



CASE STUDY

The Republic of Indonesia

Trends and Institutional Frameworks for Green Investments in Indonesia

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Introduction

Although Indonesia has been one of the largest recipients of climate related development assistance since 1998 (Halimanjaya, 2013), the National Action Plan on GHG Reduction (RAN-GRK) was only introduced in 2011 in response to the government's commitment to reducing emissions by 29% compared to the business as usual scenario (BAU) or 41% with international support in 2030.

To this end, approximately, IDR 8,377bn (USD 951mn) of climate finance from public sources was disbursed in Indonesia in 2011. However, this fell below the Indonesian government estimates of the level of annual finance required by 2020 to meet emission reduction targets (Falconer, Glenday, Rosenberg and Wilkinson, 2014). To fulfil this gap, the Financial Services Authority (OJK) of the Indonesian Government developed a Roadmap for Sustainable Finance in 2014. This roadmap sets forth the end goal of sustainable finance in Indonesia to be achieved in the medium term (2015-2019) and long term (2015-2024) by the financial services industry under the supervision of OJK and determines and prepares the benchmark for improvements in sustainable finance.

Table 1: Green Financial Scheme by Financial Institution

Agency/Institution	Product/Scheme	Description	Impact
BNI (State Bank of Indonesia)	BNI Go-Green (started in 2010)	Green CSR, green banking	<ul style="list-style-type: none"> Implemented environmental projects in different areas, Improved employees green behaviour,
OJK	Roadmap for Sustainable Finance (issued 2014)	Determines and prepares the benchmark for improvements in sustainable finance	<ul style="list-style-type: none"> Built capacity of banking sector in sustainable finance aspects (short-term impact, ongoing) Encouraged sustainable economic growth (projected long-term impact)
OJK	Regulation on Sustainable Finance (issued 2017)	Specific and binding regulation for all forms of financial institutions in order to implement financial system based on sustainable principles	<ul style="list-style-type: none"> Provision of adequate source of finance for sustainable development (projected impact)



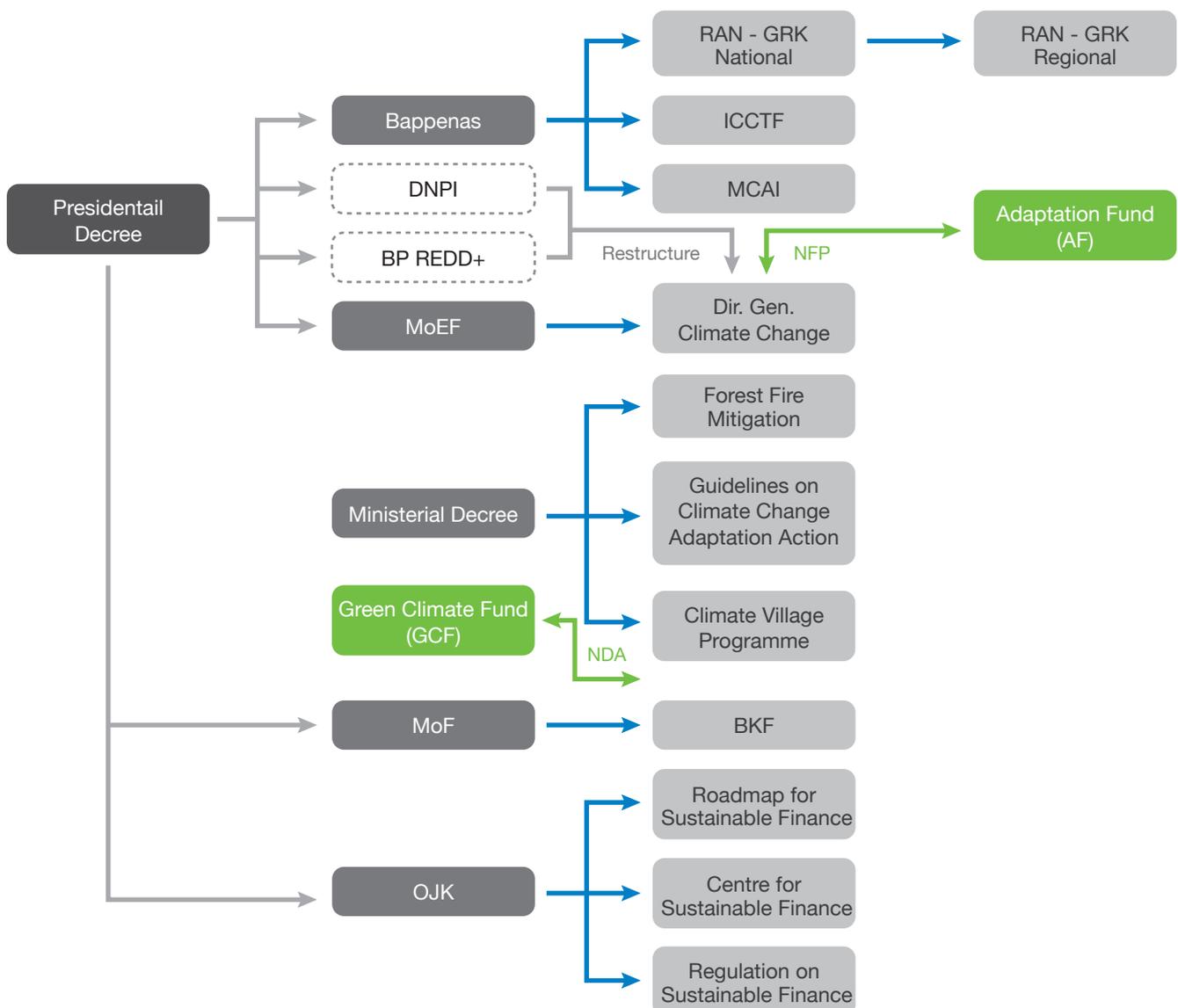
OJK has been conducting training for practitioners in the financial sector to enhance their understanding of sustainable finance, focusing on (i) the adoption of Environmental and Social Risk Management, (ii) the development of bank SOPs that support the implementation of sustainable finance, (iii) sustainability reports ([http://www.ojk.go.id/sustainable-finance/id/publikasi/materi-training/Pages/Training-of-Trainers-\(ToT\)-Keuangan-Berkelanjutan-pada-Sektor-Perbankan-Bulan-Mei-2017.aspx](http://www.ojk.go.id/sustainable-finance/id/publikasi/materi-training/Pages/Training-of-Trainers-(ToT)-Keuangan-Berkelanjutan-pada-Sektor-Perbankan-Bulan-Mei-2017.aspx)).

Further, as part of the implementation of the Roadmap and to provide support to the government in meeting the SDGs, OJK has established the first Centre of Sustainable Finance in Bali in collaboration with the Udayana University. Soon after the launching ceremony of the Centre, the OJK Regulation on Sustainable Finance – a product that governs the implementation of sustainable finance – was enacted.

Legal and Institutional Framework

The adoption of the Bali Road Map during the 2007 Bali Climate Conference, followed by the announcement of Indonesia's NDC at the 2009 G-20 Summit in Pittsburgh have laid the groundwork for the development of policies and regulations for low-carbon climate resilient development.

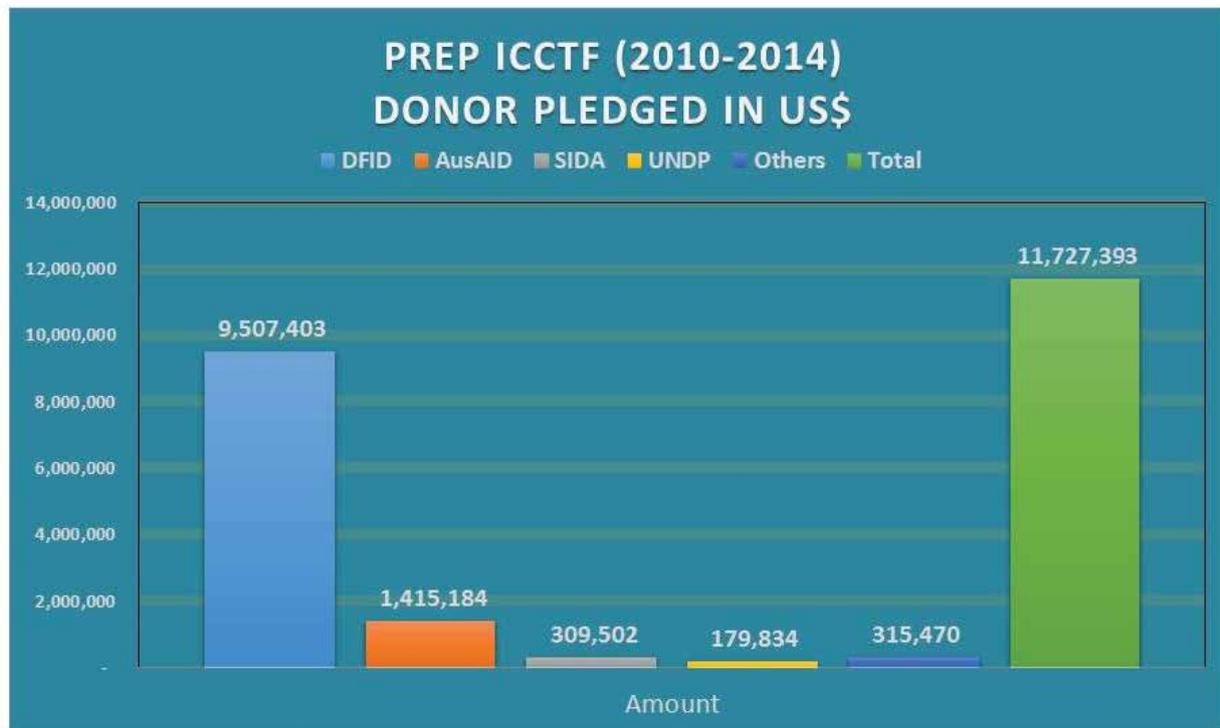
The Bali Road Map led to the development of Indonesia Climate Change Sectoral Roadmap (ICCSR) in 2007 mainstreaming Climate Change into the National Development Planning and the National Action Plan on Climate Change (RAN-API) in the same year. ICCSR and RAN-API were then followed by the establishment of the National Council on Climate Change in 2008 and the Task Force REDD+ (BP REDD) in 2013, both of which were restructured under Ministry of Environment and Forests (MoEF) and handed over to the Directorate General of Climate Change (Ditjen PPI) of the MoEF in 2015. The diagram below illustrates the development of policy and regulation as result of mainstreaming climate change into the National Development Plan:





Until 2014, Indonesia had received USD 382.86 million for climate change mitigation from a total of USD 4.4bn international public finance (Halimanjaya, 2014), the largest recipient amongst countries in Asia and the Pacific. Part of that amount has been derived through the ICCTF as described in the following graphic:

Graphic 1: Donor pledge to ICCTF until 2014



Source: ICCTF (<http://icctf.or.id/donor-pledge-2010-2014/>)

The table below describes the projection of funds implemented and planned by ICCTF from 2015 to 2018 with a total of IDR 203.3bn , approximately USD 15.2m :

Table 2: Grants pledged to ICCTF after 2014

Year	Sources Grant (IDR)			Sources APBN (IDR)	Total
	USAID	UKCCU	DANIDA		
2015			700 million	15.3 billion	16 billion
2016	18.5 billion	22.2 billion	2.3 billion	15.3 billion	58.3 billion
2017	34.3 billion	29.6 billion		20 billion	83.9 billion
2018	17.4 billion	4.7 billion		23 billion	45.1 billion
					203.3 billion

Emissions reductions between 2010 and 2015 have been recorded by different sectors as result of the implementation of climate finance in Indonesia. The projection of the achievements so far are outlined in the following table:

**Table 3: National Emission Recapitulation by RAD-GRK, 2010 - 2015**

		2010		2011		2012		2013		2014		2015	
Entity (regional)		Number of Activities	Emission Reduction (ton CO ₂ e)	Number of Activities	Emission Reduction (ton CO ₂ e)	Number of Activities	Emission Reduction (ton CO ₂ e)	Number of Activities	Emission Reduction (ton CO ₂ e)	Number of Activities	Emission Reduction (ton CO ₂ e)	Number of Activities	Emission Reduction (ton CO ₂ e)
RAD - GRK Forestry	PEP	185	3.576.053	201	6.862.326	209	6.209.212	222	6.346.948	271	3.630.054	171	2.287.053
	PETA**						60.866.187		23.000.176				
RAD - GRK Agriculture		89	4.844.395	112	4.909.495	106	5.782.576	116	6.670.520	132	7.033.393	133	1.313.840
RAD - GRK Energy		136	13.659	338	40.113	528	70.336	805	116.725	980	232.375	56	3.547
RAD - GRK Transportation		48	247.339	52	102.612	63	282.126	54	542.243	56	660.237	27	53.647
RAD - GRK Waste treatment		161	89.552	244	193.263	336	377.422	345	479.307	355	644.772	255	43.524
Total		619	8.770.998	947	12.107.809	1.242	12.721.672	1.542	14.155.743	1.794	12.200.831	642	3.710.638

In seeking to mobilise private climate finance in Indonesia, the OJK is currently the only agency that has formulated a governing regulation for financial institutions to implement sustainable finance.

Existing Climate Finance Gaps

Key challenges in green investment include high interest rates, limited financial access and limited participation from financial institutes in climate change financing.

Foreign exchange risk is an additional deterrent to the private sector's investment in climate change mitigation since most projects entail long-term investment horizons of up to 30 years. Because payments in most energy project contracts are denominated in US dollars and exchange rates are volatile, this increases the risk to the investor (Tänzler and Maulida, 2013).

Structural issues, such as preferential rights enjoyed by large, state-owned banks and market segmentation result in the lack of competition in the banking sector and hence impede the innovation of financial products for climate investments (ASrIA-AIGCC, 2015). For example, the banking sector in Indonesia holds approximately 80% of total assets of all financial institutions and about 70% of total banking assets are concentrated across the ten largest banks (UNEP-Inquiry, 2015). As a result, the ratio of domestic credit to the private sector to GDP in Indonesia is only 38%, among the lowest in the AP region (UNEP-Inquiry, 2015). In addition, in a highly segmented banking sector, commercial banks lack economic incentives to pursue climate investment opportunities that are less familiar than providing finance to large and/or state-owned enterprises.

Financial Framework of the Project's Implementation

Trends in green lending in Indonesia have demonstrated an upward trajectory in recent years and as demonstrated by a BI survey, 24 conventional banks and 5 Islamic banks drew on the green financial portfolio in 2013. However, this amounts to only 1.37% of the total financing provided by these 29 banks. Green financing occurs primarily through investments in mini hydro (26.1%), geothermal (25.7%), high efficient machineries (19.6%), organic cultivation (19.5%), and eco-label products (4.5%) (Siregar, 2014). These investments have increased by 59% in a three-year period from IDR 6.4 to 10.2tn in 2013 (equivalent to an increase from USD 580m to 927.3m). Islamic banks have been more open to providing green financing since sustainable and environmentally friendly initiatives are in line with its ethical principles. However, the share of green financing by Islamic banks remained relatively small at about 2.53% of the bank's total lending in 2013 (Halimanjaya, Maulidia, 2014). Green investment policies also indicate that a majority of private investment flows into mitigation activities, primarily in the energy sector. To date there has been limited private sector interest in financing adaptation initiatives, even though there is a growing potential for local and community development banks to play a role in the adaptation space. Table 4 outlines the provision of funding for the private sector by or through commercial banks since 2012:



Table 4: Private sector funding for climate finance

Initiative to mobilize Private sector funding for climate finance			
Organization	Year	Activity	Target beneficiaries
BRI	2012	Credit with the tenor of 6 Years	IDR 127 billion to PT Geo Dipa Energy Persero. The credit is for the revitalization program and optimization of geothermal power plant facilities on the upstream and downstream side for P Dieng unit in Central Java. IDR 1.3 trillion credit for PLN Pikitring project outside Java - Bali, PLN Pikitring Java - Bali Project and Areva Substation Transmission project (substansi) Project on PLN Pikitring outside Java - Bali.
Mandiri - AFD	2012 - 2015	Long term credit	42,3 million USD for 8 producing areas of cassava starch to develop biogas power plant and support 100 billion USD for CDM Rp 1,41 trillion credit for PLN Pikitring project outside Java - Bali, PLN Pikitring Java - Bali project, and Areva Substation Transmission Project (Substansi) project on PLN Pikitring outside Java - Bali.
BCA	2012	Credit	Rp 800 billion credit for PLN Pikitring project outside Java - Bali, PLN Pikitring Java - Bali project, and Area Substation Transmission Project (Substansi) project on PLN Pikitring outside Java - Bali. Green energy in Sumatera, credit Rp 575 billion to PT Growth Asia to support Biomass Power plant

Initiative to mobilize Private sector funding for climate finance			
Organization	Year	Activity	Target beneficiaries
BNI	2012	Credit	IDR 1,35 trillion credit for PLN Pikitring project outside Java - Bali, PLN Pikitring Java - Bali project, and Areva Substation Transmission Project (Substansi) project on PLN Pikitring outside Java - Bali.
PT SMI (owned state company) AFD		Loan	100 million USD for renewable energy
The Energy & Environment Partnership Program (EEP) Finland - Indonesia	2012 - 2014	Grant	Grant as much as €70.000- 200.000 million from EEP to provides co-financing and incentivizes the private sector through capacity-building for biomass development in two provinces, Riau and Central Kalimantan
The Cities Development Initiative for Asia (CDIA) Urban Development Indonesia	On going	Grant	Grant as much as \$2.4m for the project. CDIA involves three national institutions: a state-owned enterprise recently accredited by the Green Climate Fund, PT Sarana Multi Infrastruktur (PT SMI), and two civil society organisations, the Foundation for Local Government Innovation (Yayasan Inovasi Pemerintahan Daerah or YIPD) and the Urban and Regional Development Institute (URDI). Pre-FS have engaged the private sector, government agencies, and donors in financing the development of eight urban transport and solid waste management projects across Indonesia

Project loans, of which the sole source of repayment is the project's cash flows, are not available in most developing countries. Since project finance is a non-recourse type of finance, i.e. the bank has no recourse¹ to the parent company of the project developer, it is a popular type of finance in developed countries because it is less risky to the parent company and can secure high financing leverage. However, project finance has not been popular in developing countries. For example, corporate guarantees, pledged non-listed shares, and assigned receivables—even from high quality off-take agreements—are not classified as allowable collateral in Indonesia. As a result, Indonesian banking regulations for the enforcement of security interests in transactions and macro prudential risk management measures reduce banks' appetites to provide project finance.

¹ No recourse beyond the project developer's assets or the ownership share of the company.



Lessons Learned/Estimated and/or Achieved Impact

Three major government institutions, MoEF, Ministry of Finance (MoF) and Bappenas have led initial efforts to channel progressively increasing amounts from multi-donor climate funds and the state budget, and as such inter-institution coordination has been critical. The implementation of the funds also involves various actors, including other local and/or national government institutions and NGOs, further necessitating strict monitoring and evaluation of the disbursement process to ensure that initiated projects meet their targets.

Despite increasing trends in the provision for climate finance and Indonesia's position as the leading recipient of global climate funds, the level of funding available remains inadequate for the fulfilment of the NDC in 2030. Innovative schemes and financial instruments are thus needed to bridge the funding gap and in order to do so, it is critical to engage the private sector in climate change initiatives. However, the lack of an enabling environment, limitations in policy and regulation and unattractive loan conditions continue to restrict participation from the private sector.

What is needed is a governing body that can formulate guidelines and apply binding regulations to facilitate private sector investment in low carbon enterprises. Regulations were developed by the central bank, Bank Indonesia (BI) in 2012, but due to challenges in ensuring enforcement, banks continued to provide less environmentally friendly businesses with access to credit. The central bank's role in supervision and governance was subsequently assumed by the OJK in 2013 and a Roadmap for Sustainable Finance was introduced in 2014, followed by a binding regulation on sustainable finance in 2017.

With this regulation, OJK aimed to increase the provision of adequate source of finance for sustainable development, encouraging banks to provide more green capital and other financial institutions to invest more in green business initiatives.

While OJK's efforts have successfully met private sector expectations in terms of creating an enabling policy environment, coordination between ministries and government agencies remains a sensitive issue that called for emphasis at the 1st National Workshop in Jakarta in 2017.

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