR	<i>Dewan Perwakilan Rakyat</i> or House of Representatives
DPRD	<i>Dewan Perwakilan Rakyat Daerah</i> or District House of Representatives
EDA	Enhancing Direct Access
ESDM	<i>Energi dan Sumber Daya Mineral</i> or Mineral Energy and Resources
ESS	Environment and Social Safeguards



GCCSI	Global Carbon Capture and Storage Institute
GCF	Green Climate Fund
GCPF	Global Climate Partnership Fund
GEF	Global Environment Facility
GGGI	Global Green Growth Institute
GRK	<i>Gas Rumah Kaca</i> or Greenhouse Gas
HIVOS	Humanist Institute for Development Cooperation
ICCTF	Indonesia Climate Change Trust Fund
ICLEI	ICLEI-Local Governments for Sustainability
IDB	Inter-American Development Bank
IDM	<i>Indeks Pembangunan Manusia</i> or Human Development Index
IELH	<i>Instrumen Ekonomi Lingkungan Hidup</i> or Environmental Economic Instruments
IGCC	Integrated Gasification Combined Cycle
IGGP	Inclusive Green Growth Partnership
IKLH	<i>Indeks Kualitas Lingkungan Hidup</i> or Environmental Quality Index
IRR	Investment Rate of Return
IsDB	Islamic Development Bank
IIX	Impact Investment Exchange Asia
JCM	Joint Crediting Mechanism
K/L	<i>Kementerian/Lembaga</i> or Ministry/Institution
KLHK	<i>Kementerian Lingkungan Hidup dan Kehutanan</i> or Ministry of Environment and Forestry
KLHS	<i>Kajian Lingkungan Hidup Strategis</i> or Strategic Environmental Assessment
KTT	<i>Konferensi Tingkat Tinggi</i> or Summit Conference
LoI	Letter of Intent
MDB	Multilateral Development Banks
MDG	Millennium Development Goals
MEA	<i>Masyarakat Ekonomi ASEAN</i> or ASEAN Economic Society
NAMAs	Nationally Appropriate Mitigation Actions
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategies and Action Plans
NDA	National Designated Authority
NDC	Nationally Determined Contribution
NDFIs	National Development Finance Institutions
ODA	Official Development Assistance
OFP	Operational Focal Point
PBB	<i>Perserikatan Bangsa-bangsa</i> or United Nations
PINA	<i>Pembiayaan Investasi Non-Anggaran Pemerintah</i> or Government Non-Budget Investment Financing
PP	<i>Peraturan Pemerintah</i> or Government regulations
Perpres	<i>Peraturan Presiden</i> or Presidential regulations





PLTSa	<i>Pembangkit Listrik Tenaga Sampah</i> or Waste Power Plant
PN	<i>Prioritas Nasional</i> or National Priorities
PCN	Project Concept Note
PPF	Project Preparation Facility
PPN	<i>Perencanaan Pembangunan Nasional</i> or National Development Planning
PPRK	<i>Perencanaan Pembangunan Rendah Karbon</i> or Low Carbon Development Planning
PT SMI	PT Sarana Multi Infrastruktur
OPD	<i>Organisasi Pemerintah Daerah</i> or Local Government Organizations
RAD-GRK	<i>Rencana Aksi Daerah Pengurangan Emisi Gas Rumah Kaca</i> or Regional Action Plans for Reducing Greenhouse Gas Emissions
RAN-API	<i>Rencana Aksi Nasional Adaptasi Perubahan Iklim</i> or National Action Plan for Climate Change Adaptation
RAN-GRK	<i>Rencana Aksi Nasional Pengurangan Emisi Gas Rumah Kaca</i> or National Action Plan for Reducing Greenhouse Gas Emissions
RKPD	<i>Rencana Kerja Pemerintah Daerah</i> or Local Government Work Plans
RPJMD	<i>Rencana Pembangunan Jangka Menengah Daerah</i> or Regional Mid-term Development Plan
RPJMN	<i>Rencana Pembangunan Jangka Menengah Nasional</i> or National Mid-term Development Plan
RTH	<i>Ruang Terbuka Hijau</i> or Green open space
SAP	Simplified Approval Process
SDGs	Sustainable Development Goals
SGP	Small Grants Programme
SRN	Sistem Registrasi Nasional
STAR	System for Transparent Allocation of Resources
TAKE	<i>Transfer Anggaran Kabupaten Berbasis Ekologi</i> or Ecology-Based District Budget Transfer
TANE	<i>Transfer Anggaran Nasional Berbasis Ekologi</i> or Ecology-Based National Budget Transfer
TAP	Transformative Actions Program
TAPE	<i>Transfer Anggaran Provinsi Berbasis Ekologi</i> or Ecology-Based Provincial Budget Transfer
TKDD	<i>Transfer Ke Daerah dan Desa</i> or Transfer to Regions and Villages
TPA	<i>Tempat Pembuangan Akhir</i> or Landfill
TPE	Third-Party Entity
UKM	<i>Usaha Kecil dan Menengah</i> or Small and Medium Enterprises
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Programme
UPP	<i>Unit Pelaksana Proyek</i> or Project Implementing Unit
UU	<i>Undang-Undang</i> or Law
YBUL	Yayasan Bina Usaha Lingkungan



## INTRODUCTION FROM ICLEI INDONESIA FOUNDATION

Climate action requires institutional and resources capacity building programs and/or activities, growth and procurement of technology, and developments that are considered to be hard structural. This will bring implication to funding needs. This practical guideline for climate

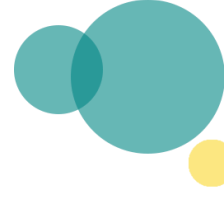


financing provides information for relevant stakeholders, especially local government on development partner institutions or organizations that provide funding for the implementation of climate actions and sustainable agenda.

Funding is needed to implement planned programs and/or activities. In reality the amount of funding required exceeds the institution's available budget. Various reports and studies have highlighted how climate change adaptation and mitigation activities require substantial amount of funding supports especially in countries prone to experience impacts of climate change. In order to overcome this limitation, the international world agrees on various type of climate funding schemes where development partner institution or commercial financial institution can help countries that are financially limited to implement climate action, minimize the risks and have the ability to support the attainment of developmental targets as well as their economic growth.

The financial requirement as the important indicator on the implementation of climate action activities and/or programs should be expressed explicitly in the development planning or working program of the local government organization hence they will have good and optimized operational capacity. Therefore, in responding to this situation, there are several measures to be taken. One of these measures is to ensure that the program





and/or activity set is a priority program. Priority here is perceived as the most important program in that particular area, but requires collective endeavour and collaboration with other organizations. Often time there are priority programs that are just collection of activities but none of these activities are addressing the real priorities of that area, which are threatened by climate change or to resolve transportation issue that will only bring disadvantages and health issues in the region.

\*\*\*In the agenda of climate change discussion, All Parties encourage and urge the developed countries to increase their investments in developing countries to support low-carbon economic growth. As part of developing country group, Indonesia has the opportunity to be one of the developed countries and still experiencing several challenges in overcoming climate change financing.

First, the climate change mitigation and adaptation are not sufficiently supported with scientific-based assessment in addressing the real needs of the region. This brings implication to weaken justification in the access of available or budgeted funds. Secondly, managing funds effectively and efficiently is not yet places as the new agenda that will only bring more burden to development sector or institution. Thirdly, the sub-national governments, especially urban administration as the highest contributor of green house gas emission have the ability to access climate action funds at the national or international level.

The negative impacts of climate change require much bigger funds for the recovery than the prevention. Therefore, it is very much timely for 'us' to place climate change program and/or activity as the priority and strategy for development target. Therefore, funds allocated will be more effective and efficient for low-carbon development and improved fund management will be the most appropriate approach for every key and technical sector to work based on integrated and coordinated plan. Furthermore, this can also be used as a corrective instrument for silo-based practices in which policy, program, action plan and output will be less and/or not sustainable. Of course, this approach should



respond issue on conflict of interest and program overlapping that often happen. Environmental and climate change are cross-sectoral.

We would like also to extend our gratitude to Ibu Endah Tri Kurniawaty and Ibu Henriette Imelda who have contributed to sharpen the concepts that are based on science and experiences. We would like to thank the ICLEI team in Indonesian office that have already worked to draft and finish this book. Finally, it is expected that this book could give a great opportunity for us to undertake climate actions. Thank you.

Jakarta, 15 September 2020

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## EXECUTIVE SUMMARY

To overcome the impacts of climate change, the Government of Indonesia has pledged its commitment at the international and national level to reduce green house gas emission and be more adaptive to climate change. The policy is then synchronized to sub-national level policy where the implementation process also requires funding support. The local fiscal capacity, which is only 20% will need further 80% of other funding support in order to implement the climate change mitigation and adaptation. In order to access the funds, sub-national government must be able to identify and appropriately place the environmental economic instrument models by also taking into consideration the prevailing legal basis.

Sub-national government plays a very strategic position in the fight against climate change in which their fiscal capacity will be one of the criteria used by line ministries in providing and/or forwarding the available grants for the purpose. In order to map out fiscal capacity and to improv local government fiscal governance, budget tagging is one of the best measures that local government can take in allocating budget for climate change adaptation and mitigation.

Local government can access various models of financial support and ECLs that either purely come from State Budget (APBN), purely commercial, purely philanthropic, public-private partnership, or blended finance and impact investment. Aside from public funds, at the national level, the local government can also access funding from Badan Pengelola Dana Lingkungan Hidup (Environmental Funds Management Agency) or Pembiayaan Investasi Non-Anggaran Pemerintah (PINA). The local government could also collaborate with other line ministries in accessing Green Bonds or conveying their support to civil society organization, academics and private sectors in access Indonesia Climate Change Trust Fund (ICCTF)



Local government cannot directly access the funds in any form such as grants or loan from international institution. But in order to reduce vulnerability and increase adaptive capacity to climate change impact, the local government together with *National Accredited Entity* (NDA), in this case Kemitraan, can access *Adaptation Fund* under the patronage of UNFCCC Kyoto Protocol. Furthermore, the local government can also access Green Climate Fund for their mitigation and adaptation program. Aside from providing funding support some international institutions such as *Climate Change Fund* (CCF) and *Global Environment Facility* (GEF) also provide technical assistance for climate change mitigation and adaptation. For the funding of renewable energy and efficiency energy, *Clean Technology Fund* (CTF) and *International Renewable Energy Agency* (IRENA) could be the alternatives for local government.

The private sector also has an important role in providing funding to local governments in the form of loans, equity, grants, and Corporate Social Responsibility (CSR) programs. In addition to offering funding for activities in the form of feasibility studies or projects, many institutions help in building connection between local governments and investors for funding support. For example, the Transformative Actions Program (TAP) mechanism developed by ICLEI-Local Governments for Sustainability, which can assist local governments in improving proposal bankability by increasing visibility to prospective investors.

It is expected that this technical guideline can inform and guide local governments in accessing funding scheme for climate change action, especially on relevant procedures and documents that are required to be completed.



### 1.1. Climate Change Policy

As an archipelagic country Indonesia is highly vulnerable to the impacts of climate change from rising sea levels. In addition, population growth, which continues to increase in line with population density and coupled by existing economic growth targets directly increases emission-generated activities. Based on these impacts, action is needed to manage the on-going climate change.

The Indonesian government is one of the state parties in the 21st Conference of Parties (COP21) in 2015 organized by the United Nations Framework Convention on Climate Change (UNFCCC) in which 195 countries set targets to fight climate change<sup>1</sup>. COP21 resulted in an agreement known as the Paris Agreement. Indonesia expressed its commitment to reduce greenhouse gas (GHG) emissions, and put it into a Nationally Determined Contribution (NDC) document. In October 2016, Indonesia ratified the Paris Agreement, which is reflected in the Law No. 16 of 2016 on the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change<sup>2</sup>.

Indonesia is committed to reduce GHG emissions by up to 29% (3% higher than the previous commitment, which is 26% in 2020) with its own capacity by implementing the Business as Usual (BAU) scenario and by 41% by 2030 with international assistance. A striking difference between business-as-usual scenario and international assistance scenario is due to the possibility of Indonesia accessing international agreements and bilateral cooperation, which include technology transfer, capacity building, payment mechanisms for the results obtained, technical cooperation assistance and access to international funding. In NDC, there are five sector categories and the proportion of their contribution to efforts to reduce GHG emissions by 29% from the 2010 baseline, which are: forestry (17.2%), energy (11%), agriculture (0.32%), industry (0.10%), and waste

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<sup>1</sup>Source: <http://ditjenppi.menlhk.go.id/berita-ppi/2664-kesepakatan-cop21-pari2951>, accessed June 15, 2020

<sup>2</sup>Source: [http://ppid.menlhk.go.id/berita\\_klhk/browse/250](http://ppid.menlhk.go.id/berita_klhk/browse/250), accessed June 15, 2020



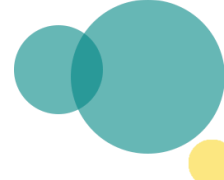
(0.38%). In terms of adaptation, Indonesia's commitments include increasing climate resilience in terms of economic and social development, resources, ecosystems and landscapes.

The Government of Indonesia has seriously responded to climate change by formulating relevant policies, one of these policies is the Presidential Regulation (Perpres) No.61/2011 on the Implementation of the National Action Plan for the Reduction of Greenhouse Gas Emissions (RAN-GRK). RAN-GRK mandates the composition of plan for GHG emission reduction at the national level and provincial level (RAD-GRK). Furthermore, the Government of Indonesia has also drafted regulation related to GHG inventory, which is contained in Presidential Decree No.71/2011 on the Implementation of National Greenhouse Gas Inventories, as the legal basis for Regents and/or Mayors to submit report on the outcome of their GHG inventory activities to the Governor periodically (once a year); and then the Governor would report the results of the GHG inventory activities to the Minister once a year.

In 2014, the Government of Indonesia prepared a document on the National Action Plan for Climate Change Adaptation (RAN-API), which contains priority adaptation action plans for sectoral and cross-sectoral for short term, measures taken to mainstream adaptation action plans in the National Mid-Term Development Plan (RPJMN). Then as a continuation of the adaptation action plan, since 2019 the Government has been preparing the 2019 National Adaptation Plan (NAP) document as a revision of the previous RAN-API document.

Then in 2020, to improve the quality of RAN-GRK, a Low Carbon Development Planning (PPRK) framework is prepared, which is also integrated into the 2020-2024 RPJMN and a follow-up to Indonesia's commitment to the Paris Agreement. PPRK takes into consideration the economic, social aspects and measures to reduce GHG emissions that are in line with the improvement of quality of life. Therefore, in the 2020-2024 RPJMN,





the climate change agenda has been included as national priority (PN) number 6, which covers three groups of specific policies, which are:

1. Improve environmental quality;
2. Improve resiliency against disaster and climate; and
3. Climate change mitigation through the transformation of RAN-GRK into PPRK

These policies should be translated into actions at the sub-national level by policy synchronization between national and sub-national governments. This synchronization is significant to further ensure harmonization of NDC achievements. Moreover, in the implementation of climate change policies as well as the GHG reduction target, the funding need becomes an inseparable part of the whole process. Climate change policy and source of funding are discussed separately in this practical guideline.

## **1.2. Policy on Access to Climate Change Funding for Local Government**

In order to access climate change finance, local governments must consider the legal basis to understand how governance and funding supports are delivered. Figure 1 shows relevant regulations or policies to access of climate change funding support. Moreover, the Ministry of Home Affairs as the focal point for local governments has made a breakthrough innovation to improve the development planning and financial governance of local government through classification, codification and nomenclature. In order to maintain sustainable environmental function, national and sub-national government must develop and implement environmental economy instruments, which include (a). Economic development and activity planning; (b) Environmental financing; and (c). incentive and/or disincentive.



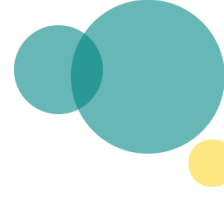
<b>Law No. 32/2009</b>	<p><b>Regarding the Environmental Protection and Management</b></p> <p>This law mandates the establishment of an <b>Environmental Economic Instrument</b> as an instrument for preventing environmental pollution and/or damage</p>
<b>GR No. 11/2011</b>	<p><b>Government Regulation (GR)</b>, Regarding the Procedures for Procurement of Foreign Loans and Grant Receipt</p> <p>This regulation states that local governments are prohibited from engaging in any form of engagement that may result in an obligation to undertake foreign loans.</p>
<b>PP No. 12/2012</b>	<p><b>Regarding the Regional Grants</b></p> <p>This regulation regulates the implementation of regional grant policies can not be separated from the implementation of the principles of decentralization and regional autonomy.</p>
<b>PP No. 46/2017</b>	<p><b>Regarding the Environmental Economic Instruments</b></p> <p>One of these regulations regulates the <b>Environmental Fund Management (PDLH)</b> with the financial management of the <b>Public Service Agency (BLU)</b>.</p>
<b>Perpres No. 77/2018</b>	<p><b>Presidential Regulations (PR)</b> Regarding Environmental Fund Management</p> <p>This regulation manages the formation of non-echelon organizational units to manage environmental funds as stipulated by <b>PMK No. 137/2019 in terms of the Structure and Governance of the Environmental Fund BLU</b>.</p>
<b>Permendagri No. 90/2019</b>	<p><b>Regarding the Classification, Codification and Nomenclature of Regional Development Planning and Finance</b></p> <p>This regulation enhances local financial and development planning governance on the basis of the Performance Approach.</p>

**Figure 1. Policies in Accessing Climate Change Finance for sub-national government**

**There are several environmental economy instrument or financing model that sub-national government can access, among others are pure support from State Budget (APBN), pure commercial support, pure philanthropy support, public and private partnership, blended finance and impact investment.**

Each EEI has different function and position, hence local government must identify and place these models appropriately in their endeavours to manage and sustain the environment, which also includes climate change adaptation activity. Funding allocation for environmental protection and management is mandatory as reflected in the following:

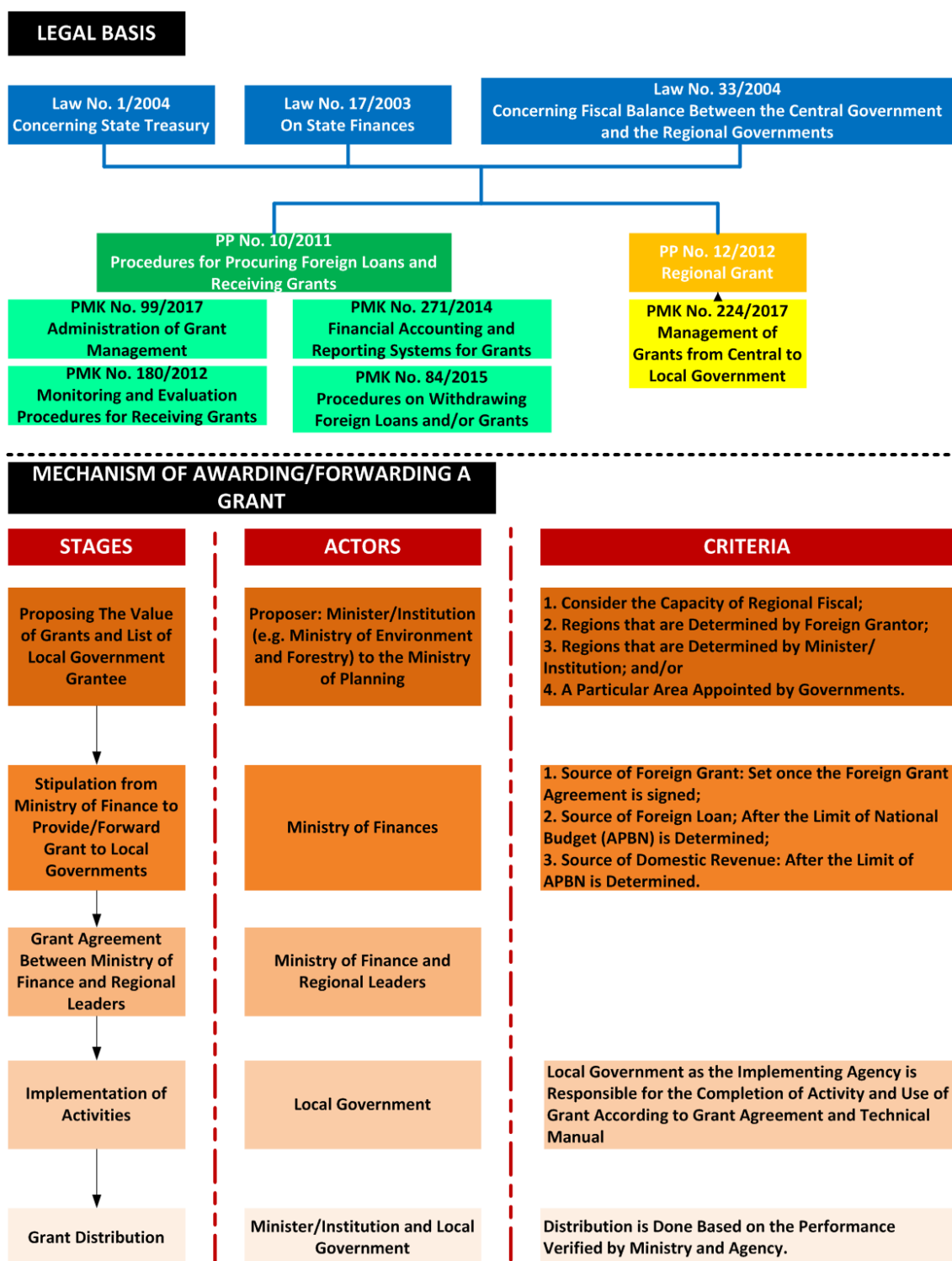


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- a. National government with the House of Representatives (DPR) of the Republic of Indonesia must allocate sufficient amount of budget to finance environmental protection and management as well as development program that considers the environment;
  - b. National government must allocate sufficient Special Allocated Funds (DAK) for the environment to be transferred to sub-national government that has good environmental protection and management; and
  - c. National and sub-national governments must allocate sufficient budget for environmental rehabilitation that can be categorized as climate change adaptation activity.

Environmental fund management could be done through fund-raising, accumulation of funds and fund-channeling. National government through its Coordinating Ministry of Economic Affairs, Ministry of Finance and Ministry of Forestry and Environment has introduced the **Environmental Fund Management Agency** or ***Badan Layanan Umum Pengelolaan Dana Lingkungan Hidup (BLU BPD LH)*** on October 9, 2019. BPU BPD LH manages and provides required funding for environmental and forestry protection, preservation and conservation. For the time being, BLU BPD LH in in transitional period to prepare administrative and service procedure that will allow sub-national government to access the fund effectively by 2021.

In terms of foreign loan, sub-national government can forward the loan and/or grants to its Local-Government Owned Enterprise following prevailing legislation. Meanwhile the sub-national government could also provide the grants to national government, other sub-national government, local-government owned enterprise or state-owned enterprises and civil society organizations with legal entity status.





**Figure 2. Legal Basis & Mechanism of Grants Provision/Channeling to Sub-national level**

Source: Ministry of Finance (processed data)



### 2.1. Role of Sub-National Government in Fighting Against Climate Change

Sub-national government is in a very strategic position to fight against climate change. In their plan, Ministry of Home Affairs has designed climate change integration to their Local Government Development Plan (RPJMD) using Strategic Environmental Study (KLHS), which is translated into Ministerial Regulation of the MoHA Number 7 of 2018 about the Drafting & Implementation of KLHS in the RPJMD. This integration will take place before the initial plan of RPJMD kicks off that is the preparation stage, consolidation stage for development plan, and in determining the framework for sustainable local government development.

For the implementation of climate change activity at the sub-national level, the division of authority follows the Law Number 23 of 2014, which consists of forestry, energy and mineral resources, environment, agriculture, marine and fisheries, industry, communication, statistics and elements that will support sub-national developmental activities. The division of authority is the basis for target disaggregation at the provincial, district and city for NDC.

The following table is about simple analysis on sub-national government role to fight against climate change, which is categorized under 4 categories of *Strength*, *Weakness*, *Opportunity* and *Threat*.

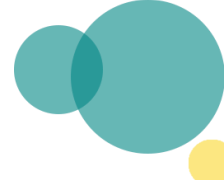
**Table 1. Simple SWOT Analysis on the Sub-National Government in Fighting Against Climate Change**

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> <li>National policy on climate change is regulatory in nature (<i>mandatory</i>);</li> <li>Several heads of local government have strong commitment on climate</li> </ul>	<ul style="list-style-type: none"> <li>Local government cannot access foreign loan and/or grants directly;</li> <li>High turnover of local government staff;</li> </ul>



<p>change issue; hence they can be role models for others;</p> <ul style="list-style-type: none"> <li>• Several financial supports at the sub-national level are available;</li> <li>• Implementation of climate change adaptation activities is more easily measured at the local/sub-national level;</li> <li>• Ensuring sustainability of the simplest measure at the local/sub-national level;</li> </ul>	<ul style="list-style-type: none"> <li>• Unclear mandate for local government (especially in city/district) in their RAD-GRK and RAD-API;</li> <li>• Coordination between provincial government and city/district government is relatively weak;</li> <li>• Difficulty in articulating and translating funding needs in project/action proposal (proposal writing)</li> <li>• Difficulty to define adaptation needs, including how to comprehend what adaptation is.</li> <li>• Require sufficient initial investment in accessing international funds.</li> <li>• Difficulty to meet requirements for international funds</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITY</b></p> <ul style="list-style-type: none"> <li>• Diverse characteristics of sub-national government enrich measures for climate change prevention</li> <li>• Good competition atmosphere between local governments in developing their capacity</li> <li>• Some local governments, for instance the City of Semarang managed to access international climate change funding, Green Climate Fund, with the help of accredited entity (PT SMI) that can be used as lesson learned for other administration.</li> <li>• There are quite a lot sources of funding though the climate change funding architecture is highly fragmented.</li> </ul>	<p style="text-align: center;"><b>THREAT</b></p> <ul style="list-style-type: none"> <li>• There is a risk in the implementation of climate mitigation or adaptation project at all stages. <ul style="list-style-type: none"> <li>- Development Stage: significant change of the policy/regulation, local government's credit feasibility status and selection of appropriate technology</li> <li>- Implementation Stage: quality of work of the contractor is far from expectation, there's a possibility of support shifting politically, swollen project budget</li> <li>- Operational Stage: technical specification does not match</li> </ul> </li> </ul>



- 
- Good international and private commitments in supporting climate change control measures at the national and sub-national level.
  - Climate change is cross-cutting, funding opportunity is from various sources.

## 2.1. Fiscal Capacity of Local Government in Fighting Against Climate Change

Local government's fiscal capacity is one of the criteria used by the line ministries in proposing local government to receive and/or forward grants for supporting climate change adaptation actions. Local government's fiscal capacity is reflected in local fiscal capacity map as set by the Ministry of Finance periodically. This is important to maintain national economic stability and fiscal balance between national and local governments.

As stipulated in the legislation, local government shall allocate budget for environmental protection and preservation activities, which also include climate change adaptation and mitigation.

**Budget tagging is the best way for budget allocation for climate change adaptation and mitigation. Local government may identify and calculate their allocated and realized expenditure as well as contribute to the achievement of NDC targets and climate resilience.**

Budget tagging for climate change adaptation at the local level could be done manually or electronically using e-planning and e-budgeting mechanisms. For local government whose planning and financial systems are already using electronic system, they can add tagging feature into their system to facilitate the local government organizations (OPD) to do budget tagging.



There are two steps in climate budget tagging, which are:

- a. Preparation Stage, documents to be prepared include:
  - ✓ RAD-GRK, RAD-API, IBSAP documents;
  - ✓ Current year's RKA or DIPA, which is SKPD 2.2 and SKPD 2.2.1 forms; and
  - ✓ Tagging table format

Climate Change Achievement		Mission		Affairs	
Analysis Result		In line with RPJMD		In line with Law No. 23 of 2014	
Strategy		Policy Direction		Program	
In line with the SKPD Strategic Planning		In line with the SKPD Strategic Planning		In line with the SKPD Strategic Planning	
Performance Indicator		Unit	Year 1	Year 2	Year 3
In line with the SKPD Strategic Planning					

No.	Account No.	Activites Name	Achievement	Output	Result	Total Budget	Personnel Expenditure	Good and Services Expenditure	Capital Expenditure	Note
							05.02.01	05.02.02	05.02.03	
1	2	3	4	5	6	7	8	9	10	11

No.	OPD	Expenditure Direct Activities	Expenditure of Activities	Development Achievement	Change Contribution
	OPD Name	Identification Result	Identification Result	Fill with the mission	Identification Result

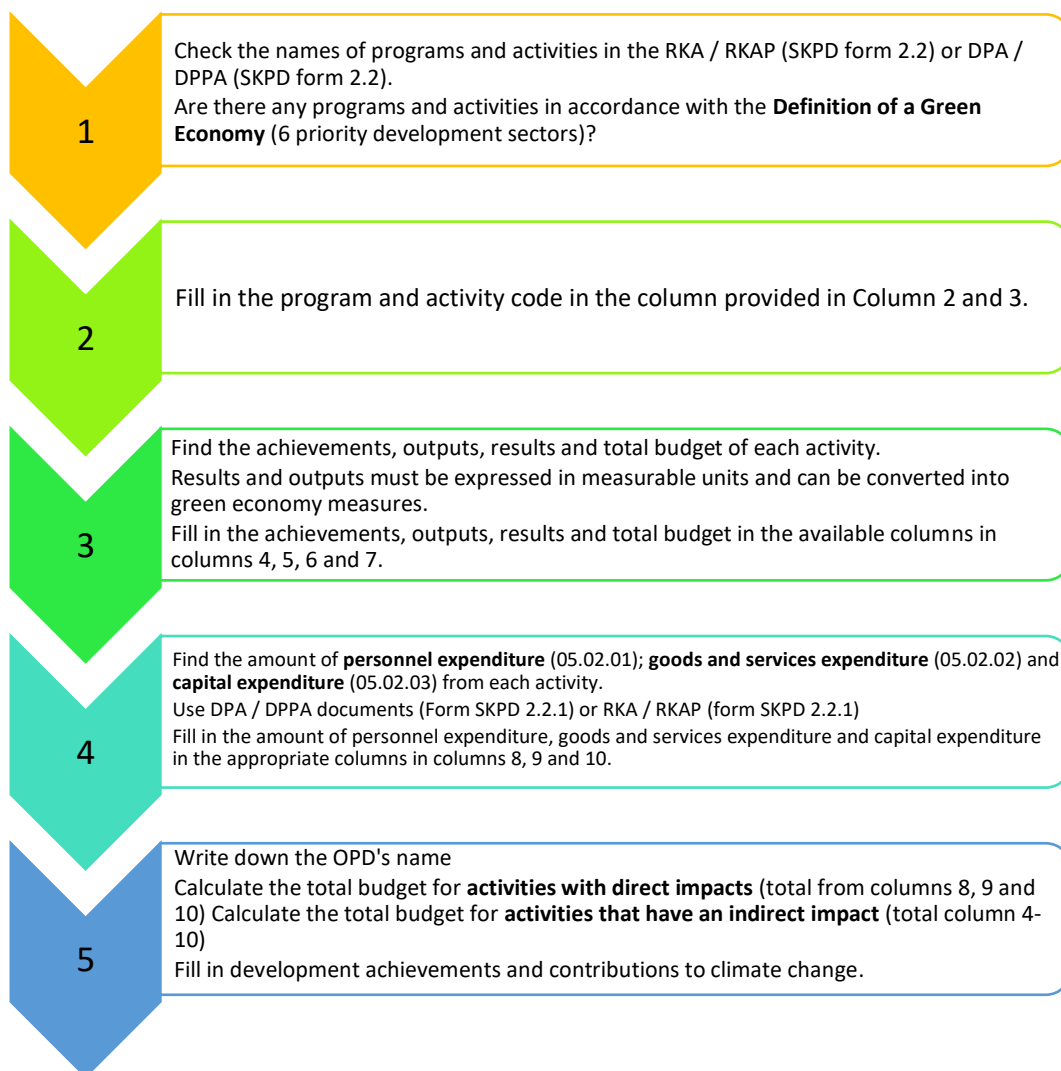
**Figure 3. Tagging Table Format**

Source: Webinar on the Improvement of Governance and Funding Support for Climate Change at the Local Level (23/04/2020), Ministry of Finance, (processed data)

- b. Tagging stage, consists of 5 (five) steps as shown in Figure 4.

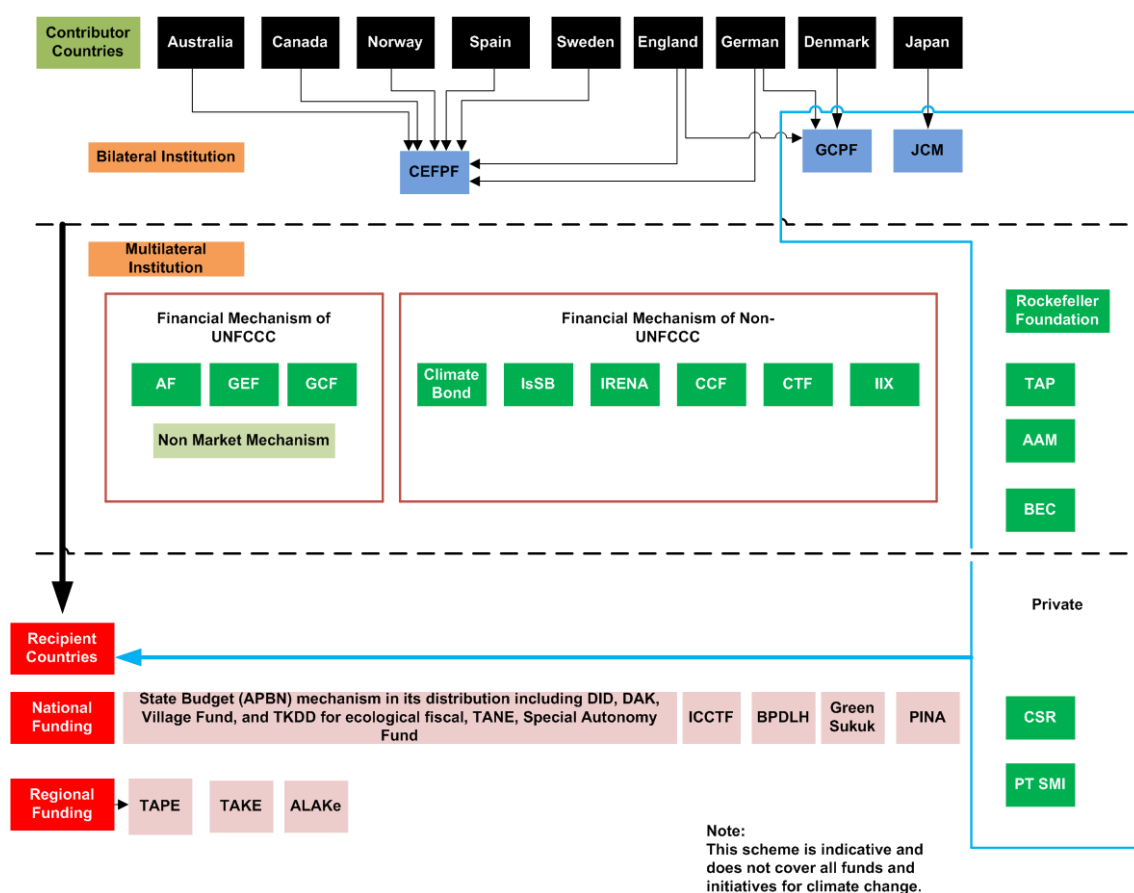
By doing budget tagging, local government will be able to gauge their fiscal capacity and find possible funding resources other than their own local government budget. Figure 5 illustrates about climate change adaptation funding architecture for local government.





**Figure 4. Five Steps in Tagging**





**Figure 5. Climate Change Adaptation Funding Architecture for Local Government**



### 3.1. Public Funds

The biggest funding for climate change adaptation activities are coming from State Budget mechanism (APBN) or known as public funds. In principle, public funds are used to ensure transfer from national to sub-national government to support environmental preservation measures. Public funds could be in forms of incentive (fiscal transfer) for climate change mitigation activities in the context of environmental preservation or other economic instruments.

The fiscal transfer accessible to local government is fiscal transfer for ecological purpose. It is expected that local government could integrate this scheme into their green development policies or their RPJMD that is currently being/has been developed. Currently fiscal transfer for ecological purpose is being developed to improve funding support from the State Budget.

**Table 2. Types of Fiscal Transfer for Ecological Purpose**

Type	Fiscal Instrument	Implementing Regulation
<i>Transfer Anggaran Nasional Ekologi</i> Berbasis (TANE)/ Ecological National Budget Transfer	Local Incentive Funds (DID) and Environmental Protection Funds	Law on State Budget, Law on Financial Relation between National and Local Governments
<i>Transfer Provinsi Ekologi</i> Berbasis (TAPE)/ Ecological Provincial Budget Transfer	Provincial Assistance	Financial Governor's Regulation that stipulates about financial assistance
<i>Transfer Kabupaten Ekologi</i> Berbasis (TAKE)/	District Assistance for Village	Financial Head of District's Regulation on ADD Mechanism



Type		Fiscal Instrument	Implementing Regulation
Ecological Budget Transfer	District	Fund Allocation or <i>Alokasi Dana Desa (ADD)</i>	
<i>Transfer Anggaran Kelurahan Berbasis Ekologi (ALAKE)/ Ecological Village Budget Transfer</i>		Budget allocation transfer for village/sub-district from municipality based on their ecological management performance	Reference regulation (such as Ministerial Regulation of Minister of Village Development) that will be used as reference by municipality or other technical regulation (mayor's regulation)

### 3.1.1. TANE

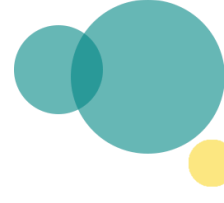
TANE is an incentive for local government in preserving forest or supporting nature's conservation measures. TANE is also part of transfer made to the sub-national and village level (TKDD). TANE is currently under development in the Ministry of Forestry and Environment and other parties such as The Asian Foundation, network of civil society organizations. TANE's formulation uses 2 (two) indicator categories as followed:

- ☐ Process indicators, consist of (a). budgetary proportion for environmental function; and (b). local innovation and policy that supports environment and forestry;
- ☐ Outcome indicators, consist of (a). forest land cover area; (b). change in forest land cover area; (c). Environmental Index (EI); and (d) any change in the EI

### 3.1.2. TAPE

TAPE is a reform of financial assistance scheme or grants from Provincial government to district/city based on their ecological management performance. TAPE legal instrument is the Government Regulation Number 12/2017 on Local Government Administration Monitoring and government Regulation Number 12/2019 on Sub-National Financial Management. In order to measure each level's performance a measured indicator at the provincial government level is required for this TAPE scheme.





Through Bappeda's involvement in the process as coordinator, local government involves other local government's organization in making agreement on measured indicator to use. Single data method or multi data method such as forest coverage, EI, and etc. can be used as supporting reference in making measured indicator. The measured indicator is evaluated annually by government or independent institution in order to assess their achievement. Each local government has their own TAPE scheme based on the data relevance and availability.

Example of TAPE implementation in Sulawesi Selatan and Kalimantan Utara Provinces<sup>3</sup>.

The **South Sulawesi Province's** TAPE is a follow up to MoU between South Sulawesi province administration with Ministry of National Development and Planning/Bappenas in supporting low-carbon development measures and to achieve relevant target and indicators to environment as set in the Local Mid-term Development Plan of 2018-2021.

The **North Kalimantan Province's** TAPE uses local government performance indicator for environmental measures using 5 (five) assessment criteria, which are (a) prevention and control of forest and land fire; (b). green open space; (c). waste management; (d) water protection; and (e) air pollution.

### 3.1.3. TAKE

In drafting TAKE, it is similar to TAPE which is adjusted to program priority relevance and data availability at the district level. For now, TAKE indicators include budget proportion indicators and district's policy innovation. TAKE has 4 (four) budget allocations, which are basic, proportionate, affirmation and performance incentive. The first district to implement TAKE is Jayapura District followed by Bener Meriah District.

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<sup>3</sup>Presented in the MoF's webinar-BKF on April 30, 2020



Bener Meria District	Jayapura District
<ul style="list-style-type: none"> <li>❑ Background: ecological disaster-prone area;</li> <li>❑ Budget allocation: 85,6% basic, 9,4% proportionate, 2,9% affirmation dan 2,2% performance incentive;</li> <li>❑ 20% affirmation allocation for villages in the border of the forest, 20% for villages bordering river shed area (DAS) and 30% for villages with social forestry concession or in possession of village forest recommendation;</li> <li>❑ Performance incentive allocation using Kampung Improvement Incentive Funds or known as <i>Skema Dana Insentif Pembinaan Kampung</i> (DEPIK) where 5% is for waste management policy, 30% waste management budget in District Revenue and Expenditure Budget (APBK); 30% for timeliness in implementing APBK Qanun and 35% for timeliness in reporting</li> </ul>	<ul style="list-style-type: none"> <li>❑ Background: role of indigeneous community in the advancement of sub-national level;</li> <li>❑ Budget allocation: 86% basic, 10% proportionate, 3% affirmation and 1% for performance incentive based on human development index (HDI);</li> <li>❑ Afformative allocation for the number of indigenous village and preparation</li> </ul>

### 3.1.4. ALAKe

ALAKe scheme is drafted for urban village priority program that should be in line with the municipality development vision. The financial transfer for urban village/sub-district level from municipality is based on ecological management performance. ALAKe scheme is being implemented in Pare-Pare through The Asia Foundation's Setapak Program assistance.





### 3.1.5. Village Financing and TKDD for Ecological Fiscal

Village financing and TKDD for ecological fiscal aims to better synchronize transfer planning and budgeting to sub-national level as well as of village funds from line ministries' allocation. TKDD for ecological fiscal is Shared Profit Fund from Natural Resources or *Dana Bagi Hasil Sumber Daya Alam* (DBH-SDA). DBH-SDA aims to overcome fiscal gap between national and sub-national government, hence fiscal balance is achieved.

There are 5 types of natural resources under DBH-SDA, as followed:

1. DBH SDA Forestry: transfer to sub-national level from forestry revenue;
2. DBH SDA Oil and Gas: transfer to sub-national level from oil-and-gas revenue;
3. DBH SDA Mineral and coal: transfer to sub-national level from mineral and coal revenue, which is land-rent and royalty (exploitation/exploration fee);
4. DBH SDA Geothermal: transfer to sub-national level from geothermal revenue, in a form of government fee and production fee; and
5. DBH SDA fisheries: transfer to sub-national level from fisheries revenue

**Each revenue is allocated to sub-national level based on percentage of funds needed to financially support sub-national level government in administering decentralization.**

**Guideline on Natural Resources Shared Profit allocation (DBH-SDA) can be accessed ([here](#)).**

### 3.1.6. Special Allocated Funds (*Dana Alokasi Khusus (DAK)*)

According to the Law Number 3 of 2004, DAK is funds sourced from State Budget (APBN) that is allocated for certain sub-national level area with objective to assist the sub-national level in financing special activity unique to that level and is in line with national priority. In the Neliti publication on Financing Climate Change Adaptation in Indonesia



<sup>4</sup>, this special activity need of sub-national level government is an activity that cannot be formulated in general allocation, unlike any other region's need, or part of national commitment/priority, which also includes activity funded by donor, sub-national reforestation funds and other humanitarian activities to meet basic needs. These needs are then accommodated by dividing them but not limited into categories of regular DAK.

There are 2 (two) types of DAK, which are Physical Construction and Non-Physical Construction DAK, in which each category has different mechanism. The followings are definition of these categories:

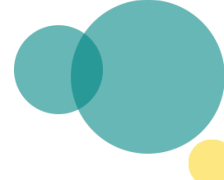
- Physical DAK is fund allocated to assist in the financing of physical construction that becomes the responsibility of sub-national government.
- Non-physical DAK is fund allocated to assist in the financing of non-physical purpose, i.e operational purpose on improving quantity and quality of local government needs.

**Table 3. Example of Physical and Non-Physical DAK in several Sector**

Sector	Example of Physical DAK	Example of Non-physical DAK
Education	Physical rehabilitation of school building	School operational assistance
Health and family planning	Construction of health infrastructure and facility	Program to eradicate stunting
Road infrastructure	Construction of bridge and road	Improved accessibility and road quality; road safety program

<sup>4</sup><https://media.neliti.com/media/publications/45138-ID-studi-literatur-pembiayaan-perubahan-iklim-di-indonesia-pemetaan-sumber-mekanisme.pdf> diakses pada 27 Juni 2020





Sector	Example of Physical DAK	Example of Non-physical DAK
Potable/drinking water infrastructure	Extending drinking water pipes for low-income households	-
Sanitation infrastructure	Provision of waste water, waste disposal facility and drainage	-
Marine and fishery	Construction of marine and fishery infrastructure	Activities for the development of marine and fishery resources, sea transportation
Agriculture	Construction of agriculture infrastructure	Activities to improve the performance of agriculture development at the sub-national level, rice-fields productivity improvement, improved quality of seeds
Infrastructure and government	Construction of local government infrastructure, improvement of government's information system	-
Environmental	<i>Early Warning System</i> development for environmental disaster, reforestation and rehabilitation of forest	Financial support for waste management

The allocation of DAK is determined annually in the State Budget. National Government sets general, specific, and technical criteria for implementing DAK for local government. DAK distribution mechanism is as followed:



➤ Distribution of Physical DAK

The local government through its implementing unit (SKPD) and Bappeda makes plan for activities financed by DAK, the plan is deliberated by line ministries, and then it will be distributed in line with technical requirements and sequence as stipulated by regulation. Distribution of funds could be done at once, gradually or mix; and

➤ Distribution of Non-physical DAK

It is a performance-based distribution. This means the sub-national level government must submit report on the implementation of non-physical activity financed by DAK i.e. report on funds utilization, utilization realization report, and recapitulation of fund disbursement at the sub-national level.

DAK finances special activities in sub-national level in line with national priorities. Fiscal policy instrument for environmental and forestry activities and their realization targets for Rp. 612.2 Billion.

1. Physical DAK, Environmental Sub-Sector

Waste management and its supporting facility/infrastructure, early warning system for environmental natural disaster.

2. Physical DAK, Forestry sub-sector

Rehabilitation of forest and land outside of forest, construction of facilities and infrastructure for forest management entity as well as access to social forestry management.

3. Non-physical DAK, Waste management financial assistance (*Bantuan Biaya Layanan Pengelolaan Sampah (BLPS)*)

BLPS aims to improve public health and environmental quality through significant reduction of waste. The basis for this fund allocation is region that already obtained technical approval from the Ministry of Environment and Forestry based on their waste production and BLPS unit cost. The target for this aid is city that has already operated the Waste Power Plant (*Pembangkit Listrik Tenaga Sampah (PLTSa)*).





### 3.1.7. Local Incentive Funds (*Dana Insentif Daerah/DID*)

DID incentivizes or recognizes sub-national government's performance in improving its financial management, basic public service, government service and social welfare. DID's legal basis is MoF Regulation Permen Keuangan 141/PMK.07/2019 on the Management of Local Incentive Funds. The distribution of DID is following prevailing regulation (see Figure 2)

**Important note to consider is that this fund CANNOT be used for honoraria unless it is attached to the activity such as for resource person, organizing committee fee; and travel cost.**

**So far there has not been any climate change parameter for DID. Therefore technical ministry should initiate and recommend climate-change parameter to Ministry of Finance, considering the available data used for assessment.**

According to the Ministerial Regulation, DID allocation is based on primary criteria and it consists of performance category.

Primary criteria for accessing DID is as followed:

1. Audit Agency's Unqualified Opinion on the Local Government's Financial Statement;
2. Timely stipulation of the bylaw on Local Government Budget;
3. Application of e-government (e-budgeting and e-procurement)
4. The local government receiving DID allocation must at least:
  - a. Get good rating (B);
  - b. Meeting Mandatory Spending; and
  - c. Timely submission of the report; and
  - d. Obtain assessment from non-ministerial agencies.



DID consists of performance category groups. One of the most relevant for ecological funding is waste management category. The category consists of:

1. Improvement of export;
2. Improvement of investment;
3. Good fiscal and local government financial management;
4. Social welfare;
5. Basic public service in healthcare;
6. Basic public service in education;
7. Basic public service in infrastructure;
8. Public administration service; and
9. Waste management

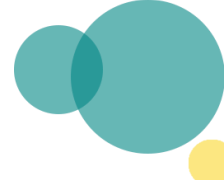
After the assessment is done for primary criteria and category groups, DID distribution can proceed in accordance with prevailing legislation. Next step will be utilization of funds for activities that will support performance attainment.

### **3.1.8. Village Fund**

Law Number 6 of 2014 on Village Management stipulates that village is an autonomous area. This means village is not a sub-ordination object of district government/municipality. The inherent and assigned authority of village could be exercised for attaining the social welfare through climate change mitigation and adaptation. Village has a space to plan for its development in response to the village needs, as reflected in the Village Mid Term Development Plan or Village Work Plan that are supported by village funds distributed annually to village.

It is ensured that village fund will change human resources and physical infrastructure landscape that will bring village into better condition, should the funds be utilized effectively and efficiently. This includes utilization of the fund for climate change adaptation.





Utilization of village fund for climate change adaptation activity has started to be introduced in 2019. Through the Ministerial regulation of Minister of Village, Under-developed and Transmigration Region on the Allocation for Village Fund Priority Utilization for 2019. Previously the Minister also issued a regulation Number 16 of 2018 that specifically elaborates about utilization of village fund in 2019. Based on this regulation, there have been measures taken to include climate change adaptation in the fund utilization plan as stipulated in the annual regulation.

The priority setting for village fund utilization is to guide and direct authority holder as well as for local government to draft technical guideline for village fund utilization and for national government to monitor and evaluate the use.

In the subsequent ministerial regulation, climate action for mitigation or adaptation (or combination of both) are always included. This should be seen as an opportunity to implement climate action at the ground level, especially village level, and should be used as lessons learned that will bring positive effect for social, economical and environmental aspects (improved quality of life, improved welfare and poverty alleviation as well as improved public service at the village level).

Principally, the utilization of village fund is for program and activity implementation and for community empowerment, and the financing of program implementation and other cross-sector priority activities<sup>5</sup>. Below are examples of climate change adaptation and mitigation for village development.

**Table 4. Climate action to support village development**

Climate Change Mitigation Activities	Climate Change Adaptation Activities
Some of these activities require the availability of supporting facility and it will	Construction of facilities and infrastructure to improve the situation

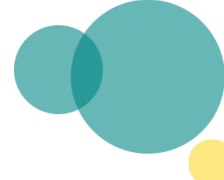
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<sup>5</sup>This is summarized from the General Guideline for Climate Change Management Facilitation as published by KLHK-Bappenas-Kemendes and USAID APIK Project (2028).



Climate Change Mitigation Activities	Climate Change Adaptation Activities
<p>require financial support from village fund. Some of these facilities are:</p> <ol style="list-style-type: none"> <li>Construction of biogas reactor;</li> <li>Solar power plant generator;</li> <li>Micro hydro power plant generator;</li> <li>Provision of seeds for reforestation and replantation purposes;</li> <li>Construction of composting facility for household, cattle and feces waste; and</li> <li>Construction of Waste Bank or 3 R installation.</li> </ol> <p>These climate change mitigation facilities will be seedling capital for village administration in reducing green-house gas emission directly from its source.</p>	<p>that will build climate resilience capacity, which includes tenurial, food, water, and renewable energy resilience that are self-managed by village community through the following activities:</p> <ol style="list-style-type: none"> <li>Creation of rainwater reservoirs or infiltration to increase surface or soil water reserves;</li> <li>Construction of building that protects and conserve spring/source of clean water;</li> <li>Construction of nursery for seeds to develop primary varieties that are adaptive to climate change;</li> <li>Obtainment of tool/facility that optimizes land use for agricultural, fishery and animal husbandry activities;</li> <li>Improvement and management of irrigation/water-efficient drainage;</li> <li>Procurement of facility/infrastructure that develops alternative livelihood that are climate sensitive;</li> <li>Establishment of joint horticultural garden;</li> <li>Environmental improvement to prevent flood that might trigger climate-change disease outbreak; and</li> </ol>





Climate Change Mitigation Activities	Climate Change Adaptation Activities
	i. Procurement of facility/infrastructure that prevents generation of mosquitos' larva in water containment pool.

Source: Annex to Ministerial Regulation of Minister of Village, Under-developed and Transmigration Number 16 of 2018 on the Village Fund Utilization Priorities in 2019.

District of Pidie in the Province of Aceh Special Region is one of the local governments that already use village fund for environmental spending. They utilize the village fund for 730 villages in the District to finance environmental preservation activities at the gampong (village) level, such as provision of green open space, cleaning of river shed area (DAS), maintenance of gampong forest, reforestation, waste management and other activities. Other example is the Village of Bulunganyar in Pasuruan, East Java that use village fund to develop biogas installation that will generate gas for cooking purpose.

### 3.1.9. Special Autonomy Fund

Special Autonomy Fund is established to address forest protection and conservation measures that would respond to regional unique condition such as in Special province of Aceh, Yogyakarta, Papua and West Papua. National Government has rendered extensive authority to special autonomy region to implement activities that have local wisdom values. This ample authority is expected to be utilized for the environmental protection for climate change prevention measures.

## 3.2. Green Sukuk

Green Sukuk is an innovative financial instrument to support Indonesia's commitment in its fight against climate change. Before its introduction in November 2019, the national government as issued Green Sukuk framework containing green projects that can receive financial assistance.

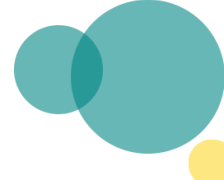


Green sukuk is sharia compliant bonds that is supported by collection of certain assets and used for activity investment or development or environmental project and climate change as well as for sustainable development agenda. In practice, green sukuk is used for financing construction, refinancing construction loan, or financing green subsidy provided by government. Typically, assets eligible to qualify for green sukuk are determined by standard certification for investments, activities or projects regarding the installation of diesel, biogas, ambitious energy efficiency, renewable transmission and infrastructure, electric vehicles and infrastructure, light rapid transport or LRT or may finance payments / government green subsidies.

**Table 5. Green Project Types in Green Sukuk**

<b>Green Project Types</b>	<b>Description</b>
Renewable energy	<ul style="list-style-type: none"> <li>• Renewable generator and transmission (wind, ocean, solar, water, biomass and geothermal); and</li> <li>• Research and development of product and technology for renewable energy generator including turbin and solar panel.</li> </ul>
Sustainable natural resources management	<ul style="list-style-type: none"> <li>• Sustainable natural resources management substantially avoid or reduce any carbon loss/increase absorption of carbon; and</li> <li>• Habitat and diversity conservation</li> </ul>
Energy efficiency	<ul style="list-style-type: none"> <li>• Improved infrastructure energy efficiency to generate at least 10% of energy consumption less than national energy consumption; and</li> <li>• Product and technology research and development and its implementation that will reduce energy consumption.</li> </ul>
Green tourism	<ul style="list-style-type: none"> <li>• Develop new green tourism following green tourism principles; and</li> <li>• Optimizing supportive infrastructure for sustainable tourism.</li> </ul>





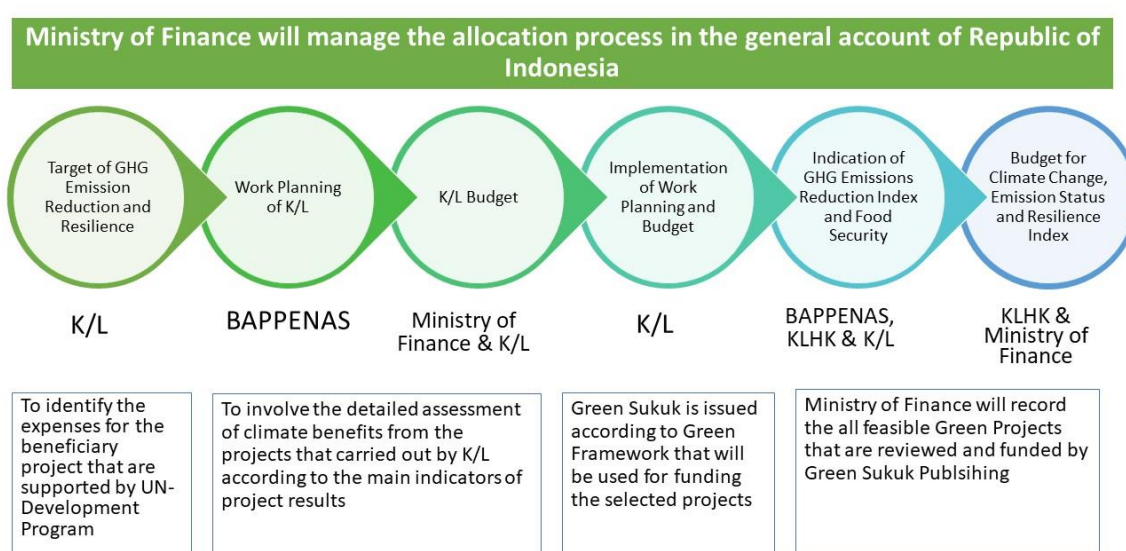
Green Project Types	Description
Climate Change resilience	<ul style="list-style-type: none"> <li>• Research on technology innovation with sustainable benefits;</li> <li>• Food resilience;</li> <li>• Flood mitigation;</li> <li>• Drought management; and</li> <li>• Public and social management</li> </ul>
Green building	Developing green building that is in line with green ship principles developed by Green Building Council in Indonesia.
Sustainable transportation	<ul style="list-style-type: none"> <li>• Developing clean transportation system;</li> <li>• Increasing energy efficiency (which will reduce at least 10% of energy consumption) and low-emission public transportation; and</li> <li>• Promote transportation network to more resilient design standard;</li> </ul>
Sustainable agriculture	<ul style="list-style-type: none"> <li>• Developing sustainable agriculture management method such as organic farming, reduced use of pesticides, research and development on climate resilient seeds, and energy efficient agricultural practice; and</li> <li>• Subsidy mechanism for agriculture insurance.</li> </ul>
Waste management and waste energy	<ul style="list-style-type: none"> <li>• Improved waste management practice;</li> <li>• Transform waste to renewable energy resources; and</li> <li>• Rehabilitation area for final disposal area</li> </ul>

Source: Ministry of Finance, processed data

**Green sukuk is accessible using budget tagging mechanism by national government. Ministry of Finance will ensure 100% will ensure 100% of the issuance proceeds to finance approved green projects.**



Even though only line ministries can access this green sukuk, they may collaborate with the local government by following the procedure in Figure 2. For regions that utilize the revenue from sukuk it is necessary to have a report prepared by the region. Currently, green sukuk issued for the environment are still general and for physical construction.



**Figure 6. Evaluation process and selection of Green Project**

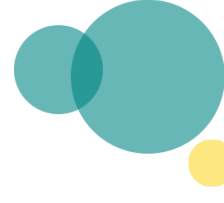
Source: Ministry of Finance

One of the real examples of Green sukuk issuance benefits in the support of green project is development of new irrigation network under Ministry of Public Works and Human Settlement to increase the water capacity and resilience in several areas prone to drought and finally support food resilience and productive economy.

### 3.3. Indonesia Climate Change Trust Fund (ICCTF)

ICCTF is financial instrument to reduce the green house gas emission intensity through low-carbon development and climate change impact adaptation. Furthermore, ICCTF seeks to integrate climate change issues into development plans at the national, provincial, district/city levels and implement initiatives on climate change mitigation and adaptation. By leveraging and channeling domestic resources and international funds





into projects that are in line with the planned implementation of RAN-GHG and / or RAD-GHG, ICCTF supports the national emission reduction target of 26% by business-as-usual scenario and 41% with international assistance by 2020.

ICCTF is the National Trust Fund (National Trust Fund) for climate change, which has the mandate to manage activities with APBN funding and international grants such as from USAID, UKCCU, DANIDA and etc. ICCTF is managed by a unit under the Ministry of National Development Planning/Bappenas in accordance with the Minister of Finance Decree No. 188/2012. ICCTF manages several projects in the land-based mitigation sector, adaptation and resilience sector, and the renewable energy sector. These projects are all over Indonesia and there are 99 recorded projects during 2010 - 2019.

In 2019, the ICCTF managed state budget funds of 34.47 billion and foreign grants of 29.97 billion. The total fund managed in 2019 is 64.4 billion. As of the 3<sup>rd</sup> quarter of 2019 63% of the total managed funds of Rp. 40,651,262,318.00 has been absorbed.

**The ICCTF DOES NOT allow any funds to be distributed to ministries, government agencies or local governments. ICCTF funding is ONLY accessible to civil society organizations, academics and the private sector. However, every proposal submitted to ICCTF MUST include a letter of support from the LOCAL GOVERNMENT where the project will be implemented, which shows that the project is contributing to the achievement of NAP-GHG and/or SNAP-GHG.**

**THE ICCTF proposal form can be accessed [here](#).**

ICCTF financing criteria are:

- Proposed project is in line with local and sectoral development focus;
  - Proposed project has integrity and environmental sustainability;
  - Proposed project that includes training or capacity building components;
  - Proposed project should identify impacts, sustainability, replication and synergy;
- and



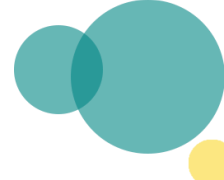
- Proposed project should also facilitate the efforts to eliminate all financial and technological challenges.

Of the 99 projects implemented within the period of 2010-2019, 23 projects were in Sumatera, 19 projects in Kalimantan, 36 projects in Java, 11 projects in Bali and Nusa Tenggara, 6 projects in Sulawesi, and 4 projects in Maluku-Papua. To provide better descriptions on projects financed by ICCTF, the following table elaborates the projects in detail.

**Table 6. Some projects financed by ICCTF**

Name of Program	Implementing Partner	Location & Period	Outputs (examples)
<b>Land-based mitigation sector</b>			
Implementation of 3R Program of Peatland Restoration in Block A and Block E former Peatland Projects in Central Kalimantan	Universitas Palangka Raya	Central Kalimantan  May 2018 – June 2019	Issuing ecological baseline and peatland ecosystem in the project location as well as emission reduction baseline.  There are 7 villages using rewetting rules and procedures.  Construction of 60 canal separator, 300 artesian wells, and 2 oversight towers for forest and land fire.



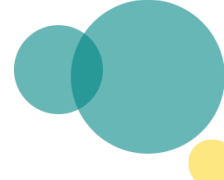


Name of Program	Implementing Partner	Location & Period	Outputs (examples)
Mitigation of land and forest fire & community-based restoration through TORA Scheme for Sustainable Peatland Management & Supporting the Green Siak Program	Collective	Riau  June 2018 – March 2019	Issuing documents of emission reduction baseline and peatland ecosystem and economical-social baseline of the project.  Construction of 18 canal separators, 18 artesian wells, and 1 oversight tower for forest and land fire
Wetting and prevention of peatland fire hazard	Consortium of UNKRIP and KONPHALINDO	Central Kalimantan  June 2018 – March 2019	Issuing baseline document for emission reduction and peatland ecosystem baseline  Construction of 30 canal separators and 60 artesian wells.
Sustainable Peatland Protection and Management by Women's Group in their endeavours to reduce emission from land and forest fire in Kampar peninsula.	Riau Women Working Group (RWWG)	Kampar Peninsula, Riau  June 2018 – March 2019	Ecosystem baseline, emission reduction and social-economic study in the project location.  Construction of 15 canal separators and 60 artesian wells.



Name of Program	Implementing Partner	Location & Period	Outputs (examples)
Climate Change Mitigation through Increased Involvement of Multiple Stakeholders in hidrological unit-based of peatland and forest management at the Siak River- Kampar River	Consortium of Konsorsium Yayasan Mitra Insani	Siak, Riau  June 2018 – March 2019	Emission reduction baseline, peatland ecosystem and social-economic study of the project.  Construction of 40 canal separators, 100 artesian wells and 2 oversight towers for fire monitoring
<b>Renewable Energy Sector</b>			
Improved efficiency and performance of Hybrid Power generator (Wind-Solar) to increase renewable energy utilization factor in the coast of Pantai Baru, Bantul, DIY	Energy	Gunungkidu I, Yogyakarta  April – Nov 2016	Online performance monitoring system of Hybrid Power Generator Plant is formed, improved quality of electricity generated from the power plant and better project administration documentation
Productivity Improvement of Community Agriculture and Animal Husbandry in Dry Land using Solar-	Universitas Mataram	North Lombok, West Nusa Tenggara	2.4 KWp solar panel system is in operation as well as 84 m <sup>3</sup> /day submersible pump. The drip irrigation system to irrigate 4-5 hectares of land



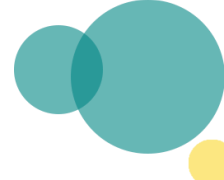


Name of Program	Implementing Partner	Location & Period	Outputs (examples)
cell-powered Drop-Irrigation System		April – Nov 2016	and 3 1,200 liter water tanks is operating.  The formation of farmer community groups that understand solar cells, as well as Micro, Small & Medium Enterprises (MSME) based on horticultural plantation
Pemanfaatan Energi Angin sebagai Energi Baru dan Terbarukan Pembangkit Listrik di Kampung Bungin dan Dampaknya terhadap Lingkungan	Pusat perubahan Iklim, Universitas Indonesia	Bekasi, Jawa Barat  April – Nov 016	Several 1kWe wind turbines are in operation along with their operational and maintenance management system.  Sea water desalination facility is in operation with capacity of 50 liters/day. Center of Technological Education and Coastal Community Empowerment is established
<b>Adaptation and Resilience Sector</b>			
Improved the capacity of local government to integrate climate change adaptation into	<i>Yayasan Transformasi Kebijakan Publik</i>	Gorontalo  April 2016 – May 2017	Data on vulnerability, priorities and policies in the District of Gorontalo are compiled



Name of Program	Implementing Partner	Location & Period	Outputs (examples)
their local government development plan	Indonesia (YTKPI)		<p>Working group on climate change adaptation is formed.</p> <p>Climate change adaptation strategies are composed and used as reference in setting RAD-API and local government development plan</p> <p>Advocacy plan for following up API strategy adoption to local government development program and policy is established.</p>
Support food security that is climate adaptable in Gunungkidul, Yogyakarta	YAKKUM Emergency Unit (YEU)	<p>Gunungkidul, Daerah Istimewa Yogyakarta</p> <p>April 2016 – Nov 2017</p>	<p>Information on food vulnerability, capacity and village vulnerability to climate change impact is available</p> <p>Farmers are protected from food and cattle loss</p> <p>Farmers are motivated in implementing sustainable climate adaptation agriculture and farming system</p>



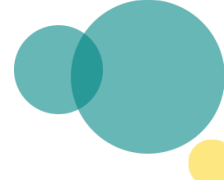


Name of Program	Implementing Partner	Location & Period	Outputs (examples)
Conservation of Spring in the North Block of Dieng Plateau as Climate Change Adaptation and Mitigation	<i>Yayasan Lingkungan Hidup Seloliman</i>	Kabupaten Batang, Jawa Tengah  April 2016 – June 2017	200 seeds of water preservation plants are planted that could increase economic productivity.  200 units of infiltration wells are built  Enacted village regulations, collaboration mechanism, and water source protection institution
Climate-based Agriculture Management: Improved Community Resilience in climate Change	Institut Pertanian Bogor (IPB)	Subang, Jawa Barat  April 2016 – Oct 2017	Documents on climate profile and regionalization, and projection of climate change in the District of Subang are available.  Interrelation-modelling between climate region, physical characteristic and agricultural practice is available  Extreme climate impact mapping as well as impact risk analysis for current and future climate change is available especially on agricultural impacts.



Name of Program	Implementing Partner	Location & Period	Outputs (examples)
			Available information on the list of adaptation options based on risk and impact assessments and local government plans
Risk-analysis-based Catch fishery adaptation to climate change and variability at the south coast of Java island	Institut Teknologi Bandung (ITB)	Sukabumi & Pangandaran, West Java; Cilacap, Central Java, Banyuwangi, East Java  April 2016 – June 2017	Availability of a Climate Change Risk Factor in catch fishery sector in area of study/analysis  Formulation of Policy Recommendations and Regional Action Plans for Climate Change Adaptation (RAD-API) in the capture fisheries sector (Summary for Policy-maker),  Technical recommendations and module for resilient catch fishery strategy for stakeholders in the sector are created.
Climate strategy projection and strategy for SRI rice variety using	Universitas Gadjah Mada (UGM)	Nusa Tenggara Timur	Climate prediction for the next 30 years and its impact to global climate index (SOI and SST) are available for



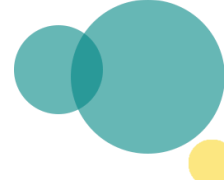


Name of Program	Implementing Partner	Location & Period	Outputs (examples)
climate integration model in NTT		April 2016 – March 2018	<p>NTT's agricultural production</p> <p>Land productivity improvement (tonne/hectare) is estimated using SRI method</p> <p>Recommendation for rice cultivation using SRI method that will be used for government policy in agriculture system in NTT is available.</p>
Climate change adaptation using bio-slurry mechanism in Lombok (ASA-Lombok)	Yayasan Rumah Energi	<p>Lombok Utara, Nusa Tenggara Barat</p> <p>Maret 2017 – Juni 2018</p>	<p>100 water tanks are built by local construction workers (local)</p> <p>70 households using bio slurry for their agricultural lands in 2017 and 2018</p> <p>25 households plant more than one variety or other high economic value variety in their land</p> <p>Learning document on climate change adaptation in the Village of Salut, Sub-district of Kayangan is available</p>



Name of Program	Implementing Partner	Location & Period	Outputs (examples)
Developing food and economic resiliency of vulnerable groups through sustainable agriculture in drought-prone area in District of Pangkep, South Sulawesi	Yayasan FIELD (Farmers' Initiatives for Ecological Livelihoods and Democracy)	Pulau Pangkajene, Sulawesi Selatan -	Document on the analysis of vulnerability, and 4 guidelines for training (TOT, PEKKERTI field school, API Field School and Pekarangan Field School) are available along with their capacity building trainings Water harvesting unit, 375 biopores wells and 9 infiltration well in 3 villages are available Availability of a demonstration plot for resilient agricultural application to climate change for 4 hectares in 2 villages, and 1 hectare of land fishery pond.
Household-based food and economic resilient for vulnerable household to adapt to climate change impacts	Yayasan Baileo Maluku	Kepulauan Aru, Maluku Maret 2017 – Juni 2018	Analysis document on climate change vulnerability in each village as well as documentation of climate change adaptation and resiliency is established.





Name of Program	Implementing Partner	Location & Period	Outputs (examples)
			12 units of fish cage fish cultivation in 100 hectares for development of local food supply including cultivation workshops are organized.
Food and water resiliency towards Climate Resilient Community in the District of Rote Ndao	CIS Timor Association	Kabupaten Rote Ndao, Nusa Tenggara Timur  Maret 2017 – Juni 2018	Document on vulnerability analysis and climate change adaptation for the district level is established, RAD-API for District of Rote Ndao and RADES-API in 3 villages.  Availability of a portfolio of horticulture commodity as guideline for 6 farmers' groups and post-harvest production procession

### 3.4. Environmental Funds Management Agency (*Badan Pengelola Dana Lingkungan Hidup (BPD LH)*)

BPD LH is one of the units under the Ministry of Finance that specifically manages environmental fund. Referring to sub-chapter 1.2, the regulations that establish the BPD LH are:

- Ministerial Regulation of Minister of Finance 137/2019 about structure and Environmental Fund Administration;
- PP Number 46 of 2017 Environmental Economy Instrument; and
- PP number 77 of 2018 about environmental funds management.



In principle, BPLDH is acting as fund manager, and one of its function is to support line ministry's program at the national and local level. Therefore, there is a Steering Committee consisting of 10 Ministers, which are Coordinating Ministry of Economic Affairs, Minister of Environment and Forestry, Minister of Finance, Minister of National Development Planning/Bappenas, Minister of Foreign Affairs, Minister of Marine and Fisheries, Minister of Agriculture, Minister of Energy, Resources and Minerals, Minister of Industry and Minister of Trade.

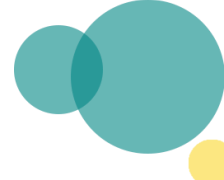
BPDH's funding source comes from both domestic or international private and public sources including bilateral support, international institution, private corporations or philanthropy sources. Funds managed by BPLDH is trust fund for conservation and compensation to pollution/environmental degradation. The initial funds managed by BPDH is reforestation funds channeled through grants (rolling funds facility) and REDD+ Fund channeled in grants scheme (expenditure).

AS a new organization, BPDH still prepares all of the instruments (Ministerial Regulation, Director's Decree and SOP) for the operationalization of BPDH.

**Table 7. Initial Managed Funds**

<b>ROLLING FUNDS</b> <ul style="list-style-type: none"> <li>Rehabilitation of forest and land; and</li> <li>Rolling funds for forest and land rehabilitation that were initially managed by the <i>BLU Pusat P2H</i></li> </ul>	<b>PROGRAM FUNDS</b> <ul style="list-style-type: none"> <li>Environmental conservation; and</li> <li>Environmental conservation funds coming from grants and donation from domestic and foreign resources</li> </ul>
<b>REPLANTATION AND INVESTMENT FUNDS</b> <ul style="list-style-type: none"> <li>Fund allocation for replantation of forest development;</li> </ul>	<b>REDD+ FUNDS</b> <ul style="list-style-type: none"> <li>Compensation funds for GHG emission decrease in forestry sector;</li> </ul>





<ul style="list-style-type: none"> <li>• Funding sources: State Budget and Ministry of Environment and Forestry</li> <li>• Beneficiaries: farmers group, forestry industry</li> <li>• Fund delivery through <b>loan/financing</b></li> </ul>	<ul style="list-style-type: none"> <li>• Source of fund: grants (results-based payment)</li> <li>• Beneficiaries: local government, community, research/academics institution, indigenous community; and</li> <li>• distribution: <b>grants (expenditure)</b></li> </ul>
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BPD LH distributes funding as followed:

1. Expenditure/spending

Direct distribution to beneficiaries because they have the capacity to access and indirect distribution through intermediary institution because beneficiaries do not have capacity to access.

2. Financing

Direct distribution to debtor while indirect distribution is through intermediary distributor that will distribute the money to debtor.

### 3.5. Non-State Budget Investment Financing/*Pembiayaan Investasi Non-Anggaran Pemerintah (PINA)*

PINA is infrastructure financing scheme without involving State Budget. PINA is alternative financing facilitated by National Government through Ministry of National Development Planning (Bappenas) to overcome infrastructure project's equity challenged. PINA funds allocation source from raising alternative finances that is utilized to finance national strategic projects that require huge capital with economically valuable and financially profitable.

Since it was first established in 2017, PINA has facilitated USD 3.3 Billion for 11 cross-sector projects at the end 2018. Projects registered in PINA includes various sectors such as infrastructure, strategic industry and plantation, housing, and energy. In the energy



sector, PINA also finances renewable energy projects such as waste-to-energy and biomass projects.

PINA offers several alternative financial options to investors using three financing instruments such as direct equity, loan and hybrid. PINA is currently working with other stakeholders to assess other instrument such as direct equity for real estate (DIRE) and direct equity for infrastructure (DINFRA).

Government institution, State-Owned Enterprises and Private-Owned Enterprises may propose their projects using PINA facility schemes by meeting the following main criteria as followed:

**1. Project with significant economic and social impacts**

Assessment is based on qualitative and quantitative studies on economic and social impacts of the project.

**2. Project has appropriate and legal documents**

Assessment with checklist of preparedness criteria, which includes submission of documents: project profile, action and funding plans, and other prerequisite documents.

**3. Project is investment feasibility**

The assessment is based on project investment feasibility where the Investment Rate of Return (IRR) of project is at least 13% in Rupiah.

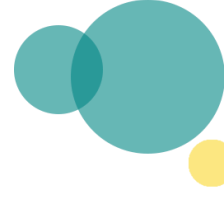
**4. Project is related with national development objectives**

The project is mentioned in the Mid Term Development Plan document and/or national Strategic Sector Plan

PINA evaluation and selection process consists of several steps, which are:

1. Submission of *Letter of Intent* (LoI) and project profile to PINA Center
2. Project's initial profile and evaluation on the company doing the project (sponsor)



- 
3. Feasibility study evaluation (regulatory framework, financial analysis, technological consideration, risk mitigation) based on project's preparedness criteria
  4. Signing of *Memorandum of Understanding* (MoU) between PINA Center and investee/project's owner
  5. Investor and investee matching process (due diligence process)
  6. *Financial close*
  7. Project Development and Operation



## BAB 4 | INTERNATIONAL FINANCING

### 4.1. Adaptation Fund

Adaptation Fund was established under Kyoto-UNFCCC Protocol. This instrument was established in 2007 and started to operate in 2009. Adaptation fund is the first financing instrument under UNFCCC. Adaptation fund has been committed to finance climate adaptation and resilience for US\$ 720 Million since 2010, including supporting 100 projects of concrete adaptation with around 8.7 million of direct beneficiaries.

Adaptation fund has been invested in various sectors among others are food security (21%), agriculture (16%), water management (14%), disaster risk management (14%), multisector (13%), rural/village development (10%), coastal zone management (9%), urban development (2%) and forestry (1%)<sup>6</sup>. The funding source is coming from 2% of the issuance of Certified Emission Reduction (CER) from Clean Development Mechanism under Kyoto-UNFCCC Protocol and also from other sources of funding to finance concrete projects and adaptation programs.

#### 4.1.1. Objectives

The overall objectives of all adaptation projects and programs are to support concrete and explicit adaptation activities, reduce vulnerability and increase adaptive capacity to respond to climate change, which includes variability aspect at the local, national, regional and cross-border levels. Proposed adaptation projects and programs by developing countries are based on the countries' needs, views, and priorities. Definition of adaptation program is a process to build a plan or approach to overcome more extensive climate change impacts within individual project scope.

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<sup>6</sup>Adaptation Fund at Glance, <https://www.adaptation-fund.org/adaptation-fund-infographic/>, accessed on May 27, 2020.





#### 4.1.2. Form of Funding

There are 2 (two) types of adaptation fund forms, which are (a). Adaptation program and projects; and (b). Small Grant under the Readiness Programme. The decision on funding source allocation should consider the criteria elaborated in strategic priorities, policies and guidelines adopted by the conference of All Parties<sup>7</sup>, specifically:

- a. Level of vulnerability;
- b. Level of urgency and risks arising from delay;
- c. Ensuring access to the fund in a balanced and equitable manner;
- d. Lessons learned in project and programme design and implementation to be captured;
- e. Securing regional co-benefits to the extent possible, where applicable;
- f. Maximizing multi-sectoral or cross-sectoral benefits; and
- g. Adaptive capacity to the adverse effects of climate change

##### 4.1.2.1. Adaptation projects and programs

In accessing adaptation projects and programs, developing countries (including local/sub-national level administration) must submit proposals to accredited institutions, which fall under 3 (three) categories, which are:

- National Implementing Entities (NIEs).  
Partnership for Governance Reform in Indonesia is a legal implementing entity for national level (Indonesia)<sup>8</sup>;
- Regional Implementing Entities (RIEs); and
- Multilateral Implementing Entities (MIEs).

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<sup>7</sup> [https://www.adaptation-fund.org/wp-content/uploads/2019/06/AFB-B.33-b-3-Add.2\\_SPPG\\_OPG-ANNEX-1\\_highlighted.pdf](https://www.adaptation-fund.org/wp-content/uploads/2019/06/AFB-B.33-b-3-Add.2_SPPG_OPG-ANNEX-1_highlighted.pdf), diakses pada tanggal 27 Mei 2020

<sup>8</sup> <https://www.adaptation-fund.org/apply-funding/implementing-entities/national-implementing-entity/>, diakses pada tanggal 27 Mei 2020.



**Table 8. Scope of Adaptation Project and Program**

<b>Sectors</b>	Food security, agriculture, water management, disaster risk management, multisectors, rural/village development, coastal management, urban/city development, and forestry.
<b>Feasibility Criteria</b>	<ol style="list-style-type: none"> <li>1. Consistent with national development strategy, which includes if appropriate, national development plan, poverty alleviation strategy, national communication and national adaptation action program and other relevant instruments;</li> <li>2. Economic, social and environmental benefits from projects;</li> <li>3. Meet national technical standards, if applicable;</li> <li>4. Project and program cost effectiveness;</li> <li>5. Management for arrangement, including finance and risk;</li> <li>6. Monitoring and evaluation arrangement and impact evaluation and assesment;</li> <li>7. Avoid duplication with other source of funding for adaptation from the same project activities; and</li> <li>8. Moving towards programmatic approach, if necessary</li> </ol>
<b>Funding Scale</b>	<ul style="list-style-type: none"> <li>○ Small-size projects up to USD 1 million; and</li> <li>○ Regular-size project above USD 1 million.</li> </ul>
<b>Supporting Requirements</b>	<ul style="list-style-type: none"> <li>✓ Commitment to social and environmental policies<sup>9</sup>; and</li> <li>✓ Commitment to gender policy<sup>10</sup>.</li> </ul>
<b>Forms</b>	<ul style="list-style-type: none"> <li>○ Form is accessible here <a href="#">here</a>.</li> </ul>

<sup>9</sup><https://www.adaptation-fund.org/wp-content/uploads/2013/11/Amended-March-2016-OPG-ANNEX-3-Environmental-social-policy-March-2016.pdf>, diakses pada tanggal 8 Juni 2020.

<sup>10</sup><https://www.adaptation-fund.org/wp-content/uploads/2016/04/OPG-ANNEX4-Gender-Policies-and-Action-Plan-approved-in-March-2016-1.pdf>, diakses pada tanggal 8 Juni 2020.



<b>Modality of Funding Access</b>	<p>     Financial Flow      Proposal Submission and Contract      Proposal Elaboration and Oversight      Instruction from the Board to the Trustee      Direct Access Modality   </p> <p>     *A Party Nominates a National Implementing Entity, a Regional Implementing Entity or a Multilateral Implementing Entity   </p>
<b>Cycle</b>	<ul style="list-style-type: none"> <li>○ Stage 1: Project and program selection (screening);</li> <li>○ Stage 2: Project and program reviewing; and</li> <li>○ Stage 3: Project and program approval</li> </ul> <p>In Stage 2, small or regular scale projects may go through one or two steps approval process. The differences between these types of approval are:</p> <ul style="list-style-type: none"> <li>✓ In one-step approval process, the project/program document submitted should be comprehensively developed; and</li> <li>✓ In two-step approval process, which consists of first step that is to submit brief project/program concept, and then followed by the second step that is to submit comprehensively developed project concept. While the two concepts might take the same amount of time, the process minimizes the risk of the initiator from not investing time and energy to project or program that fails the criteria.</li> </ul> <p>For both one or two-step approval process, financing will only reserve for project/program upon submission of comprehensive document</p>

For the time being, there is only one project in Indonesia that obtains funding from Adaptation Fund in which Indonesia's NDA is the Ministry of Environment and Forestry.



Furthermore, there are two projects from Indonesia that are currently in proposal reviewing process. The following table summarizes the programs in Indonesia with funding or currently in proposal reviewing process.

**Table 9. Several Projects in Indonesia in the Adaptation Fund Scheme**

Project with Funding			
Community Adaptation in Forest Food Source Management in Saddang Watershed Area Ecosystem			
Location	Sadang Watershed area runs through four districts in South Sulawesi (Tana Toraja, Toraja Utara, Enrekang, Pinrang) and small area of West Sulawesi		
Implementing Entity	Kemitraan/Partnership for Governance Reform in Indonesia	Executing Entity	Konsorsium Adaptasi Perubahan Iklim dan Lingkungan/KAPABEL (Consortium of Climate and Environmental Change Adaptation)
Sector	Food Security	Duration	One year
Amount of Funding	USD 835,465	Date approved	07/08/2019
Example of Outputs	<ul style="list-style-type: none"><li>• Increase social forestry scheme area for 5,000 hectares</li><li>• Improve local community and relevant stakeholders' capacity in sustainable forestry management</li><li>• Increase capacity of forest farmers, women and vulnerable group in sustainably managing forest food source and as well as development of forest food product processing facility</li><li>• Climate change community is established to improve the governance of coastal area as well as the development of creative industry and food diversification.</li><li>• POKJA-API is established as well as climate change adaptation action plan in local policy.</li></ul>		
Projects in Proposal Reviewing Stage			
EMBRACING THE SUN: Redefining public space as solution to overcome global climate change effect in urban area in Indonesia			
Location	City of Samarinda		



Implementing Entity	Kemitraan ( <i>Partnership for Governance Reform in Indonesia</i> )	Executing Entity	Universitas 17 Agustus 1945 Surabaya and <i>Queensland University of Technology</i>
Sector	Urban Development	Duration of project	Three years
Amount of funding	USD 824,835	Status	Proposal submission
Examples of outputs	<ul style="list-style-type: none"><li>• Mechanism and methodology for climate-resilient public space evaluation as well as its guideline</li><li>• Development of climate-resilient public space by involving public in the design process</li><li>• Training for local community and government in relevant sectors on public space design and strategies is organized</li><li>• Evaluation of local quality from prior, during or after the development of public space along with lessons learned are available</li></ul>		
Improvement of Coastal Community Adaptation Ability in Dealing with Climate Change Impacts in Negeri (Village of) Asilulu, Ureng, and Lima in the Sub-District of Leihitu District of Central Maluku in the Province of Maluku			
Location	District of Central Maluku, Province of Maluku		
Implementing entity	Kemitraan ( <i>Partnership for Governance Reform in Indonesia</i> )	Executing entity	Yayasan Harmoni Alam Indonesia
Sector	Coastal area management	Duration	Three years
Amount of funding	USD 963,456	Status	Proposal submission
Examples of Output	<ul style="list-style-type: none"><li>• The availability of fishery potential map based on sea circulation and fish migration patterns, as well as the availability of fish aggregating device (rumpon) and cooling facility in each village.</li><li>• Training for 450 fishers is organized, and established fishers' community</li><li>• 12 hectares of coral reefs are rehabilitated with increased capacity for 90 people related to this rehabilitation.</li><li>• 9 floating ponds for fish cultivation and 9 ponds for algae cultivation in 3 villages are available where each pond is managed by 20 individuals.</li><li>• 100 women in three villages are empowered to process fish products and algae</li><li>• 500 meters of embankment structure is recovered</li></ul>		



#### 4.1.2.2. Readiness Programme

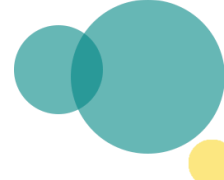
Adaptation fund council has provided several small grants under Readiness Program to support NIE in providing equal support to countries seeking accreditations with the small grants. Furthermore, the small grants aim to build capacity by organizing several activities to prepare climate funding. These smaller grants among others are South-South Cooperation (SSC) Grants, Project Formulation Assistance (PFA) Grants and Technical Assistance (TA) Grants. NIE includes among others ministries, inter-ministerial commissions, inter-governmental institutions. This means the grants are not accessible directly by local governments.

For the time being there has not been any project in Indonesia that is funded from Readiness program from Adaptation Fund scheme. To give bigger overview on the amount of funds delivered in this scheme, the following table shows several examples from other countries. According to table 10, it can be seen that the amount of grants varies depending on the form of the grant. Furthermore, the implementing entity for Readiness Programme should not come from the same country as grants recipient country.

**Table 10. Several projects funded in Readiness Programme Adaptation Fund**

Grants Type	Implementing Entity	Location	Budget Allocation
South-South Cooperation Grant (SSC)	National Environment Management Authority (NEMA) – Kenya	Bostwana	USD 50,000
South-South Cooperation Grant (SSC)	National Bank for Agriculture and Rural Development (NABARD) - India	Afghanistan	USD 50,000



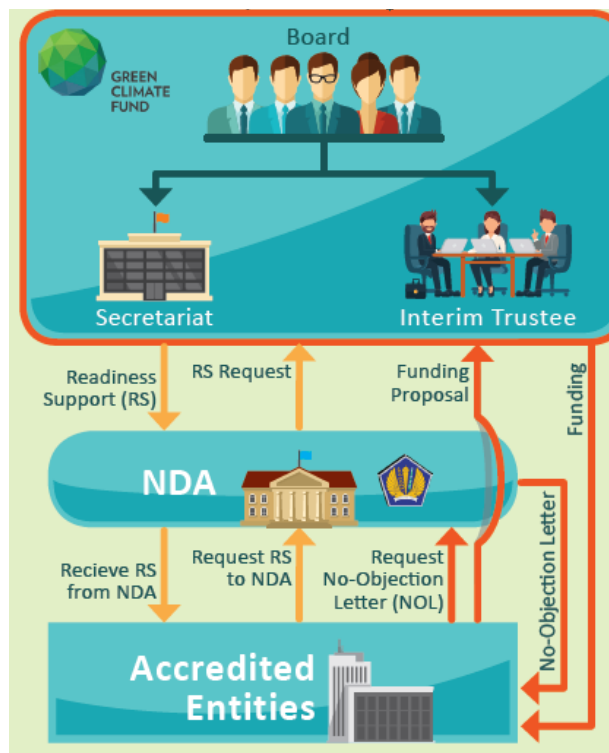


Grants Type	Implementing Entity	Location	Budget Allocation
South-South Cooperation Grant (SSC)	Centre de Suivi Ecologique (CSE) - Senegal	Cape Verde	USD 47,449
Technical Assistance Grant for ESP and Gender	Dominican Institute of Integral Development (IDDI)	Dominican Republic	USD 22,700
Technical Assistance Grant for ESP and Gender	Bhutan Trust Fund for Environment Conservation (BT FEC)	Bhutan	USD 25,000
Technical Assistance Grant for Gender	Fundecooperación	Costa Rica	USD 10,000
Readiness Package	Centre de Suivi Ecologique (CSE)	Burundi	USD 50,000
Readiness Package	Centre de Suivi Ecologique (CSE)	Mali	USD 50,000
Project Scale-Up Grant: Reducing Vulnerability to Climate Change in North West Rwanda through Community Based Adaptation (RV3CBA)	Ministry of Environment (MoE) - Rwanda	Rwanda	USD 99,000



## 4.2. Green Climate Fund (GCF)

GCF is an implementing entity of UNFCCC financing mechanism. GCF was established by the highest organ of UNFCCC, COP 16 in Cancun Mexico in 2010. Official, GCF started to operate in 2015 and is headquartered in Songdo, South Korea. The objective of GCF is to support project, program, policies and other activities in developing countries to adapt and mitigate as responses to climate change. Moreover, GCF also use public investment to stimulate private funding, opening up climate-friendly investment key for low carbon and climate resilient development.

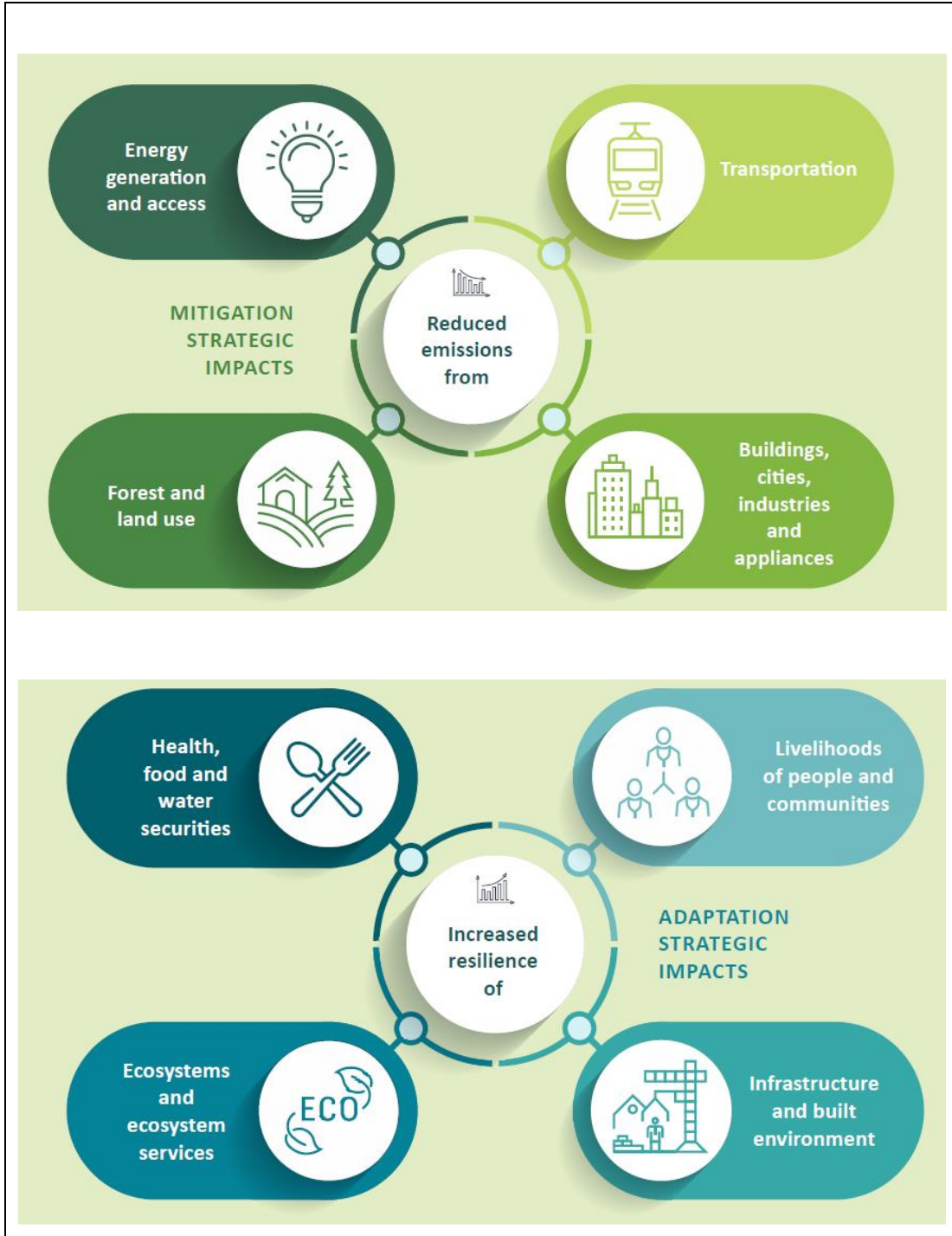


**Figure 7. Architecture of GCF**

Architecture of GCF is seen in Figure 6. Accredited entities (AE) and national designated authority (NDA) are the main components for accessing GCF funding. GCF works through AE to distribute its fund to project or program.

GCF funding area for project and program are in mitigation and adaptation.





**Figure 8. GCF Funding Area**

Source: GCF Booklet, 2018




**Currently Indonesia has one AE, which is PT SMI and 2 candidates of AE. Developing countries need to have NDA or focal points to access GCF funding.**

**Fiscal Policy Agency represents Ministry of Finance as Indonesia NDA-GCF based on the Ministerial Regulation of Minister of Finance Number 756/KMK.10/2017.**




GCF investment finance criteria are as follow:

1. **Potential impact from project.** Project/program contribution to the objective attainment and GCF funding area (adaptation and mitigation);
2. **Potential paradigm shift.** To what extent project generates impact greater than the expected impact of the invested project;
3. **Potential impact on Sustainable Development.** Impacts related to gender, environment and social issues;
4. **Project beneficiaries needs.** Funding vulnerability and need from the state and beneficiary population;
5. **Promoting state's ownership.** Ownership from beneficiary country and capacity to implement the project funded by GCF (policy, climate change strategy and institutionalization); and
6. **Efficiency and Effectiveness.** Economic impacts if possible, financial profit from the project/program.

**Table 11. GCF Funding Form or Window**

	<b>Readiness and Preparatory Support</b>
<b>Objective</b>	Strengthen the capacity of NDA, AE and private entity to draft National Adaptation Plan
<b>Parties with Access</b>	NDA, which is Fiscal Policy Agency representing Ministry of Finance. NDA could choose partner to access this funding and implementing approved activities

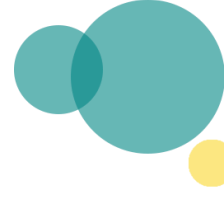


<b>Funding Scale</b>	<input type="checkbox"/> Grants to country up to USD 1 Million per annum; and <input type="checkbox"/> Grants up to USD 3 Millions (fixed) to formulate adaptation plan
	<b>Project Preparation Facility (PPF)</b>
<b>Objectives</b>	Supporting project and program in the initial stage of project identification, concept development and help establishing enabling environment to the middle and last part of the project including project's due diligence and structurization.
<b>Parties with access</b>	AE
<b>Funding scale</b>	<input type="checkbox"/> Grants and repaid grants up to US 1.5 million; and <input type="checkbox"/> Loans to be considered for private projects.
	<b>Program or Project Funding</b>
<b>Objectives</b>	To support climate change adaptation and mitigation projects
<b>Parties with access</b>	AE
<b>Funding scale</b>	Project scale where AE meets the criteria
	<b>Simplified Approval Process (SAP)</b>
<b>Objectives</b>	For smaller scale projects or with minimum social and environmental risks hence the project is ready for scaling up and prospective to support climate change adaptation and mitigation programs
<b>Parties with access</b>	NDA and AE specifically encouraged to propose concept note
<b>Funding scale</b>	Up to USD 10 millions



	<b>Private Sector Facility</b>
<b>Objectives</b>	Opening up investment path for private sector in climate change adaptation funding
<b>Parties with access</b>	Private sector or other business entity that will collaborate with AE.
<b>Funding scale</b>	In line with AE project scale category that will facilitate loan, equity, collateral and grants. The last allocation was USD 500 million as of August 20, 2017.
	<b>REDD+ Result Based Payments Pilot Programme</b>
<b>Objectives</b>	Countries that have already finished phase 1 and 2 of REDD+ RBP from 2013-2018 deserve to send application to funding for Phase 3.
<b>Parties with access</b>	Accredited entity in coordination with NDA and REDD + entity or focal point
<b>Funding scale</b>	In accordance with AE project scale category. Allocation of USD 500 million until GCF Board Meeting in 2022.  ***as of now, REDD+ RBP are still in pilot programme scale, which will be reviewed again.
	<b>Enhancing Direct Access (EDA)</b>
<b>Objectives</b>	State-based programmatic approach. The application could not be made individually because decision making process is up to the national level.
<b>Parties with access</b>	Accredited entity specifically appointed Direct Accredited Entities (DAE) by NDA to implement the program. Accredited entity is required to deliver concept note and obtain input and guideline prior to meet all of





	proposal requirements. It should be noted that program initiator should be accredited first prior to accessing the funding.
<b>Funding scale</b>	In accordance with AE project scale category. Allocation for USD 200 million.

**Local government may collaborate with accredited entity to submit project concept note (PCN) or proposal to NDA in accessing all forms of existing GCF funding. Furthermore, local government may submit PCN proposal to NDA, in which NDA will matchmake with existing accredited entity.**

The project or activity that is proposed by the entity should meet **Pipeline of Thematic Area** requirement in Annex 1 Document Call for PCN. GCF funding mechanism is divided into two stages, which are: (a). no objection letter issuance procedure and NDA's recommendations; and (B) proposal submission process.

**1. Procedure of issuance of no-objection letter and NDA's recommendations**

- Step 1: Submission of PCN and funding proposal to Accredited Entity;
- Step 2: NDA will do administrative review;
- Step 3: NDA will require ministry/technical institution and/or consultant to do substantive review;
- Step 4: NDA will draft recommendations; and
- Step 5: NDA will issue recommendations for concept note or issue no-objection letter for the proposal.

**2. Procedure for Proposal Submission**

- Step 1: Accredited Entity submit proposal and PCN, optional;
- Step 2: Accredited Entity collects funding proposal and apply for no-objection letter from NDA;
- Step 3: GCF Secretariat and Council reviews and provides recommendations (through ITAP); then file it to the Board for further review, consideration and approval by GCF secretariat



- Step 4: GCF Secretariat and Council makes decision on the submitted proposal proposed by Accredited Agency; and
- Step 5: GCF Secretariat and Council issues formal legal and accredited entity has to sign Funding Allocation Agreement.

### 4.3. Global Environment Facility (GEF)

GEF was established a night before Rio Earth Summit in 1992 to help overcome the most urgent environmental problems on earth. Since then GEF has provided almost USD 20.5 Billion in form of grants and mobilized additional USD 112 billion in form of co-financing for more than 4,800 projects in 170 countries. Through Small Grants Programme, GEF has provided support to 24,000 civil society and community initiatives in 133 countries.

GEF fund is available for developing countries and countries in economic transition to meet the international summit's convention and agreements. GEF provides fund to support government's project and program. Government decides on the implementing agency (government's institution, civil society organization, private corporations, and research institute).

GEF has Operational Focal Point (OFP)<sup>11</sup> to coordinate all of GEF-related activities in a country. GEF-OFP reviews all of project's ideas, assesses feasibility criteria and ensures that new project ideas will not duplicate the existing projects. GEF-OFP decides which partner that will suit the best in developing and implementing project's ideas because they will be involved in all of project or program stages. The GEF partnership recently approves on the new directive in their work to achieve bigger result and help in facing increasing challenges. The agreement is regulated in the Summary Negotiations Seventh Replenishment GEF-7<sup>12</sup>.

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<sup>11</sup> [https://www.thegef.org/focal\\_points\\_list](https://www.thegef.org/focal_points_list), accessed in June 10, 2020 .

<sup>12</sup> <https://www.thegef.org/council-meeting-documents/summary-negotiations-seventh-replenishment-gef-trust-fund>, accessed in June 10, 2020.



**Table 12 GEF Funding Window**

<b>Objectives</b>	<ul style="list-style-type: none"> <li>• To achieve the multilateral agreement objectives; and</li> <li>• Support state's priority that will overcome the factors of environmental degradation.</li> </ul>
<b>Sector</b>	<p>Biodiversity, climate change mitigation, land degradation, international water, and chemical and waste.</p> <p>These sectors are also the main feature for GEF-17<sup>13</sup> that gives opportunity for countries to participate in "Selected Impacts" focusing on 1) food system, land use and recovery; 2) sustainable city; and 3) sustainable forest management.</p>
<b>Feasibility Criteria</b>	<ol style="list-style-type: none"> <li>1. State meets at least one of two conditions: <ol style="list-style-type: none"> <li>a. If the state already ratifies the convention GEF serves<sup>14</sup> and adjust them to feasibility criteria decided by Multi Parties Conference in each convention; or</li> <li>b. If the state meets conditions to receive the World Bank's finance (IBRD and/or IDA) or if the state is recipient to UNDP's technical assistance that meets target for core resources allocation (Especially TRAC-1 and/or TRAC-2).</li> </ol> </li> <li>2. Project should be endorsed by the State (not by external party) and consistent to national priority that supports sustainable development.</li> <li>3. Project has to find GEF funding for additional financing for steps taken for global environmental benefits; and</li> <li>4. Project has to involve public in the project design and implementation following public involvement policy in GEF-funded project and each guideline</li> </ol>
<b>Funding scale</b>	<ul style="list-style-type: none"> <li>○ Full-sized Project (FSP): more than USD 2 million;</li> <li>○ Medium-sized Project (MSP): less or equal to USD 2 million;</li> </ul>

<sup>13</sup> <https://www.thegef.org/documents/gef-7-programming-directions>, diakses pada tanggal 10 Juni 2020.

<sup>14</sup> <https://www.thegef.org/partners/conventions>, diakses pada tanggal 10 Juni 2020.



	<ul style="list-style-type: none"> <li>○ Enabling Activity (EA): project for preparing plan, strategies, or reports to meet commitment made in the convention; and</li> <li>○ Program: long-term arrangement and strategies for each relevant project to achieve larger scale impact for global environment.</li> </ul>
<b>Forms</b>	Form for each funding scale is accessible in the following link: <a href="https://www.thegef.org/documents/templates">https://www.thegef.org/documents/templates</a>
<b>Supporting documents</b>	Each proposed project requires a Certificate signed by GEF-OFP.
<b>Cycle</b>	Cycle of each funding scale can be accessed <a href="#">here</a> .
<b>Partners</b>	ADB, AfDB, EBRD, FAO, IDB, IFAD, UNDP, UNEP, UNIDO, WBG, CI, CAF, DBSA, FECO, FUNBIO, IUCN, BOAD and WWF-US.

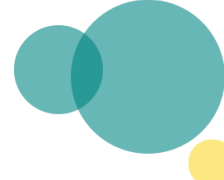
#### 4.3.1. The GEF-Small Grants Programme (SGP)

GEF-SGP provides financial and technical supports to the community and civil society organizations to meet the global environmental benefits secured in community-based actions and initiatives. GEF-SGP was launched in 1992 with 33 participating countries, and has provided assistance to 125 countries as of now.

GEF-SGP has provided more than USD 580 million for more than 21,500 projects around the world. Overall, the grants have supported 8.41 hectares of conservation areas, preserved 1,803 significant species, brought about 900,000 hectares of land against degradation, and placed 32,000 hectares of marine and coastal area under sustainable management practices.

Local government plays important role in the submission of project proposals by civil society organization. Supports to relevant, effective and efficient projects will bring greater global environmental benefits while overcoming livelihood, poverty, gender equality and women empowerment issues. Therefore, local government may report the





projects' successes into National Registration System developed by Ministry of Environmental and Forestry as one of the contributions to achieve NDC target.

**Table 13. GEF-SGP Funding Windows**

<b>Objectives</b>	Overcoming global environmental problems hence it will generate environmental benefits and bring implication for sustainable livelihood, gender equality and civil society empowerment.
<b>Area/Impact Program</b>	<ul style="list-style-type: none"> <li>○ Biodiversity;</li> <li>○ Climate change</li> <li>○ Land degradation;</li> <li>○ International water; and</li> <li>○ Persistent organic pollutant</li> </ul>
<b>Feasibility Criteria</b>	<ol style="list-style-type: none"> <li>1. <b>Proposing party:</b> national or civil society institution that resides in one of GEF-SGP working areas and possesses working experiences to assist community for more than two years and understand about biodiversity issues, climate change and land degradation in selected region</li> <li>2. <b>Beneficiaries:</b> local civil society and poor and vulnerable community, including women and indigeneous groups.</li> </ol>
<b>Funding form</b>	Grants
<b>Funding scale</b>	<ul style="list-style-type: none"> <li>○ USD 2.000-5.000 for grant planning with project duration of 3-6 months;</li> <li>○ Up to USD1.000-50.000 for full-grant with project duration between 12-24 months. Average grants around USD 25.000;</li> <li>○ Maximum up to USD 150.000 for strategic projects especially the ones to increase and reach number of communities in critical landscape or marine landscape.</li> </ul>
<b>Forms</b>	Accessible <a href="#">here</a> .
<b>Procedures</b>	Proposal to be submitted to GEF-SGP Indonesia Secretariat, accessible here <a href="https://sgp-indonesia.org/">https://sgp-indonesia.org/</a>



<b>Partners</b>	United Nations Development Programme (UNDP) with partnership with Yayasan Bina Usaha Lingkungan (YBUL)
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#### 4.3.2. Roll Out of GEF-7

GEF-7 will be launched to be accessible for countries, institutions and stakeholders. GEF-7 concept is to give special emphasis on countries about how they can access impact program and relevant resources by utilizing allocation from system for transparent allocation of resources (STAR).

GEF-7 Secretariat will receive proposals to be financed through STAR allocation and aims at special investment for impacted program/area, especially in international water and persistent organic pollutant that meet requirements and in line with GEF policies in project and program cycle. To render the same opportunity for all countries in terms of submitting proposals, initial consultation will be provided by GEF-7 Secretariat in order to clarify on GEF-7 programming concepts.

In GEF-7, program must emphasis on the main push factors for environmental degradation. Therefore, GEF-7 programming must:

- Focus on resources in each field where significant impact could be attained;
- Mobilizing and strengthening coalition of various actors including improving roles played by private sector; and
- Be responsive to the country's priority or commitment as reflected in NDC, National Biodiversity Strategies and Action Plans (NBSAPS), and ASEAN Economy Community

Call proposal from GEF-7 Secretariat will be presented to all OFPs before the GEF-7 replenishment cycle. Countries accessing funds must pay attention to the following issues:



- Meet the requirements for each impact program, geographical scope and expected outcome;
- Guarantee commitment for network-based approach beyond national and sub-national activities, along with recognition on the importance and willingness to be involved in global platform and knowledge-sharing platform;
- Demonstrate an understanding of the global-national project relationship as a means of monitoring, tracking and reporting on a coherent set of performance indicators; and
- Meet specific additional criteria that will be developed in the program.

#### 4.4. Clean Energy Financing Partnership Facility (CEFPF)

CEFPF was established in 2007 to help improving energy security in developing countries and reduce climate change rate. CEFPF aims to improve protection and access to energy by funding mobilization of new energy technology. The facility is supported by the Government of Australia, Canada, Norway, Spain, Sweden, United Kingdom and Japan, and Global Carbon Capture and Storage Institute (GCCSI).

CEFPF also aims to finance policy, regulation and institutional reform that support clean energy development. Prospective investment includes:

- a. New energy technology application;
- b. Project to reduce challenges in adopting clean energy;
- c. Project to increase access to modern form of clean and efficient energy for poor community; and
- d. Technical capacity program for clean energy

**Table 14. CEFPF Funding Windows**

<b>Sector</b>	Energy
<b>Feasibility Criteria</b>	1. Types of activities among others are biomass, biofuel, biogas, rural electrification and energy access, distribution of energy production, waste to energy project, demand side management project, energy



	<p>efficiency (heating, transportation, street lighting, building, and final disposal facility), clean energy for generator, transmission and distribution, clean energy for manufacture facility, high-efficient tool, energy service, carbon capture and storage, integrated gasification combined cycle technology, super critical and ultra-supercritical;</p> <p>2. Developing countries in Asia</p>
<b>Form of funding</b>	Grants and loan
<b>Mechanism</b>	To access this funding support, local government must follow legal basis & grants delivery mechanism as explained in Figure 2.
<b>Further information</b>	Further information could be accessed <a href="#">here</a> .

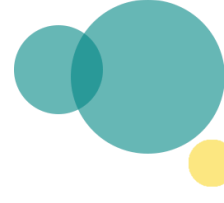
#### 4.5. Clean Technology Fund (CTF)

CTF is one of two multi-donor trustfunds in Climate Investment Funds (CIF). The funding is distributed through multilateral developmental partner banks, among others are African development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank and World Bank Group. However, World Bank is the responsible institution for administration process. CTF has financed 12 country programs and 1 (one) regional program.

CTF is trying to promote funding for demonstration, distribution and transfer of low carbon technology with significant potential to reduce green house gas emission. Furthermore, other objectives of CTF are as followed:

1. Providing positive incentive, through public and private sector investment for low carbon development and green house gas emission mitigation;



- 
2. Financing low carbon project and development as reflected in national strategy and planning, increasing development and accelerate clean technology transfer and diffusion;
  3. Realizing environmental and social co-benefits, illustrating the potential of low-carbon technologies in contributing to sustainable development and the Millennium Development Goals (MDG);
  4. Supporting international collaboration on climate change adaptation;
  5. Utilizing multilateral development bank skills and capacity to increase and provide new and additional resources, including official and soft loan in significant scale; and
  6. Sharing experiences and lessons in responding to the challenges of climate change.

**Table 15. CTF Funding Window**

<b>Sector</b>	<ul style="list-style-type: none"> <li>○ Generator: renewable energy and high-efficient technology to reduce carbon intensity;</li> <li>○ Transportation: efficiency and shift modality; and</li> <li>○ Energy efficiency: building, industry and agriculture</li> </ul>
<b>Feasibility Criteria</b>	<ol style="list-style-type: none"> <li>1. ODA feasibility according to OECD/DAC guideline;</li> <li>2. Existence of active multilateral development banks</li> <li>3. Project feasibility and level of funding are assessed in “transformative” potential as well as project feasibility without any soft loan</li> <li>4. Social and economic criteria to create market with private funding innovation and filling any funding gaps.</li> </ol>
<b>Funding form</b>	Soft loan distributed through multilateral developmental partner banks
<b>Mechanism</b>	To access this funding, local government has to follow legal basis & grants distribution mechanism as explained in Figure 2.



<b>Further information</b>	It could be accessed here <a href="#">here</a> .
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#### 4.6. Climate Change Fund (CCF)

CCF was established in May 2008 to facilitate larger investment for developing countries to effectively overcome climate change consequences and causes by increased support for low carbon development and climate resilient. The fund is supported by ADB in collaboration with regional and private partners.

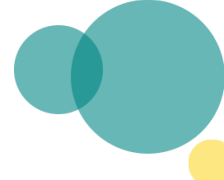
**Table 16. CCF Funding Window**

<b>Sector</b>	Clean energy, REDD+ and adaptation
<b>Feasibility Criteria</b>	<ol style="list-style-type: none"> <li>1. Relevant strategy or action plan preparation for ADB, regional department and developing countries;</li> <li>2. Investment on climate change mitigation or adaptation measures;</li> <li>3. Development of product and knowledge relating to climate change;</li> <li>4. Facilitating knowledge management activity, including participating in conference and regional workshop; and</li> <li>5. Funding for ADB corporate carbon foot print off-set.</li> </ol>
<b>Funding form</b>	Technical assistance, grants and equity investment
<b>Mechanism</b>	Local government has to follow legal basis & grants distribution mechanism as explained in Figure 2 to access this form of funding.
<b>Further information</b>	It could be accessed here <a href="#">here</a> .

#### 4.7. International Renewable Energy Agency (IRENA)

IRENA is an inter-governmental organization supporting countries to move toward transition to sustainable energy future. IRENA serves as the main platform for international cooperation, center of excellence, as well as information hub for policy,





technology, resources, finance and knowledge about renewable energy including bioenergy, geothermal, hydro power, sea, solar and wind energies. With its mandate, IRENA encourages the government to adopt enabling policy for renewable energy investment, provides practical instrument and policy advice to accelerate renewable energy distribution and facilitates various technological knowledge and transfer to provide clean and sustainable energy.

**IRENA offers service to conduct cost study on renewable energy; renewable energy preparedness assessment conducted in partnership with government and regional organization, and provide tools and instruments to develop renewable energy projects such as project navigator, renewable energy market and facility for IRENA project or *The Abu Dhabi Fund for Development (ADFD)*.**

In the past couple of years, investment on renewable energy is around USD 300 billion per year, IRENA plays important role in bridging financial gap and attracting further investment from private sector to more renewable energy. This investment may come from pension fund, insurance company, trust fund and state's wealth.

IRENA launches marketplace, online platform during COP21 in December 2015, it aims to increase transparency and liquidity of renewable energy market and energy efficiency in Africa, Latin America, Asia, Southeast Europe and small islands of developing countries. Marketplace connects project owner, investors, host government, provider of service and supplier of technology to make a result-oriented project. This innovation is to enable investment opportunity as seen and identified by investor. Hence, it will be entry point between investor and project developer to make renewable energy and energy efficiency project realized.

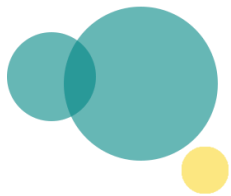
**Table 17. IRENA Funding Window**

<b>Name</b>	ADFD
<b>Sector</b>	Renewable energy and energy efficiency



<b>Feasibility Criteria</b>	<ol style="list-style-type: none"> <li>1. <b>Initiator:</b> IRENA's member states (government entity, semi-government, private or non-government) that are eligible to receive official development assistance or ODA, which are low to middle income countries according to the World Bank per capita income including less developed countries except the G8 members and European Union member states;</li> <li>2. <b>Technology:</b> use renewable energy (bioenergy, geothermal, hydro power, wind, sea and solar that are tested and tried and/or hybrid technology);</li> <li>3. <b>Stages:</b> project is in bidding stage and an infrastructure project, not applicable for pre-development activity such as feasibility study, environmental or socio-economic impacts;</li> <li>4. <b>Government Support:</b> the project initiators should get support and be prioritized by the government where the project is being implemented and equipped with government's guarantee letter that is issued by relevant ministry or authority to international cooperation and state's loan; and</li> <li>5. <b>Principle of project:</b> transformative, replicable/measurable, economically feasible, innovative in business model design, has positive impact, improve energy access, emphasis on energy security aspect.</li> </ol>
<b>Form of funding</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> USD 50 million per year for 7 years;</li> <li><input type="checkbox"/> USD 5-15 millions for each project;</li> <li><input type="checkbox"/> Up to 50% from project cost and the remaining cost is covered by co-financing that may source from any source including government, developmental fund and private entity;</li> <li><input type="checkbox"/> 20 years of loan period including 5 years of grace period; and</li> <li><input type="checkbox"/> 1% or 2% of loan interest depends on state's treasure list</li> </ul>
<b>Mechanism:</b>	<b>Selection process:</b>



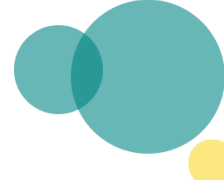


	<ol style="list-style-type: none"><li>1. The international and independent panel of experts evaluates the initiator to assess technical feasibility, economic/financial feasibility and other social-economic and environmental benefits; and</li><li>2. IRENA's Board of Advisor assess the project to ensure its coherence with national development priority, geographical distribution and technological diversity.</li></ol> <p><b>Agreement:</b></p> <ol style="list-style-type: none"><li>1. Loan Offer and Letter of Consent The hosting government (i.e. Ministry of Finance) sends letter of consent for loan offer from ADFD.</li><li>2. On-site Appraisal<ul style="list-style-type: none"><li>○ After phase 1, on-site assessments will be arranged in consultation with the beneficiaries (ministries or government authorities or organizations that have handed over the project).</li><li>○ The Applicant must take appropriate steps to acquire ownership of the land or rights over it and ensure that it is free from any confiscation in accordance with the requirements for Project implementation.</li><li>○ Applicant must provide access to the site for engineering consultants and contractors, suppliers etc. for implementation purposes.</li></ul></li><li>3. Loan Agreement<ul style="list-style-type: none"><li>○ A loan agreement will be signed with the ministry responsible for the country's international loans, if the beneficiary is a government entity.</li><li>○ The loan guarantee agreement will be signed by the government in line with the signing of other loan agreement with the borrower, if the borrower is a semi-government or private entity.</li></ul></li></ol>
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	<ul style="list-style-type: none"> <li>○ If a project is selected for ADFD funding, the loan and guarantee agreement must be signed within a maximum period of two years from the date of formal notification by the ADFD.</li> <li>○ The loan agreement including all work and services must be free of taxes, fees and dues of any kind under the laws of the country.</li> </ul> <p>4. Loan Ratification and Declaration</p> <ul style="list-style-type: none"> <li>○ The loan agreement ratification with the initiator country</li> <li>○ Government provides ratified document and legal opinion to enable ADFD to state loan effectiveness (preparation and contract bidding process will not be affected by legal opinion and ratification document).</li> </ul> <p>5. Approval of Project Implementation Unit.</p> <p>Quality and experienced Project Implementing Unit (Unit Pelaksana Proyek-UPP) should be identified and established by beneficiaries (upon approval from ADFD) to be responsible for administering project implementation.</p> <p>6. Tendering and procurement</p> <ul style="list-style-type: none"> <li>○ Project implementation should be in line with tender/bidding procedure and procurement of ADFD.</li> <li>○ Technological provider and other technical consultation could only be rendered once the project is selected and loan agreement has been signed by ADFD</li> <li>○ ADFD oversees and approves this procedure to ensure tender and delivery process transparency</li> <li>○ Tender, procurement and establishment of UPP could start with the same time as loan agreement process. However, fund disbursement will not start until the loan agreement is deemed effective.</li> </ul>
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	<p>7. Loan Disbursement</p> <p>Invoice for actual jobs. Disbursement should be directed to service provider depending on financing percentage.</p>
<b>Initiator</b>	The state may suggest the funding through line ministry, and line ministry may collaborate with local government following the procedure in Figure 2.
<b>Further information</b>	It could be accessed here <a href="#">here</a> .


#### 4.8. Nationally Appropriate Mitigation Actions (NAMAs)


NAMAs was first introduced in Bali Action Plan as part of Road Map of UNFCCC-Bali that was agreed upon in 2007 and also part of Copenhagen Agreement in the COP15 in Copenhagen (December 2009). NAMAs refers to series of policies and measures taken by some of the countries part of their commitment to reduce green house gas emission (mitigation action) under the BAU in 2020, and contributes to domestic sustainable development. NAMAs recognize that different countries may take national measures in accordance with their responsibilities and capabilities (*common but differentiated responsibilities and respective capabilities*). In drafting mitigation actions, it should be done in the framework of NAMAs supported by effective policy and funding instrument.




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**Well-being:** A green economy must create genuine, sustained, shared wellbeing, going beyond mere monetary wealth to prioritise human development, health, happiness, education, and community.
- 

**Justice:** A green economy emphasises equity, equality, community cohesion, social justice, and supporting human rights – especially the rights of marginalised minorities. It seeks a just transition and serves the interests of all citizens, including those yet to be born.
- 

**Planetary boundaries:** A green economy recognises that all human flourishing depends upon a healthy natural world. It defends nature's functions and limits, and protects biodiversity, soil, water, air and other ecosystem capitals.
- 

**Efficiency & sufficiency:** A green economy is low-carbon, diverse and circular. It recognises that our single biggest economic challenge is the need to create prosperity within planetary boundaries, and align economic incentives with true costs to society.
- 

**Good governance:** A green economy builds institutions that combine dynamic democratic accountability, relevant metrics, sound science, and local knowledge. Civil life prioritises public participation, social dialogue, informed consent, transparency, and accountability.

**Figure 9. NAMAs Framework**

**NAMAs is established as important part of mitigation component – in a form of regulation, standard, programs, policies or financial incentive.**

**NAMAs distributes financial assistance from more developed countries to developing countries to reduce green house gas emission that is measurable, reported and verified.**



### 5.1. Joint Crediting Mechanism (JCM)

JCM is a collaboration mechanism between Government Indonesia through Coordinating Ministry of Economic Affairs with Government of Japan through its Ministry of Foreign Affairs for low carbon development since 2013. In this collaboration scheme, the Government of Japan provides its support through financing subsidy on low carbon technology application, capacity building and transfer of technology to Indonesia.

The following are the objectives of collaboration between Government of Indonesia and Government of Japan:

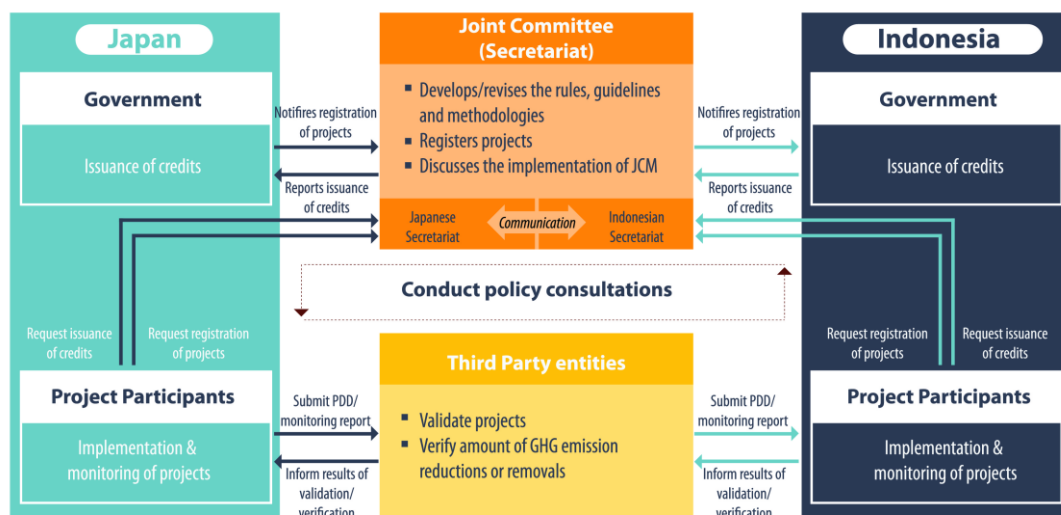
1. Government of Japan facilitates diffusion of technology, product, system, service and the latest low carbon infrastructure including implementation of mitigation measures and contributes to sustainable development in Indonesia;
2. Appropriately evaluate all contributions to green house gas reduction in Indonesia quantitatively through well-implemented mitigation measures to achieve the NDC targets;
3. Contributes to all UNFCCC main objectives by facilitating global measures to reduce or decrease emission.

**JCM between Government of Indonesia and Government of Japan offers the opportunity for ALL ENTITIES (including local government of) Indonesia to propose activity in a form of feasibility study or project, JCM also enables business and private entities in Indonesia to carry out green house gas emission reduction collectively with the grants provided by the Government of Japan.**

In proposing for feasibility study or project, there are several aspects to consider, which are:



- Activities proposed in the feasibility study or project is the activity to reduce green house gas emission in energy efficiency, renewable energy, waste management, forestry, land use control, and others related to JCM sectoral scope;
- The activities are carried out in the region of Republic of Indonesia
- Green house gas emission reduction from the activities should be measureable, reported and verified through approved methodology by the JCM between Indonesia and Japan;
- The activity is between Indonesian and Japanese institutions using sophisticated and proven technology;
- The activity initiator is willing to adhere to the law and regulation especially environmental law in Indonesia and international level.



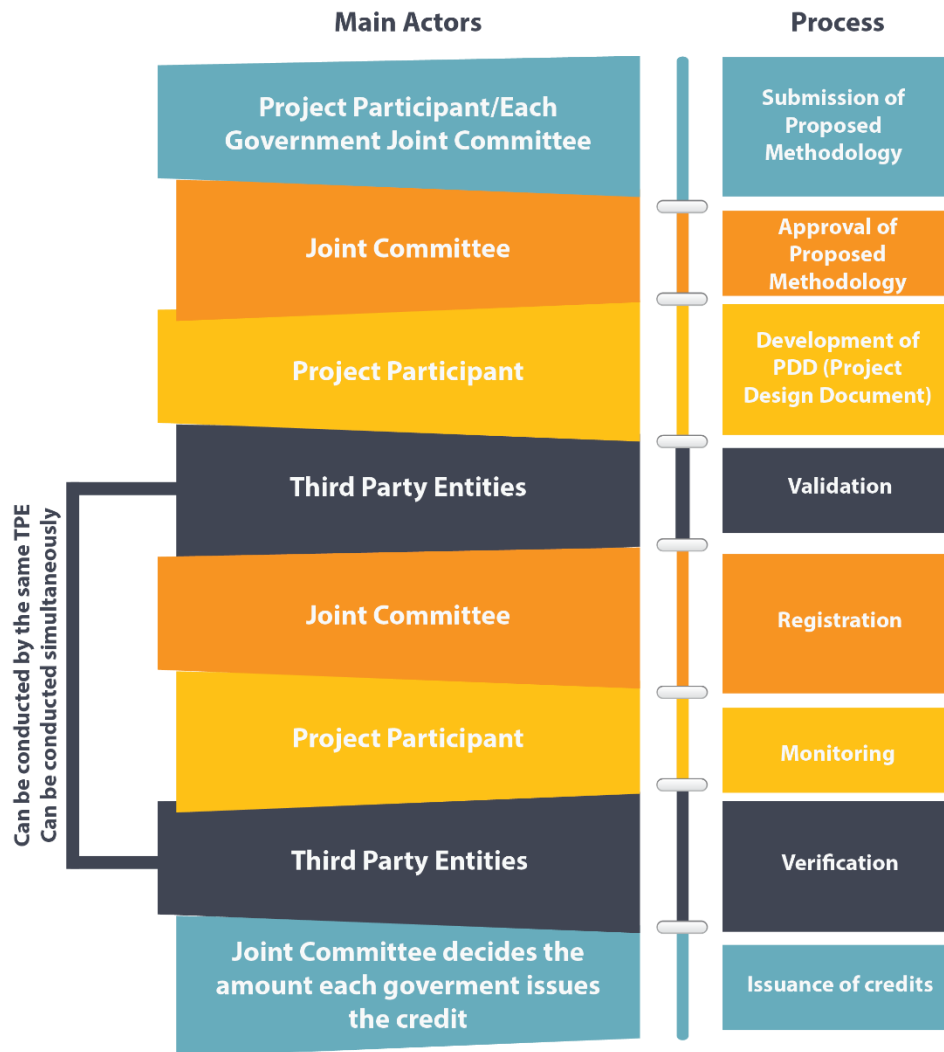
**Figure 10. JCM Scheme**

Source: Website of JCM Secretariat in Indonesia [www.jcm.ekon.go.id](http://www.jcm.ekon.go.id)

Indonesian entities that are interested need to register their activity under JCM could start with feasibility study in collaboration with Japanese entity partners. This means that interested party to apply for JCM financial support for feasibility study or project provided by Government of Japan should ensure that they have Japanese entity partnership or



vice versa. The interconnectedness and roles played by parties of JCM between Indonesia and Japan could be seen in Figure 9.



**Figure 11. JCM Cycle**

Source: Website of JCM Secretariat Indonesia, [www.jcm.ekon.go.id](http://www.jcm.ekon.go.id)

Each stakeholder in JCM plays the following roles:

☐ **Joint Committee**

Representatives of Government of Indonesia and Government of Japan. The members are 2<sup>nd</sup> echelon officials (same level as directors) from relevant line ministries.



☐ **JCM Secretariat**

Each party (Indonesia and Japan) establishes JCM Secretariat. Both of them communicate and collaborate to help the Joint Committee. JCM Secretariat Office is at the Building of Ministry of State-Owned Enterprises, Jakarta

☐ **Third Party Entity (TPE)**

Qualified entity appointed by Joint Committee to validate JCM Project proposal as well as to verify GHG reduction or elimination.

☐ **Project participation**

Government (including local government), private sector and/or public sector involved in the JCM project

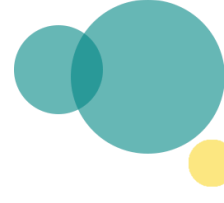
Relevant documents to collaboration approval, JCM rules and guideline, outcomes of joint committee are accessible in the official website of JCM Secretariat of Indonesia ([www.jcm.ekon.go.id](http://www.jcm.ekon.go.id)).

## 5.2. Transformative Actions Program (TAP)

ICLEI-Local Governments for Sustainability (ICLEI) is in partnership with various institutions to establish TAP platform, which is a platform that would facilitate local government in accessing investment funds for climate change control measures for mitigation and adaptation. In general TAP serves as a catalyst and increase capital distribution to local government and strengthen their capacity in accessing climate funding and attract more investment in climate change activities.

Through TAP, local government may receive support to develop climate project concepts into transformative, mature, strong and bankable sustainable infrastructure projects as well as the ones that are ready to be financed and implemented. TAP is designed to liaise project developer, local climate actor, technical experts, and financial institutions.





**TAP assists local government in improving bankability proposals by increasing visibility to prospective investors, connecting local government with project preparation facility or helping local government to connect with specific service that will promote the proposed concept.**

There are four pillars of the TAP platform as followed:

**1. Pipeline**

TAP project serves as an incubator, collects and filters application based on **transformative** potential as proposed by local government. TAP project is a connector to local government proposing the project to TAP scheme, also to connect them to parties that are able to facilitate project preparation, and displayed TAP platform and other platforms.

**2. TAP service**

Local government has access to special service made by ICLEI and TAP partners in the whole project cycle, from the initial stage project definition to long-term assistance provided to develop strong and bankable project concepts. TAP partners involve financially and technically, supporting capacity building, developing feasibility study and guiding sustainable and resilient infrastructure design and financing.

**3. TAP Platform**

Online TAP platform displayed selected application in centralized and uniform format that would optimize visibility to prospective investor and funder. The process is a starting point for funder as well as local government seeking for information on ambitious and transformative local infrastructure projects to support their commitments for low emission and adaptive development on the impact of climate change. TAP platform could be accessed here <https://iclei.org/en/TAP.html>.






#### 4. TAP Advocacy

TAP is an advocacy tool that presents demands and diversity of local infrastructure projects, promoting multi-level governance, and call for effective costing mechanism to increase climate action.

Local governments can follow 3 simple steps to be able to submit proposals for mitigation or adaptation activities into the online TAP platform.

**Table 18. Three Simple Steps to Apply for TAP**

	<p><b>Step 1. Application to TAP</b></p> <ul style="list-style-type: none"> <li>○ Assessment on basic quality assurance;</li> <li>○ Evaluation/assessment on information;</li> <li>○ Evaluation on transformative approach including assessment on the ideas proposed using transformative approach.</li> </ul>
	<p><b>Step 2. Approval</b></p> <p>Receiving TAP approval from the Secretariat Office of ICLEI to access TAP service</p>
	<p><b>Step 3. Access Service</b></p> <ul style="list-style-type: none"> <li>○ Financing implementation and support; and</li> <li>○ TAP projects that have been approved to increase technical capacity and assistance as well as access to investors, PPFs, and financial service provider.</li> </ul>





### 5.3. Global Climate Partnership Fund (GCPF)

GCPF is a partnership innovation between public and private sectors dedicated to contribute to climate change mitigation in the green house gas emission reduction measures. The institution focuses on energy efficient financing and renewable energy projects for small and medium enterprises, households and municipality entity that is commercially feasible and has effective risk management structure in developing countries, especially in the collaboration with local financial institutions. This program focuses on the financing of climate change mitigation in countries in Sub-sahara Africa, Latin America, Caucasus and Asia Pacific with the expectation that the funds will contribute to economic and social development in the area where investment is made.

**Though line ministries could access GCPF, line ministries might collaborate with local government by following the procedure shown in Figure 2**

GCPF provides loan to reduce any loan risks from local bank. GCPF invests in financial institution such as local commercial bank, leasing company and other prominent financial institution that seeks for investors. Refinancing, co-investment and technical assistance are all services provided by GCPF. Technical assistance is sponsored by the German Federal Ministry of the Environment, Natural Conservation, Building and Nuclear Safety, and Austrian Development Bank. Activities that might be financed through technical assistance include:

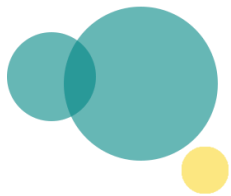
- Business development support; potential initiative technical assessment;
- Support for financial institution in developing their sustainable energy financing portfolio including special product design;
- Improving social and environmental management systems from GCPF partner institutions; and
- Market research and feasibility study to enable direct investment potential development and the initial stage for investment



**Table 19. Project Requirements**

Requirements for Financial Institutions	Requirements for Direct Investments
<ul style="list-style-type: none"> <li>Financial institutions include local commercial bank and leasing company;</li> <li>FI is willing to develop or currently developing sustainable green products (renewable energy or energy efficiency project that will reduce 20% of CO<sub>2</sub>);</li> <li>Posesses social and environmental risk management or willing to implement it;</li> <li>Investment for financial institution requires around 8 weeks up to 4-5 months; and</li> <li>Requires financing between USD 10 Million and USD 30 Million for the provision of loan for green energy project.</li> </ul>	<ul style="list-style-type: none"> <li>Direct investment in small scale renewable energy and energy efficiency that is commercially feasible and has effective risk management;</li> <li>Energy efficiency project should increase energy efficiency and/or reduce GHG emission from building, factory or process at least 20%.</li> <li>Renewable energy project uses selected technologies of:               <ol style="list-style-type: none"> <li>Solar power with 15 MW capacity. If it exceeds 25 MW then it could be a case-by-case basis.</li> <li>Wind power up to 50 MW.</li> <li>Run-of-the-river micro hydro power with qualifying capacity up to 15 MW and maximum of 15 M heights of dam. Project up to 30MW could be considered on case-by-case basis.</li> <li>Biomass and biogas power up to 15 MW. Tenaga biomassa dan biogas hingga 15 MW. Project up to 30MW could be considered on case-by-case basis.</li> </ol> </li> </ul>





	5. Direct investment process highly depends on the project size and partners
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For funding procedure, either the one for Financial Institutions and direct investment is as followed: project source from financial institution, global or local ESCO, project producer and developer. Project evaluation includes assessment of portfolio matching, financial evaluation, environmental and technical laws. It is then followed by project approval and disbursement along with monitoring and reporting.

#### 5.4. Corporate Social Responsibility (CSR)

CSR is an endeavor by business undertaking to include environmental and social aspects into their practice. CSR usually focuses on the idea that business could make the world a better place by taking measures to reduce negative traces of their practice in the world. As mandated by the Law Number 19/2003, Law Number 25/2007, and Law Number 40/2007, business actors have to support the community, society and small business.

CSR programs are varied but general initiatives may include:

- Direct provision to non-profit group. It is also followed by voluntary effort taken by employees and donations from companies in a form of occupational training for persons living with disabilities, or other group with deprived rights;
- Commitment to ensure diversity and diverse workforce in terms of their gender, race, and sexual orientation;
- Focus on the efforts to reduce company's ecological footprints through more efficient supply chain, recycle, reduced energy use, and other measures; and
- Commitment to support disaster prevention/management measures such as provision of supplies and supports for flood victims, storm victims, landslides, and etc.



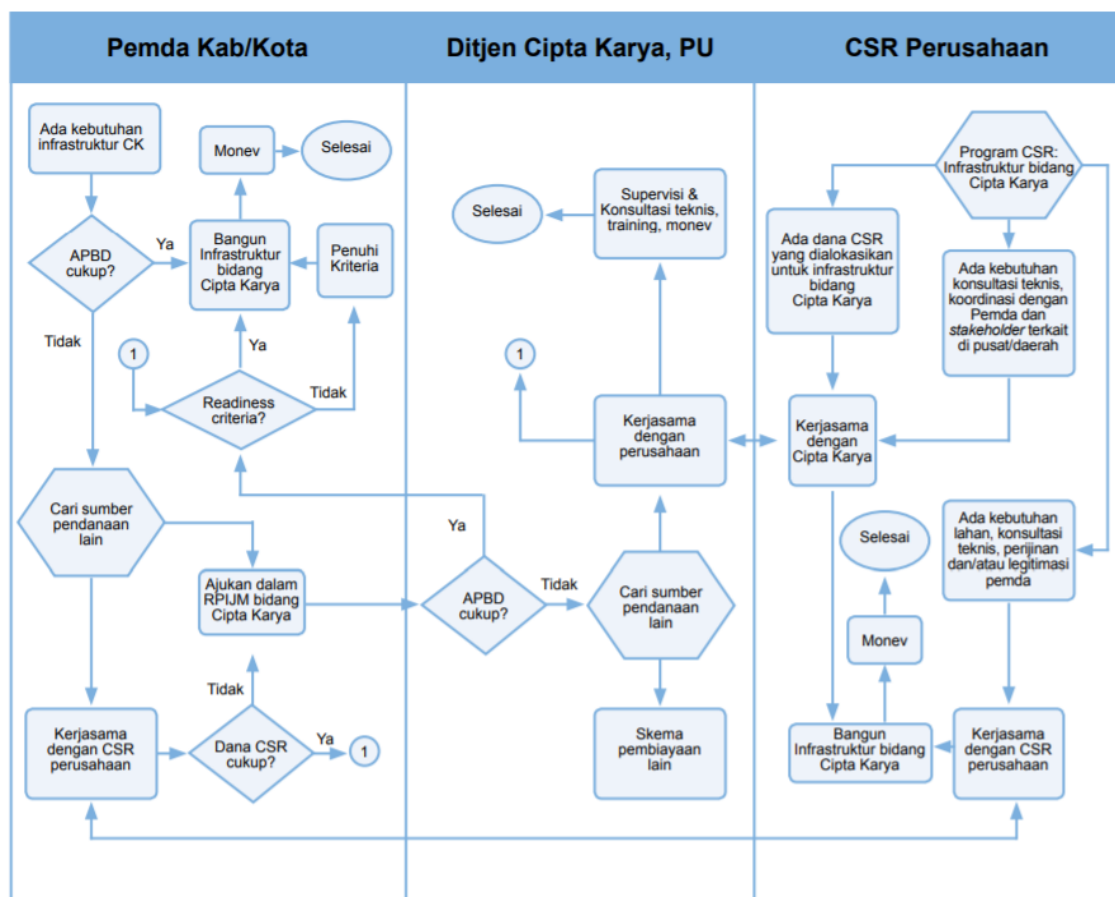
**CSR uses ISO 26000 standards in which social responsibility is not only for corporations but also to all organizations such as civil society organizations, government (including sub-national government), educational facility, cooperatives, and other organizations.**

**This responsibility is due to positive and negative impacts that organizations and corporations may have on their activities. Social responsibility is done to reduce negative impacts and increase positive impact of stakeholders in the organization and corporation.**

**Table 20. Seven Principles and Core Subjects of CSR**

<b>Seven Principles of CSR</b>	<b>Seven Core Subjects of CSR</b>
1. Accountability ; 2. Transparency; 3. Ethical behavior; 4. Respecting stakeholders' interests; 5. Respecting rule of law and prevailing legislation; 6. Respecting international norms; and 7. Respecting human rights.	1. Governance; 2. Human rights; 3. Employment; 4. Environmental 5. Fair operating practices; 6. Consumers issues; and 7. Community involvement and empowerment.





**Figure 12. CSR Scheme for corporations, local governments and ministries (in Bahasa)**

Source: Ministry of Public Works, 2012

The figure 11 is one of the examples of CSR flowchart between government (district/city) and company as facilitated by the Directorate General of Cipta Karya, Ministry of Public Works through their CSR funds.

### 5.5. Islamic Development Bank (IsDB)

IsDB is a multilateral development bank that aims to improve the live of their served members by promoting impactful social and economical development in larger scale in member states and moslem community around the world. IsDB finances infrastructure and agricultural projects in government and private sectors. Since 2019, IsDB has issued climate change policy as initial step to provide financial services for IsDB member states to finance climate change agenda that focuses on energy generator sector, water supply, transportation, and waste management.



IsDB financial service is coming from ordinary capital resources by providing interest-free or soft loans. The followings are IsDB financial scheme:

1. **Loan**

Loan is for projects that are expected to have significant socio-economy development impacts. This is a revenue generating project, loan provided has 3-7 grace period with 15-25 years of repayment period.

2. **Leasing**

Leasing is a mid-term financing for equipment and other fixed asset such as factory, machine, and equipment for industry, agro-industry, infrastructure, transportation, and etc. Leasing could also be provided for public or private sectors. At the end of leasing period IsDB will transfer ownership to the lessee as a prize.

3. **Instalment Sale**

Instalment sale is similar to leasing but the asset ownership is transferred to the sender recipient. IsDB purchases assets, which are equipment and machine, and sell them to the recipient with agreed value including mark-up value.

4. **Equity Participation**

IsDB participates in equity of a long- or newly-established company, operating in shariah provisions in public and private sector. IsDB finances one third of the company's equity

5. **Profit Sharing**

Profit sharing is a partnership involving two or more parties that collect shared capital to finance business undertaking. The partners share profit or loss proportionally in accordance with their contribution.

6. **Istina'a**

Istina'a is modus used to promote capital goods trade, increase production capacity and project financing. Istina'a is a contract for manufacture or other assets where the producer agrees to provide goods with buyer's specification within a timeframe and for every price that they agreed upon. IsDB finances



working capital and therefore contributes to improved production capacity of member states.

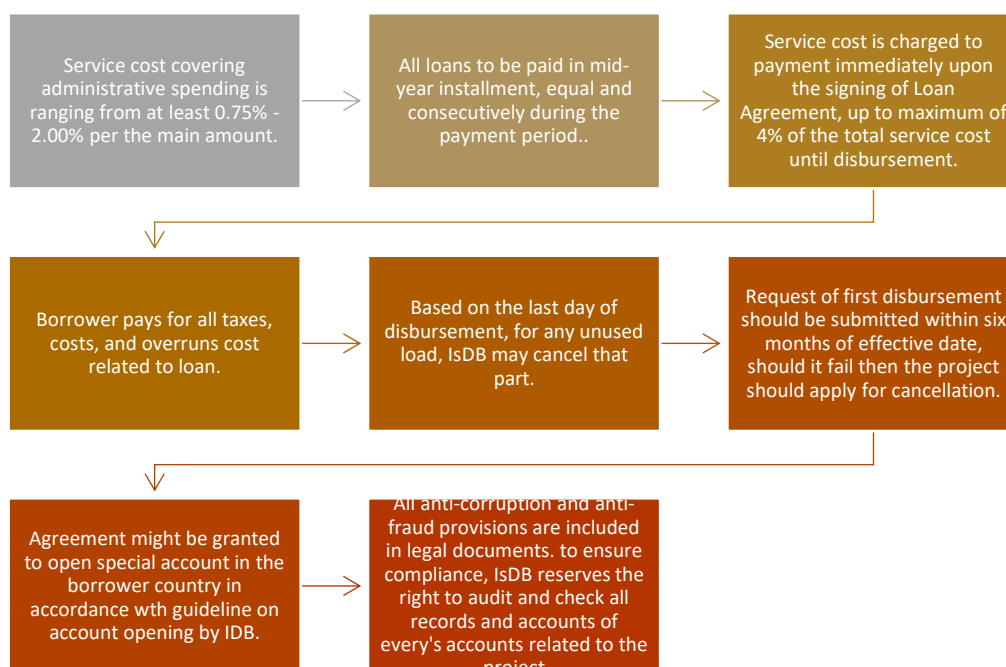
## 7. Technical Assistance

IsDB provides technical assistance in form of grants and/or loans for financing project-related tasks such as feasibility study and design, oversight of project development and advocacy-type of work such as policy definition, sector-based planning, institutional development, research, and etc. Technical Assistance is extended to most advanced member state.

## 8. Line of Financing to National Development Financing Institutions (NDFIs)

IsDB extends its financing through equity, leasing and installment sales to NDFIs in member states to promote small to middle size industry especially in private sectors.

The requirements to obtain IsDB<sup>15</sup> loan is as followed.



**Figure 13. Requirements to access IsDB's Financing**

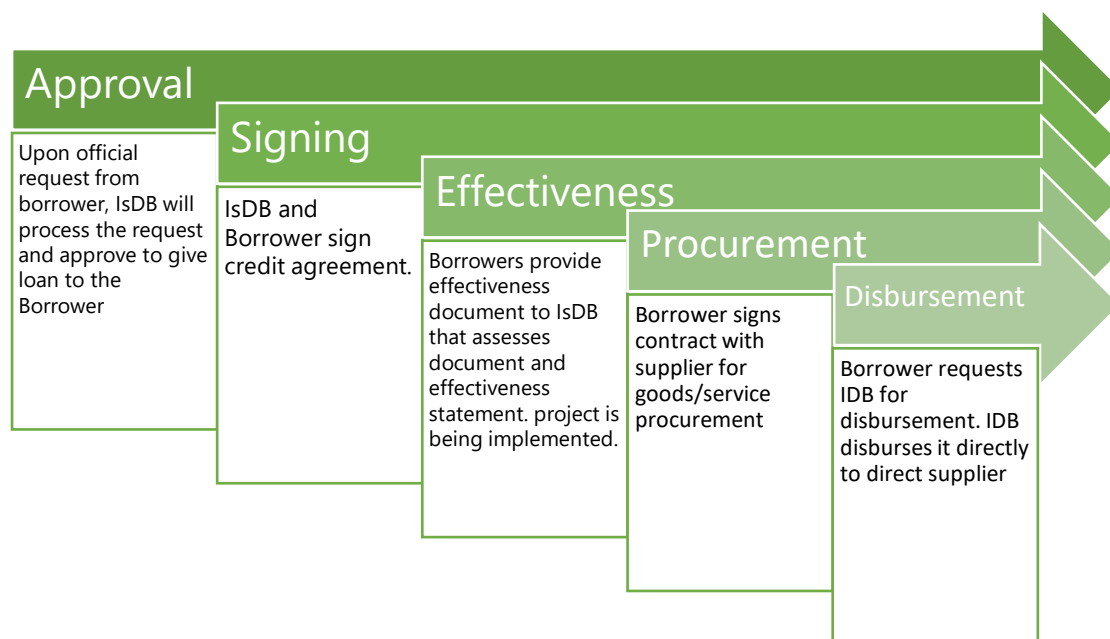
<sup>15</sup> [http://www.pro-cs.net/PDF\\_files/IDB-ProductsManual-2014.pdf](http://www.pro-cs.net/PDF_files/IDB-ProductsManual-2014.pdf), quoted on June 16, 2020



Aside from fulfilling the requirements, IsDB considers also the amount funding borrowed by borrowing countries and the following:

- ☐ Borrowing country's equity participation in the IsDB;
- ☐ Willingness of borrowing country to partake in IsDB program;
- ☐ Suitability of the project target and implementation;
- ☐ Number of population and State's Budget; and
- ☐ Ability to pay off the main loan and interests on time.

IsDB funding distribution mechanism could be seen below.



**Figure 14. IsDB Funding Distribution/Disbursement Mechanism**

Source: [www.isdb.org](http://www.isdb.org)

## 5.6. Impact Investment Exchange Asia (IIX)

IIX aims to provide bigger access to capital for social entrepreneurship in Asia. IIX does not provide direct funding and is a platform connecting companies involving in development projects with private investors. IIX is only available for companies and institutions (investors, companies, foundations, international organizations and government) that try to increase social equality or environmental sustainability.





It is the institution's vision and mission to empower less fortunate community with required social and financial mobility, boost growth and prosperity for all in services such as comprehensive consultation, connecting between and with all parties, accelerating social and business undertaking growth, financial innovation, and conducting research, capacity building, and etc.

**One of the companies obtaining assistance from IXX is the *East Bali Cashews (EBC)*, a cashew company in Bali, to have the capacity to develop their business. The assistance provided is to enable the company to partner with international investment company Kohlberg Kravis Roberts (KKR) to help local entrepreneurs to develop their capacity to compete and add more values to the area.**

### 5.7. Climate Bonds

*Climate Bonds* is a financial bond issued by bank accessible to government or company to finance or improve financing for projects related to climate change. Climate Bonds is an association of many financial institutions such as J.P Morgan, HSBC, ING, KfW and Crédit Agricole CIB that aim to promote investment in projects and assets required for low carbon economy transition and adaptive to climate change.

Climate Bonds' strategy is by developing **Green Bonds** that are quite large and liquid, which will help reducing capital cost for climate projects in more developed and developing countries. This will bring positive impact in growing aggregate mechanism for fragmented sectors and supporting government that is trying to utilize equity capital market. Climate bonds provide loan through issuance of obligation and borrowers would have to meet the prevailing regulation and provision.

Project that meets criteria for financing from green bonds among others are energy efficiency scale, pollution prevention, sustainable agriculture, fishery and forestry, water and land ecosystem protection, clean transportation, sustainable water management and environmental-friendly technology cultivation<sup>16</sup>.

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<sup>16</sup>[http://lppi.or.id/site/assets/files/1461/tentang\\_green\\_bond\\_-\\_krisna\\_wijaya.pdf](http://lppi.or.id/site/assets/files/1461/tentang_green_bond_-_krisna_wijaya.pdf) accessed on July 30, 2020



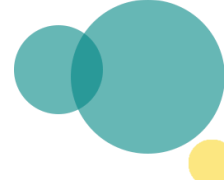
**In order to balance green bonds development that is massive overseas, the Financial Service Authority (Otoritas Jasa Keuangan (OJK)) follows up the provision by issuing Agency regulation Number 60/POJK.04/2017 about the Issuance and Requirements for Loan Stocks with Environmental Perspective (green bonds)**

POJK is issued to support government's program that has been set in the Long-Term Development Plan (RPJP) 2005-2015. In the article 4 of the regulation it is stated that there's only 11 business or activities that could be financed by green bonds, and these activities or undertakings should relate to:

1. Renewable energy;
2. Energy efficiency;
3. Prevention and control;
4. Natural resources management and sustainable land use;
5. Land and water biodiversity conservation;
6. Environmental-friendly transportation;
7. Sustainable water and waste water management;
8. Climate change adaptation;
9. Eco-efficient products (reduced use of resources and generates less pollution);
10. Environmental-friendly building that would meet national, regional or international standards and certification;
11. Other environmentally friendly activities and/or undertakings.

In order to obtain financial support using this scheme, OJK requires at least 70% of the financed project should meet the 11 provisions above. Independent third-party existence is a pre-requisite for project approval to oversee and assess green bonds compliance annually in ensuring project's appropriateness. Furthermore, each company issuing green





bonds is allowed to use all of their loan to develop project. Nevertheless, the fund should be allocated at least 70% for Environmental-friendly Business Undertaking (Kegiatan Usaha Berwawasan Lingkungan (KUBL)). The fund should also be accounted for through OJK oversight and obligation performance report.

## 5.8. Breakthrough Energy Coalition (BEC)

BEC is the cooperation between individual and organization with commitment to develop affordable energy technology and reliable to overcome climate change problems. This coalition consists of private investors that would tolerate risks, global companies producing or consuming energy, and financial institution with capital to finance infrastructure projects.

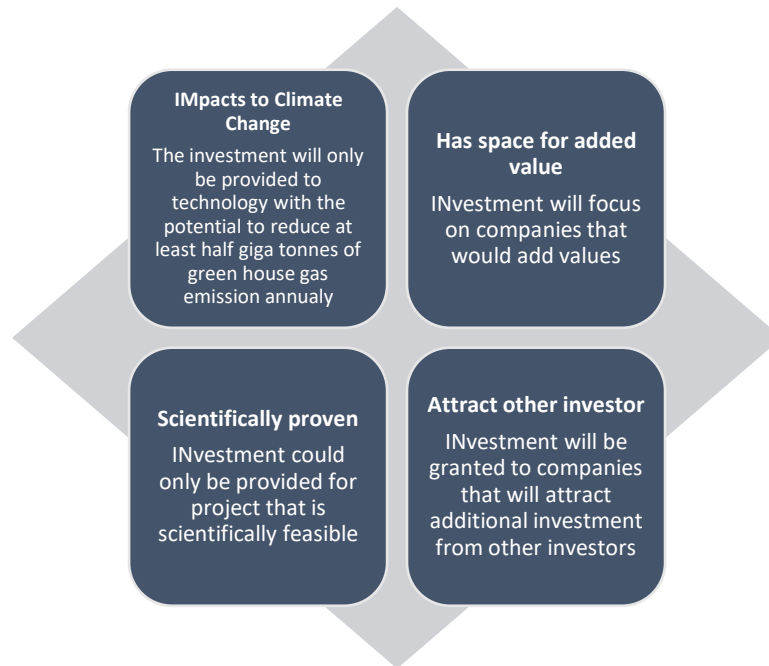
The coalition establishes **Breakthrough Energy Venture**, which is funds from the investors that focuses on developing companies that would stop climate change. They will provide more flexible investment to companies trying to develop innovation from research funded by government, including from local government. The strategy here is to connect research funded by government to investor with capital that would realize clean energy technology innovation as well as commercialize the technology. The funds aim to reduce emission in electricity, transportation, agriculture, manufacture and building.

There are several stages to access funding from BEC, which are:

- Choosing one of the five topics that would emit green house gas the most, which are **electricity, transportation, agriculture, manufacture and building**;
- Government, including local government conducts research to create solution-oriented innovations; and
- New companies that may make the innovations come true could access funding from private investor through *Breakthrough Energy Venture*.



The funding from BEC is an equity and should meet the following criteria.



**Figure 15. BEC Criteria**

## 5.9. Rockefeller Foundation

Rockefeller Foundation is a private foundation that has mission to promote people's welfare around the world. This philanthropic institution distributes their resources and expertise in activities to increase access to electricity, food, healthcare service and economic opportunity. The foundation also channels its asset and resources to activities related to innovation, innovative financing as well as on climate and resiliency. Climate and resiliency activities aim to mobilize capital and investment to provide emission-reduction solution and protect more vulnerable group from climate impacts.

The foundation owns Zero Gap Fund that aims to invest in new financial product and solution to catalyze new capital to achieve Sustainable Development Goals (SDGs). The scheme focuses on improved high innovative financial mechanism such as new security, insurance product and funding strategy to open up new private capital in a form of grants.





## 5.10. PT Sarana Multi Infrastruktur (PT SMI)

PT SMI is a state-owned enterprise in infrastructure financing sector. Infrastructure structures financed by PT SMI are transportation, road, irrigation, telecommunication, energy efficiency, electricity, oil and gas, sewer system, clean water, train, education, health care, correctional institution, urban facility, tourism, infrastructure zone, public housing, informatics, fountain, waste management system, sports facility, arts facility, renewable energy and energy conservation. PT SMI owns several accessible funding innovations for local government such as green bonds, SDG Indonesia One, and local loan.

### 5.10.1. PT SMI Green Obligation

As a response to Government of Indonesia's policy on low-carbon development and green growth as well as climate change agenda, PT. SMI has commitment to provide green financial scheme. In 2018, PT SMI issues **Green Bonds Stage 1**. It is expected that the bonds could contribute to Indonesia's NDC commitment.

This environmental bond is used to finance existing projects in PT SMI's financial portfolio for new or existing projects that have environmental benefits, support transitional process to climate change growth and low carbon development as well as to protect, preserve, and/or increase environmental quality and function. Then the project should be evaluated based on financial feasibility as well as environmental and social risks in line with Environment and Social Safeguards (ESS) of PT. SMI. Project criteria with environmental perspective are as followed:

- ✓ Clear environmental benefits;
- ✓ Support transition to low carbon development and climate resilient growth; and
- ✓ Protecting, preserving and/or improving environmental quality and function



Sectors financed by the bonds among others are:



**Figure 16. Sectors for PT SMI Green Bonds**

### 5.10.2. SDG Indonesia One PT SMI

Ministry of Finance and PT SMI established SDG Indonesia One, an infrastructure provision platform that integrates in combine public and private funds through blended finance scheme to be distributed to infrastructure projects related to the SDG's attainment. There are four pillars in SDG Indonesia One, which are:

1. **Development facility**

This pillar aims to promote good quality infrastructure projects at the national and local level.

2. **Risk mitigation** (de-risking facility)

This pillar aims to increase infrastructure projects' bankability to attract private interest or investor to participate.

3. **Financing** (financing facility)

This pillar aims to promote and stimulate larger infrastructure financing by attracting participation of other parties such as commercial bank or private investor to participate in infrastructure projects.





#### 4. **Investment** (equity fund)

This pillar aims to promote private investor's participation in infrastructure projects related to SDGs.

#### 5.10.3. PT SMI Local Loan

As a state-owned enterprise in financing infrastructure, financing and investment is one of the most important business pillars. In this business pillar, PT SMI provides financial and investment products, one of these products is loan provided to local government.

Local government financing is financing facility for local government to support their effort in providing basic and social infrastructure with mid-term and long-term financing. Furthermore, local government financing also has the potential to increase local government's revenue and accelerate local economic growth. This local government financing could be in a form of loan. There are two types of local loan, which are:

##### 1. **Mid-term Loan**

This loan is utilized to finance public service that would not generate revenue. The loan period is more than 1 (one) fiscal year. The repayment period (main loan, interest, and/or other responsibility) should be paid within the period of governor, head of district, or mayor in office.

##### 2. **Long-term Loan**

This loan is to finance infrastructure and/or facility investment in the public service with following criteria:

- Generating direct revenue for local budget that relates to the infrastructure and facility development;
- Generating indirect revenue in a form of Local Budget's efficiency that should have been disbursed when the activity is not implemented;
- Providing economical and environmental, and social benefits; and
- The loan period is more than 1 (one) fiscal year. The obligation to repay the loan (main loan, interests, and/or other obligation) should be completed in accordance with requirements.



Local loan should be assessed by Minister of Home Affairs by fulfilling the following requirements;

- a. Approval from local parliament made during deliberation of Local Budget, which includes temporary priority and budget ceiling;
- b. Copy of dossier of inauguration of local government;
- c. Term of Reference of Activities;
- d. Mid-term Development Plan and Government's Work Plan;
- e. Local government's financial report for the past 3 (three) years;
- f. Current year's state budget and current year's local government's regulation on Local Budget; and
- g. Local government's loan planning.

Moreover, in order to apply to PT. SMI's local loan, the local government has to prepare:

1. Written application and/or filling out Local Financing Initiation Form signed by the head of local government, containing information about:
  - Prioritized infrastructure that require immediate funding;
  - Financial budget plan required to finance the infrastructure;
  - Financial facility repayment timeline; and
  - Local infrastructure benefit for the people.
2. Local parliament's approval during deliberation of general policy of local expenditure and revenue and temporary budget ceiling
3. Document on Integrity Pact (SMI's format)
4. Current year's local budget along with the amendments
5. Local government's financial report for the last three years that have been audited for the last three years with qualified opinion
6. Copy of the dossier of inauguration of governors, head of districts or mayors.
7. Statements of head of local government that local government does not have any arrears for the loan payment from government and/or other parties.



8. Feasibility study that should include at least about (a). background; (b) project and needs plan; (c). Infrastructure finance; (d) financial ratio calculation; (e.) funding withdrawal plan; and (f) project feasibility and benefits.
9. Official document from RPJMD and RKPD that contains infrastructure development.

There are three process in the financial distribution, which consist of:

#### Local Government Process

- a. Planning for activities funded from loan
- b. Approval from local parliament on the loan plan

#### Ministry of Home Affairs and Ministry of Finance Process

- a. Head of Local Government proposes local loan plan to be considered by Minister of Home Affairs in accordance with Article 18 Section 1 PP 56/2018
- b. Minister of Home Affairs makes consideration upon coordinating with Minister of Finance
- c. Local government applies for deficit exceeding permit should the loan exceeds deficit based on the Loan Decession
- d. Minister of Finance provides permit for deficit exceeds

#### PT SMI Process

- a. Local Government applies for loan application to PT SMI along with consideration letter from Minister of Home Affairs
- b. PT SMI assess the loan proposal
- c. Decision on loan application provided for maximum of 40 days upon the reception of correct and completed documents
- d. Local government and PT SMI sign the financial agreement

**Figure 17. Local Financing Process from PT SMI**

### 5.11. Armstrong Asset Management (AAM)

AAM is an independent asset management company based in Singapore. AAM is committed to investing in clean energy infrastructure that has a long-term positive impact on society and the environment, especially for developing countries in Southeast Asia. Established in 2010, AAM has a variety of investment schemes funded by several development finance institutions, investment institutions, and companies in Asia. To date, USD 130 billion has been distributed in the form of equity. Through this fund AAM has funded the development and construction of 16 renewable energy projects in Southeast Asia. The Indonesian government through K/L can access this scheme and collaborate with local governments by following the procedure in Figure 2.



## BAB 6 CLOSING

### 6.1. Conclusion

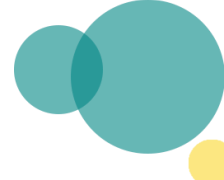
Often the lack of and limited funding are the common reasons to complain and become obstacles for environmental protection and management actions, including actions of responding to the impacts and threats of climate change. Even though at the moment the availability of funding sources is plenty enough yet the climate funding architecture is still fragmented and international and private commitments are good enough in supporting climate change control efforts at the national level.

Highlighting the issue of limited funding, local governments can optimize potential sources of funding sourced from the private sector, non-governmental organizations (NGOs), development partners and donors. One of measures the local governments need to take is how to articulate and translate funding needs into proposal writing.

In conclusion, challenges faced by local governments are due to: **Firstly, the lack of priority.** The programs and activities of each Ministry/Institution, Regional Government Work Units (SKPD) that have environmental and climate change issues are considered as programs/activities that must be funded because they are fulfilled in terms of the current logical framework, regardless of the extent of the program and activities affecting other interests. For instance, characteristics of actions from climate change adaptation activity is that that it involves more than one institution and the results of the activities are experienced by more than one sector.

**Secondly, the absence or limitations of an assessment on the financing needs for mitigation or adaptation,** which are originated as the result of identification of the need for action, which includes technology interventions and capacity building activities. The planning process often found to stop at the listing stage of the activities.





**Thirdly, the unavailability of a single information system that is capable of monitoring and evaluating the use of funding** originating from the APBN, international funding assistance, the private sector and other non-binding sources.

## **6.2. Recommendations**

### **6.2.1. Recommendation for Local Governments**

1. Climate activities that are cross cutting and some of them are carried out indirectly. With clarity of categories in the UNFCCC framework for both adaptation as well as mitigation actions, subsequently it can make it easier for local governments to carry out monitoring and reporting based on outcomes/benefits that can be accounted for. Then, with this existing modality, it can be one of the ways for the government to carry out regional financial governance.
2. Funding for climate action is supposed to be utilized to realize programs, plans and activities as a follow-up to mitigation action plans or adaptation activities based on a scientific basis that is narrow down towards priority action. In terms of determining program and activity priorities, there should be an agreement between agency and OPD. Hence, the priority programs and activities can reflect cross-issue and sectoral activities and cooperation.
3. Before deciding the access to funding, it is crucial for local governments to identify their needs, regarding to climate change, including commitments, and the availability of budgets once the project does not exist. How local governments must prepare long term funding as a step to ensure both operational and maintenance along with continuity. This means that the initiator must have a big concept about what it really takes and how to execute it.

### **6.2.2. The Ministry of Home Affairs**

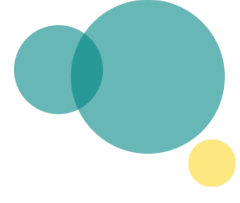
1. There has to be a space for dialogue between the local government and the central government including ministries/technical agencies as well as potential and relevant partners to activities and sources of funding. This situation aids local government in understanding and completing the mechanisms that must be implemented including



the clarity in terms of the type of funding, procedures and documentation that are required to be completed.

2. For the reason that climate change issues and agendas are closely linked to the components contained in the Sustainable Development Goals (SDGs) and Disaster Risk Reduction (DRR), Collaboration with regards to interests and institutional from the planning stage should be mandatory. Furthermore, the essence of using and utilizing funding is effectiveness and efficiency. Collaboration is vital in giving an understanding to stakeholders, specifically on the goals that want to be achieved through synergy and collaboration activities.
3. Encourage the Funding Management Agency for the Environment to become one of the institutions capable of reforming financing governance.
4. Information with respect to the need for climate action which leads to prioritization of climate action is managed in a single system for data and information that is formally referred to by various stakeholders. This data and information system should be used as a menu of important and priority activities. For instance, if there is an NGO or donor agency that has a desire to help climate action, then the program or activity and its location must be recommended by this data and information system as a suggestion/offer/recommendation for intervention. On the other hand, potential overlapping activities, whether funded by National Budget, NGOs, donors or the private sectors can be avoided and the impacts of activities can be monitored, assessed and analysed for later interventions.
5. The one-data and information system are regarded as a dashboard for climate action in Indonesia that aims to answer challenges towards limitations and utilization of additional funding including classic problems, which are weak coordination, communication and collaboration between local governments, central government and development partners. For instance, local governments can grasp a knowledge from a good practice associated with adaptation actions in an area and gain an ease in finding vulnerable areas, a scope of program, the amount of funding required, the focus of the program, and the institutions. Moreover, it offers information about the





joint climate mitigation-adaptation that is effective and targeted as well as the effectiveness and efficiency of utilizing the amount and available capital.



## GLOSSARY

**Anggaran Ekonomi Hijau** (Green Economic Budget) Government's Budget allocation to earmark activities to attain green economics.

**Blended Finance** Environmental protection activity to be implemented by mobilizing private investment supported by public financial instrument (government and philanthropic).

**Clean Development Mechanism** (CDM) One of the mechanisms under Kyoto Protocol-UNFCCC for emission reduction projects where each green house gas emission (Certified Emission Reduction or CER) generated could be traded in carbon trade scheme

Dis-incentive Monetary and / or non-monetary imposition of burdens or threats to anyone as well as the Central Government and regional governments in order to reduce activities that have a negative impact on natural resource reserves and the quality of environmental functions

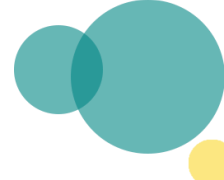
**Hibah daerah /** Local Grants Provision of grants by transferring rights over something from the Government or other parties to the Regional Government or vice versa which has been specifically designated and carried out through an agreement

**Impact Investment** Activities carried out by private companies or social enterprises that emphasize not only financial benefits but also social and environmental benefits.

Incentive Efforts to provide encouragement or attractiveness in monetary and / or non-monetary terms to individual as well as the Central Government and regional governments to carry out activities that have a positive impact on natural resource reserves and the quality of environmental functions

**Instrumen Ekonomi Lingkungan Hidup** Series of economic policy to encourage government, local government or individual to move towards environmental preservation function.



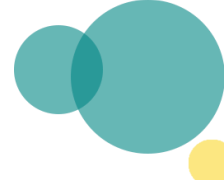


/Environmental Economy Instrument	
<b>Kapasitas Fiskal Daerah</b> / Local Government Fiscal Capacity	Fiscal capacity by local fiscal capacity index
<b>Kemitraan Pemerintah dan Badan Usaha</b> / Government and Business Entity Partnership	Environmental protection activity that is part of government program implemented by private investor with various facilities from government
<b>Mandatory Spending</b>	<p>State expenditures or spendings that have been regulated by law. The aim is to reduce the problem of regional social and economic inequality. Mandatory spending in local government financial governance includes the following:</p> <ul style="list-style-type: none"> <li>• Education budget allocation of 20% of the APBD according to the mandate of the 1945 Constitution Article 31 paragraph (4) and Law no. 20 of 2003 concerning the National Education System article 49 paragraph (1).</li> <li>• The amount of the provincial, district / city government health budget is allocated at least 10% (ten percent) of the regional revenue and expenditure budget excluding salaries (Law No. 36 Year 2009 on Health).</li> <li>• The use of the General Transfer Fund (DTU) is directed at at least 25% (twenty five percent) for regional infrastructure spending which is directly related to the acceleration of the development of public and economic service facilities in order to increase employment opportunities, reduce poverty,</li> </ul>



	<p>and reduce disparities in service provision public between regions (Law on State Budget).</p> <ul style="list-style-type: none"> <li>• Village fund allocation (ADD) of at least 10% of the balance funds received by the Regency / City in the Regional Revenue and Expenditure Budget after deducting the Special Allocation Fund (Law No.6 of 2014 on Villages).</li> </ul>
<b>Multilateral Implementing Entities</b> (MIEs)	Multilateral Institutions and Regional Development Banks invited by the Council that meet fiduciary standards and demonstrate commitment and ability to comply, as a minimum, with environmental and social policies and gender policies approved by the Council
<b>Murni APBN</b> / Purely State Budget	Environmental protection activity funded by Government budget such as line ministry budget allocated for activities at the local level and fiscal transfer budget
<b>Murni Filantropi</b> / Purely Philanthropic	Environmental protection activities are funded by philanthropic institutions, such as family foundations, corporate foundations and non-governmental organizations both from domestic and outside the country.
<b>Murni Komersial</b> / Purely Commercial	Environmental protection activities fully funded by the business world, both as part of efforts to mitigate climate change as well as investment in other companies
National Implementing Entities (NIEs)	A national legal entity nominated by the Parties recognized by the Council as meeting fiduciary standards and demonstrating the ability to comply, as a minimum, with environmental and social policies and gender policies approved by the Council
<b>Pemupukan Dana</b> / Accumulation of funds	Funds obtained through banking instrument, market instrument and/or other financial instruments in accordance with the legislations.
<b>Penghimpunan Dana</b> / fundraising	Funds raised for handling pollution and / or damage and restoration of the environment originating from the APBN, APBD and / or other sources of funds that are legal and not





	binding in accordance with the provisions of laws and regulations.
<b>Penyaluran Dana /</b> Distribution of Fund	Funds that could be obtained through carbon trade, loan, subsidy, grants and/or other mechanism as stipulated in the law.
<b>Proyek dan Program Adaptasi /</b> Adaptation Project and Program	Series of activities aim to overcome negative impact and risks caused by climate change
Regional Implementing Entities (RIEs)	Legal entity at the sub and / or regional level nominated by the Parties who is recognized by the Council as meeting fiduciary standards and demonstrating the ability to comply, as a minimum, with environmental and social policies and gender policies approved by the Council.
<b>Standar Fidusia /</b> Fiduciary Standards	Standards to meet from financial integrity and management and institutional capacity. Fiduciary standards could be accessed in the following link: <a href="http://www.adaptation-fund.org/wp-content/uploads/2015/01/OPG%20ANNEX%202.pdf">http://www.adaptation-fund.org/wp-content/uploads/2015/01/OPG%20ANNEX%202.pdf</a>
<b>Transfer Fiskal Ekologis /</b> Ecological fiscal transfer	The new concept is expected to improve the performance of environmental management for the better and allow it to be adopted by the provincial government and other district governments



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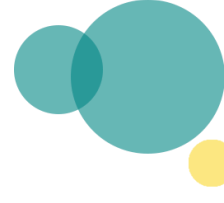
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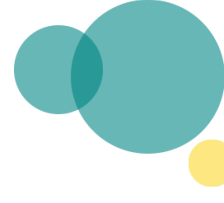
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