

Document of
The World Bank
FOR OFFICIAL USE ONLY

Report No: 149795-ID

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON AN

EMISSION REDUCTION CREDITING PROJECT

IN THE AMOUNT OF UP TO US\$110 MILLION

FROM THE

CARBON FUND OF THE FOREST CARBON PARTNERSHIP FACILITY

TO THE

REPUBLIC OF INDONESIA

FOR THE

EAST KALIMANTAN PROJECT FOR EMISSION REDUCTIONS RESULTS (P166244)

NOVEMBER 11, 2020

Environmental, Natural Resources and Blue Economy Global Practice
East Asia And Pacific Region



CURRENCY EQUIVALENTS
(Exchange Rate Effective May 31, 2020)

Currency Unit = Indonesian Rupiah (IDR)
IDR 14,640 = US\$1

FISCAL YEAR
January 1 – December 31

Regional Vice President: Victoria Kwakwa

Country Director: Satu Kahkonen

Regional Director: Benoit Bosquet

Practice Manager: Ann Jeannette Glauber

Task Team Leader(s): Dinesh Aryal, Alexander Lotsch



ABBREVIATIONS AND ACRONYMS

AMDAL	Environmental Impact Analysis
APL	Land for other purposes
BAPPEDA	Provincial Planning and Development Agency
BLU	Environment Service Agency or <i>Badan Layanan Umum</i>
BLU-BPDLH	Environmental Fund Management Agency or <i>Badan Layanan Umum - Badan Pengelola Dana Lingkungan Hidup</i>
BPKH	Regional Office for the Management of Forest Area
BSP	Benefit Sharing Plan
COP	Conference of Parties [to the UNFCCC]
CO ₂	Carbon dioxide
COVID - 19	Coronavirus Disease 2019
CSO	Civil Society Organization
DDPI	Regional Council on Climate Change (<i>Dewan Daerah Perubahan Iklim</i> or DDPI) in East Kalimantan Province
DGCC	Directorate General of Climate Change
EK-JERP	East Kalimantan Jurisdictional Emission Reductions Program
EK-PERR	East Kalimantan Project for Emission Reductions Results
ER	Emission Reductions
ERPA	Emission Reductions Payment Agreement
ER-PD	Emission Reductions Program Document
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
FCPF	Forest Carbon Partnership Facility
FGRM	Feedback and Grievance Redress Mechanism
FMT	Facility Management Team [of the FCPF]
FPIC	Free, Prior and Informed Consultation
FOERDIA	Forestry and Environmental Research Development and Innovation Agency
FREL	Forest Reference Emissions Level
FY	Fiscal Year
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas
GIZ	German Corporation for International Cooperation or <i>Gesellschaft für Internationale Zusammenarbeit</i>
GOI	Government of Indonesia
ha	Hectares
HCV	High conservation value
IPPF	Indigenous Peoples Planning Framework
IPSDH	Directorate of Forest Resources Inventory and Monitoring or <i>Inventarisasi dan Pemantauan Sumber Daya Hutan</i>
KPH	Forest Management Unit (or <i>Kesatuan Pengelolaan Hutan</i>)



MMR	Measurement, Monitoring and Reporting
MoEF	Ministry of Environment and Forestry
MoF	Ministry of Finance
MRV	Measurement, Reporting and Verification
NDC	Nationally Determined Contributions
NSC	National Steering Committee
NTFP	Non-Timber Forest Product
PF	Process Framework
POM	Project Operational Manual
REDD+	Reducing Emissions from Deforestation and forest Degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks in developing countries
REL	Reference Emissions Level
RIL-C	Reduced Impact Logging-Carbon
RL	Reference Level
PMU	Program Management Unit
RPF	Resettlement Planning Framework
SESA	Strategic Environmental and Social Assessment
SIS	Safeguards Information System
tCO ₂ e	Metric tonnes of carbon dioxide equivalent, can also be CO ₂ e (carbon dioxide equivalent) or MtCO ₂ e (million tonnes of carbon dioxide equivalent)
TNC	The Nature Conservancy
UKL-UPL	Environmental Management and Monitoring Efforts (or <i>Upaya Pengelolaan Lingkungan Hidup – Upaya Pemantauan Lingkungan Hidup</i>)
UNFCCC	United Nations Framework Convention on Climate Change
US\$	United States Dollar
WWF	World Wildlife Fund

**DATASHEET****BASIC INFORMATION**

Country	Project Name	
INDONESIA	East Kalimantan Project for Emission Reductions Results	
Project ID	Financing Instrument	Environmental Assessment Category
P166244	Emission Reduction Crediting (ERC)	B

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Disbursement-linked Indicators (DLIs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Situations of Urgent Need of Assistance or Capacity Constraints

Other Emission Reduction Payment Agreement

Approval Date November 11, 2020	Closing Date December 31, 2025	
Bank/IFC Collaboration No		

Project Development Objective(s)

The Project's development objective is to incentivize reduced deforestation and forest degradation in East Kalimantan, Indonesia, through payment of verified emission reductions (ERs), and to ensure that paid amounts are distributed according to an agreed Benefit Sharing Plan (BSP).

**Organizations**

Borrower: Republic of Indonesia

Implementing Agency: Ministry of Environment and Forestry (MoEF)

PROJECT FINANCING DATA (US\$, Millions)

<input type="checkbox"/> Counterpart Funding	<input checked="" type="checkbox"/> Trust Funds	<input type="checkbox"/> Parallel Financing
Total Project Cost:	Total Financing:	Financing Gap:
110.00	110.00 Of Which Bank Financing (IBRD/IDA): 0.00	0.00

Financing (in US\$, millions)

Financing Source	Amount
Forest Carbon Partnership Facility Carbon Fund (FCPF CF)	110.00
Total	110.00

Expected Disbursements (in US\$, millions)

Fiscal Year	2020	2021	2022	2023	2024	2025
Annual	0	25.00	0	40.00	0	45.00
Cumulative	0	25.00	0	65.00	0	110.00

INSTITUTIONAL DATA**Practice Area (Lead)**

Environment, Natural Resources & Blue Economy

**Contributing Practice Areas**

Climate Change

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks.

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

No

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	High
7. Environment and Social	Substantial
8. Stakeholders	Moderate
9. Other: Reputational, relocation of national capital, and COVID-19	High
10. Overall	High

COMPLIANCE**Policy**

Does the project depart from the CPF in content or in other significant respects?

Yes No



Does the project require any waivers of Bank policies?

[] Yes [X] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01		
Natural Habitats OP/BP 4.04	X	
Forests OP/BP 4.36	X	
Pest Management OP 4.09	X	
Physical Cultural Resources OP/BP 4.11	X	
Indigenous Peoples OP/BP 4.10	X	
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50	X	
Projects in Disputed Areas OP/BP 7.60	X	

Legal Covenants

Name	Frequency
Program Entity shall monitor and report to the Trustee on the implementation of the Safeguards Plans during Reporting Periods	Annually
Program Entity shall monitor and report to the Trustee on the implementation of the Benefit Sharing Plan	Six (6) months after receipt of the first Periodic Payment and annually thereafter
Program Entity shall apply technical corrections to improve the carbon accounting in order to reduce uncertainty.	Three (3) months prior to the end of the first Reporting Period

Description of Covenants:

In addition to Section 5.01(b)(i) of the ERPA General Conditions, the Program Entity shall monitor and report to the Trustee on the implementation of the Safeguards Plans and Benefit Sharing Plan during Reporting Periods. The Program Entity shall monitor and report to the Trustee on the implementation of the Safeguards Plans annually after the date of the ERPA. The Program Entity shall first monitor and report to the Trustee on the implementation of the Benefit Sharing Plan six (6) months after receipt of the first Periodic Payment and annually thereafter. The Program Entity may coordinate the annual monitoring and reporting of the Safeguards Plans and the Benefit Sharing Plan, provided that the Program Entity notifies the Trustee and the Trustee accepts such coordinated timelines. The Trustee reserves the right to initiate a separate monitoring of the implementation of the Safeguards Plans and/or the Benefit Sharing Plan annually after the date of the ERPA by an independent Third-Party monitor. Sections 9.01(g) and (k) as well as Section 9.05(d) of the General Conditions shall apply to such Third-Party monitor *mutatis mutandis*.

The Program Entity shall apply technical corrections to improve the carbon accounting in order to reduce uncertainty. The Program Entity shall do this in line with the areas of improvement (“**Areas for Improvement**”) described in the TAP’s Technical Assessment Report (May 2, 2019) and the FMT’s Assessment Note (May 21, 2019), and shall do this following the provisions included in the



"Guideline on the application of the methodological framework Number 2: Technical corrections to GHG emissions and removals reported in the reference period" dated November 2018 ("Guideline"). Such technical corrections shall be included in the Reference Level and shall be used for any ER Monitoring Report. If the Program Entity does not provide the Trustee with a detailed description of the technical corrections taking into account the Areas for Improvement and in accordance with the Guideline at the latest three (3) months prior to the end of the first Reporting Period, this shall constitute a material breach by the Program Entity (Event of Default) under Section 16.01(a)(vi) of the General Conditions.

Conditions of Effectiveness

Description of Condition

1. Submission of a final Benefit Sharing Plan (BSP) which, based on the advanced draft version of the BSP provided by the date of the ERPA, takes into account specific guidance to be provided by the Trustee, following consultations with FCPF Carbon Fund Tranche A/B Participants, on the outstanding issues that need further clarification in the final version of the BSP;
2. Submission of a letter in which the Program Entity documents its decision to use the ER Program Buffer as the Reversal Management Mechanism for its ER Program;
3. Submission of evidence demonstrating the Program Entity's ability to transfer Titles to ERs, free of any interest, Encumbrance or claim of a Third Party; and
4. Submission of evidence, in form and substance satisfactory to the Trustee, demonstrating that the ER Program Measures that generated the ERs during the period from June 18, 2019 until the date of the ERPA were implemented in a manner consistent with the Safeguards Plans.

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Dinesh Aryal	Team Leader (ADM Responsible)	Senior Natural Resources Management Specialist	SEAE1
Alexander Lotsch	Team Leader	Senior Carbon Finance Specialist	SEAE2
Efrian Muharrom	Forest Policy and Institution	Environmental Specialist	SEAE1
Tini Gumartini	Operational Aspects	Operations Analyst	SEAE1
Fajar Djati	Safeguards Specialist	Social Development Specialist	SEAS2
Krisnan Pitradjaja Isomartana	Safeguards Specialist	Senior Environmental Specialist	SEAE1
Francis V. Fragano	Safeguards Specialist	Senior Environmental Specialist	OPSGR
Budi Permana	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	EEAR2
I Gusti Ngurah Wijaya Kusuma	Financial Management Specialist	Financial Management Specialist	EEAG1
Katie O'Gara	Benefit Sharing and Operations	Operations Officer	SCCFM
Alief Aulia Rezza	Economic and Financial Analysis	Economist	EEAM2
Leela Raina	Economic and Financial Analysis	Environmental Economist	SAFE3



Dayu Nirma Amurwanti	Benefit Sharing and Disbursement	Consultant	SEAE1
Ariphoerti Woerasihingtijas	Program Assistant	Program Assistant	EACIF
Kate Chadwick	REDD+ Implementation and Operations	Consultant	SEAE1
Andrew Gillespie	Carbon Accounting	Carbon Accounting Consultant	SEAE1
Markus Pohlmann	Counsel	Senior Counsel	LEGEN
Xiaoxin Shi	Counsel	Counsel	LEGEN

**TABLE OF CONTENTS**

I.	STRATEGIC CONTEXT	12
A.	Country Context	12
B.	Sectoral and Institutional Context.....	13
C.	Relevance to Higher Level Objectives	16
D.	Government's East Kalimantan Jurisdictional Emission Reductions Program	17
II.	PROJECT DESCRIPTION	22
A.	Project Development Objective (PDO).....	22
B.	Project Components.....	22
C.	Project Cost and Financing.....	23
D.	Project Beneficiaries.....	24
E.	Rationale for Bank Involvement and Role of Partners	25
F.	Lessons Learned and Reflected in the Project Design	27
III.	IMPLEMENTATION ARRANGEMENTS	28
A.	Institutional and Implementation Arrangements.....	28
B.	Results Monitoring and Evaluation	30
C.	Sustainability	31
IV.	APPRAISAL SUMMARY.....	32
A.	Economic and Financial Analysis	32
B.	Technical	33
C.	Financial Management.....	34
D.	Procurement.....	34
E.	Social (including Safeguards)	34
F.	Environment (including Safeguards)	36
G.	Other Safeguard Policies (if applicable)	38
H.	Gender Analysis.....	38
V.	GRIEVANCE REDRESS SERVICES.....	39
VI.	KEY RISKS	39
VII.	RESULTS FRAMEWORK AND MONITORING	45
	ANNEX 1: DETAILED DESIGN OF THE EK-JERP AND EXPECTED EMISSION REDUCTIONS	47
	ANNEX 2: IMPLEMENTATION ARRANGEMENTS.....	54



ANNEX 3: IMPLEMENTATION SUPPORT PLAN	62
ANNEX 4: INDONESIA'S REDD+ READINESS AND PARTICIPATION IN THE FCPF	64
ANNEX 5: BENEFIT SHARING ARRANGEMENTS/USE OF ERPA PAYMENTS	69
ANNEX 6: FINANCIAL MANAGEMENT	80
ANNEX 7: EK-JERP SAFEGUARDS APPROACHES, ISSUES, AND OPTIONS.....	82
ANNEX 8: EMISSION REDUCTION CREDITING ASPECTS OF THE EK-PERR.....	93
ANNEX 9: SUPPORTING DOCUMENTS	95
ANNEX 10: DETAILED ECONOMIC ANALYSIS.....	96
ANNEX 11: GENDER ANALYSIS	99
ANNEX 12: MAP OF EAST KALIMANTAN.....	102



I. STRATEGIC CONTEXT

A. Country Context

1. **Indonesia is emerging as a politically stable middle-income country seventy years after independence and following more than a decade of political and institutional reforms.** With a population of 260 million living across over 6,000 inhabited islands, Indonesia is the world's fourth most populous nation, the tenth largest economy in terms of purchasing power parity, the only Southeast Asian member of the Group of Twenty (G20) and endowed with remarkable natural resources from its land and seas. It has made significant gains in poverty reduction and for a decade up until 2015, it had an annual growth rate of about 6 percent.¹ Growth averaged 5 percent in 2016, but rose to 5.2 percent in third quarter of 2018, and is projected to remain steady at 5.2 percent in 2019.² Despite the Government's expansionary monetary and fiscal policy, the country's Gross Domestic Product is projected to be flat in 2020 due to the Coronavirus Disease 2019 (COVID-19) pandemic which has affected Indonesia. Furthermore, preliminary estimates suggest that the pandemic could also increase poverty rates by 1.3 percent to 3.6 percent points, translating to between 3.7 million to 9.8 million additional people living in poverty relative to a 2020 scenario where the pandemic did not occur.
2. **Indonesia has had one of the highest rates of deforestation in recent decades.** Annual deforestation rates within the Forest Area (*Kawasan Hutan*)³ peaked between 1996-2000 (totaling 3.51 million hectares (ha)) and averaged of less than one million ha per year since 2000.⁴ Land administration in Indonesia is divided between the Forest Area administered by the Ministry of Environment and Forestry (MoEF) and non-Forest Area administered by the Ministry for Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN). Land management and administration system dualism contributes to weak governance and uncertainty over tenure arrangements. These circumstances are compounded by poverty rates that are twice as high for those inside and around forest areas (26 percent inside *Kawasan Hutan*) as compared to the national average (11.3 percent).
3. **Indonesia is the fifth-largest greenhouse gas (GHG) emitter globally⁵, with emissions from deforestation and forest degradation constituting the majority share of national GHG emissions.⁶** Expanding agriculture, logging, mineral extraction, urbanization and housing development have resulted in not only increased land conversion, but also forest degradation, reducing environmental benefits which further exacerbate poverty.
4. **While many factors impact growth, the commodities sector, which has weakened globally, has had a significant effect.** Prices of key export commodities have fallen by 40 percent since their 2011 peak and the economic tailwinds of the past decade—rapid growth among Indonesia's key trading partners,

¹ World Bank (2015) *Indonesia - Country partnership framework for the period FY16 - 20 (English)*.

² World Bank 2018b.

³ According to Law 41/1999, Forest Area (*Kawasan Hutan*) is designated and or stipulated by government to be preserved as permanent forest, with or without forest cover and includes Protection Forest (*Hutan Lindung*), Conservation Forest (*Hutan Konservasi*), and Production Forest (*Hutan Produksi*).

⁴ Based on Government reported data. MoEF (2018): *The State of Indonesia's Forests 2018*.

⁵ WRI 2017.

⁶ Indonesia's third national communication to the United Nations Framework Convention on Climate Change (UNFCCC) (2017) reports this share to be 53 percent, but independent estimates based on observations of higher deforestation rates increase the contribution of deforestation and forest degradation to around two thirds.



particularly China, high commodity prices, and significant growth in consumption of an emerging middle class—have now become headwinds. The main objectives of the National Government’s Mid-term Development Plan (RPJMN 2015-2019) are human and community development, narrowing the income gap through increased productivity and poverty reduction measures, and increasing development in an environmentally sustainable manner, including engaging the private sector as an integral part of solutions. Nonetheless, despite a general downturn in agricultural commodity prices and national climate commitments, Indonesia’s pulp and paper and palm oil industries have grown substantially, as reflected by an expansion of land area under plantations as well as smallholder production, while a growth strategy based on intensification has not received strong support.

5. **From January 2020, however, export volumes of palm oil have reduced sharply as a result of the COVID-19 pandemic which has contributed to falling demand in major export markets, especially China.** Given that palm oil is one of Indonesia’s largest source of foreign exchange, the economic consequences are and will continue to be substantial. In particular, the economic impact on producers is already apparent and will become clearer as the pandemic continues to unfold and evolve.

B. Sectoral and Institutional Context

6. **Indonesia’s forests have global significance.** The country is home to the world’s third-largest tropical forest (94 million ha of natural and planted forests representing 52percent of Indonesia’s total land area), that contain 17percent of the world’s bird species, 16percent of reptiles and amphibians, 12percent of mammals, and 10percent of plants. Indonesia’s forests are one of the world’s most important carbon sinks, sequestering and storing significant quantities of carbon in both above-ground biomass and below-ground peat soils. Much of Indonesia’s forest resources are found within the Forest Area (*Kawasan Hutan*). Indonesia’s natural ecosystems are under threat from inadequate management and weak governance, which erodes their potential to contribute to the country’s growth and development, particularly for the 50 million people living in and around forests. Achieving sustainable management requires scalable solutions at the landscape level that balance the needs of multiple, and often competing, users.

7. **Roughly two-thirds of Indonesia’s annual GHG emissions come from land use change and agriculture, which has been primarily driven by the production of agricultural commodities, notably oil palm, and forest plantations.** Reoccurring seasonal fires amplified during dry El Niño years, including on peatlands, significantly contribute to Indonesia’s ranking among the world’s top emitters, and the largest emitter when considering the land sector alone. The 2015 fires resulted in 2.6 million ha of Indonesian land burned between June and October, an area four and half times the size of Bali. These fires resulted in daily emissions greater than those from the entire European Union economy and cost the country’s economy over US\$16 billion.⁷ Such patterns will make it difficult for Indonesia to meet its emissions reduction targets and are likely to compound impacts on the poor as they stand to suffer most from the impacts of climate change.⁸

⁷ The Cost of Fire - An Economic Analysis of Indonesia’s 2015 Fire Crisis (World Bank 2016).

⁸ While seasonal fires can significantly contribute to overall emissions, they are not the main cause of primary forest loss, as they tend to concentrate on areas that were previously converted (e.g. to palm oil concession) or shrubland areas, i.e. areas that are



8. **The Government of Indonesia (GOI) has made significant international commitments to reduce Indonesia's GHG emissions, with a focus on reducing emissions from deforestation, forest degradation and enhancement of forest carbon stocks (REDD+⁹) as the principal mechanism to address the land use and forestry sectors as the primary sources of emissions.¹⁰** At the Conference of Parties meeting in Paris in 2015, the GOI pledged through its nationally determined contribution(NDC) to reduce its GHG emissions by 41percent by 2030 with international assistance (29percent with its own resources) relative to a business-as-usual (BAU) scenario. For Indonesia to reach a target of 41percent, emissions need to decrease by 1.1 billion tonnes of carbon dioxide equivalent (tCO₂e), with 60percent of this target to come from the forestry sector. This scenario entails: 1) a reduction of average annual deforestation from 920,000 ha to 450,000 ha from 2013 to 2020; 2) a further reduction of annual deforestation to 325,000 ha annually from 2021 to 2030; 3) the rehabilitation of two million ha of degraded peat areas; and 4) the rehabilitation of 12 million additional ha of other degraded land.

9. **Such a transformational change in land use and forest management requires significant investments and reforms to financial incentives.** In 2015, the Ministry of Finance (MoF) allocated US\$870 million with 51percent for the land use sector though little of this (0.5percent) went to sub-national governments, indicating challenges in allocating resources at the local level. Notably, the scale of finance needed to meet NDC targets is estimated to be much larger – in the range of US\$70.5-US\$100 billion from public and private sources.¹¹

10. **The GOI faces an urgent challenge given the potentially significant impacts of COVID-19 on the country's environment and natural resources and the livelihoods of local communities who are dependent on these resources.** There is evidence from other recent crises, including the 1997/1998 financial crisis that significantly impacted the country's economy, that pressure on the environment and natural resources significantly increased during and after such crises, in particular for land use and forests. A Center for International Forestry Research (CIFOR) study¹² on the impact of the financial crisis on small-scale farmers in five provinces in Sumatra, Kalimantan and Sulawesi revealed that there was a strong correlation between the financial crisis and related loss of low-skilled employment with encroachment of natural forests. Specifically, people adopted mixed farming to supplement their short-term cash income from food and crops. This trend may be seen during and after the COVID-19 pandemic, however, the GOI now has various policies, programs, and mechanisms in place to cope with related challenges that may

generally characterized by intensive, and often unsustainable, land use. During the 2019 fires season, 38percent of fires occurred in APL areas (*areal penggunaan lain* or land for other purposes), which is land allocated to non-forestry purposes (but may still have significant tree cover and above-ground biomass) and 23percent in production forest (*hutan produksi*). In East Kalimantan 3.3 million ha of APL area is allocated to estate crop companies through concessions.

⁹ REDD+ is defined as “Reducing Emissions from Deforestation and forest Degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks in developing countries”.

¹⁰ GOI (2016) Indonesia's Nationally Determined Contribution (NDC).

¹¹ MoF 2015: US\$70.5 (1.69percent of total budget, or US\$7.5 billion to US\$15 billion per year) for 2012-2020 to reach a 26percent emission reduction target and approximately another US\$13.5 billion-US\$25 billion thereafter from 2020-30 to reach 29percent emission reductions from BAU. Of that, the analysis of needs and financing gaps by the Indonesia Mitigation Fiscal Framework 2012 was estimated to be US\$6 billion – US\$11 billion per year from public finance and US\$7.5 billion-US\$14.2 billion per year from private sources.

¹² Nawir, A., A. Murniati, and Rumboko, L. 2007. Forest Rehabilitation in Indonesia: where to after three decades, CIFOR, Bogor, Indonesia. The report notes that 96.3 million hectares of Indonesia's forests were degraded due to illegal logging, forest fires, forest conversion, and unplanned agricultural expansion as a consequence of unprepared decentralization during the reformation era in 1998 and social conflict over forest resources. The 1998 reformation triggered the rearrangement of central and local governance, local and indigenous communities, private sectors, and forests to boost capitals needed for decentralization.



mitigate the overall impacts of the pandemic on the environment and natural resources. Specifically, programs managing and delivering cash and social safety nets to people, village empowerment, enforcement of moratoria of oil palm expansion and natural forest conversion, and providing access to land resources for small farmer through Agrarian Reform and Social Forestry, will help communities cope with some of the economic impacts of the COVID-19 pandemic sustainably, ideally limiting the need to convert land to support themselves.

11. The GOI has requested assistance in improving the enabling environment for REDD+ and accessing results-based finance to support the achievement of its NDC, National REDD+ Strategy, and broader green growth agenda. The World Bank has provided this support, including through activities funded by the World Bank's Forest Carbon Partnership Facility (FCPF) Readiness Fund, which have principally supported the formulation of an enabling policy framework for REDD+ at the national level and a broad-based implementation plan at the sub-national level. Specifically, the FCPF Readiness Fund has contributed to the development of measurement, reporting, and verification (MRV) systems, national forest monitoring system (NFMS), forest reference emission level (FREL), benefit sharing arrangements, and safeguards instruments, including a feedback and grievance redress mechanism (FGRM), amongst other activities.

12. Building on this experience, including with REDD+ pilots and initiatives¹³, and to scale up REDD+ implementation at the provincial level, the GOI requested support from the FCPF Carbon Fund to provide finance that incentivizes reduction of emissions across East Kalimantan. To this effect, the GOI submitted an initial proposal in 2016 (ER Program Idea Note) on the basis of which a Letter of Intent was signed in 2017 and US\$110 million were notionally allocated by the Carbon Fund towards future incentive payments. Subsequently, the Bank supported GOI in the preparation of an ER Program Document (ER-PD) that was accepted by the Carbon Fund in June 2019. The ER-PD details how Indonesia intends to reduce emissions in East Kalimantan through programmatic set of interventions as well as technical design elements that allow the monitoring of future GHG emissions against an agreed baseline (Reference Level). The GOI proposal was rigorously and comprehensively reviewed to ascertain that it meets requirements of the Carbon Fund. The program design and technical aspect of the program detailed in the ER-PD are the basis for an Emission Reductions Payment Agreement (ERPA), whose commercial terms, including the total volume and price, were negotiated following satisfactory appraisal¹⁴. **Accordingly, this appraisal document relates to the East Kalimantan Project for ER Results (EK-PERR), which is the FCPF Carbon Fund's ERPA transaction with Indonesia to pay for verified ERs generated in East Kalimantan.** The EK-PERR will also provide a framework to ensure that the EK-JERP's activities are in compliance with World Bank Operational Policies related to environmental and social safeguards, that benefits from the

¹³ Such as the Berau Forest Carbon Program, which was the first REDD+ project in Indonesia to span an entire political jurisdiction, making it possible to systematically address the drivers of land use change and generate lessons for large jurisdictional and national REDD+ programs. Also, Central Kalimantan joined the Governors' Climate Forum (GCF) Task Force in 2010 and in the same year, was chosen as a pilot province for REDD+ under an agreement with Norway, which has provided valuable lessons on the application of REDD+ at the jurisdictional scale.

¹⁴ The ERPA is structured in two separate legal agreements, one for each of the two tranches of the FCPF Carbon Fund. For simplicity, this document refers to both agreements jointly as 'ERPA'. Specifically, Tranche A is designed to be a commercial window that transacts on tradeable carbon assets whereas tranche B is designed to provide incentive payments for recipient countries (Tranche B has approximately 95percent of the current fund capitalization). It is important to note that most commercial terms, notably the term and reporting period for the ERPA, are the same for both ERPs and verification follows the same process. A key difference is whether ERs are retained by the Program Entity (e.g., to be accounted for as part of the NDC) or the Carbon Fund (for possible transaction in the future).



transaction will be distributed to relevant stakeholders, and that investments will be sustained longer than the lifetime of the EK-PERR.

13. It is relevant to note that the rate of forest conversion since 2017 has decreased, which has resulted in a lower rate of annual GHG emissions. The estimated annual emissions from forest loss in 2017 and 2018 were 511 and 480 MtCO₂e, respectively, compared to an average annual rate of 654 MtCO₂e for the 2006-2016 period¹⁵, which is measurably less than Brazil and the Democratic Republic of Congo during the same period.¹⁶ These improvements can likely be attributed to the Government's actions to curb the rate of deforestation, notably through a nationwide moratorium on primary forest clearance for plantations and logging (made permanent in 2019 for a total area of 66 million hectares of the Forest Area) as well as moratoria on peatland and primary forest conversion. These national actions are further complemented by and expanded in several provinces, including East Kalimantan (the target province of the program), which has gubernatorial moratorium on new licenses for mining, forestry and estate crops is in effect, as well as policies to accelerate social forestry¹⁷ licensing and fire prevention. The effective implementation of these and other policies, including through the EK-PERR, will be critical to sustain this fledgling trend at the national level and in pioneering provinces, such as East Kalimantan. In this context, it is relevant to note that these results could have translated into significant payments for emission reductions (ERs; as designed for this operation for 2019 onwards), had an ERPA been signed earlier.¹⁸

C. Relevance to Higher Level Objectives

14. The EK-PERR is closely aligned with the global framework on REDD+, which is an integral part of the 2015 Paris Climate Agreement, as well as the broader objectives of the United Nations Framework Convention on Climate Change (UNFCCC). The financing provided through this operation is one element of Indonesia's international engagement on climate change, both as an important global GHG emitter and a major actor demonstrating how emissions from land can be reduced at scale. The EK-PERR is aligned with the country's REDD+ agenda and RPJMN, both of which aim to improve the quality of human life and address disparity and inequality without environmental degradation. The EK-PERR supports approaches that are pro-poor, including engagement of local people in forest and land management, livelihood development, and equitable benefit sharing approaches.

15. The EK-PERR is consistent with the World Bank Group's strategic goals—to end extreme poverty and to promote shared prosperity with environmental, social, and fiscal sustainability—as well as the

¹⁵ WRI, 2019 (Global Forest Watch). Data based on estimated rates of forest cover loss, using a 30percent tree cover density threshold. Even though this estimate does not include emissions from forest degradation, i.e. emissions linked forest thinning above the density threshold, it can be considered indicative of the overall pattern of emissions from forest areas.

¹⁶ By contrast, many countries, notably in Africa, exhibited a significant increase in annual deforestation rates.

¹⁷ The Social Forestry Program, along with the overall agrarian reform (TORA), are integral components of the GOI's equitable economic policy. Launched in 2015, the policy aimed to reduce inequality by ensuring the availability of land for members of local communities, including *adat* communities, reduce poverty among forest dependent people, reduce deforestation and forest degradation and the achievement of social justice in the use of forest resources by these communities throughout Indonesia. As part of national priority program reflected in the National Midterm Development Plan (RPJMN 2015-2019), MOEF aims to transfer 12.7 million hectares of degraded forest land to community groups through social forestry schemes including: (i) community forestry; (ii) village forests; (iii) community timber plantation; (iv) customary forest (*adat* forests); (v) forestry partnerships; and (vi) community forestry on private land and forestry partnership.

¹⁸ Based on Government-reported nationwide emission reductions for 2017, the Government of Norway is currently preparing a first payment under its agreement with Indonesia (Letter of Intent, signed in 2011, to pay up to US\$1 billion for verified ERs).



World Bank Group's Country Partnership Framework (CPF) 2016–2020 for Indonesia discussed by the Board in December 2015, Report No. 99172. Under the EK-PERR, ERPA payments will be distributed to relevant stakeholders, including communities, which will further enhance the development benefits they will receive as part of the Government programs. In addition, the EK-PERR forms a key part of the Sustainable Landscape Management engagement area identified in the CPF. This engagement area aims to improve the management of terrestrial natural assets as well as benefit from it. Finally, the EK-PERR is also in line with the World Bank Group's Climate Change Action Plan and Forest Action Plan for FY16-20. Consistent with these plans, the Project represents an integral part of a programmatic engagement on forests in Indonesia, including by building on the activities funded by the FCPF Readiness Fund. The EK-PERR will complement other forest and land sector investments by the Government of Indonesia, including those that reduce deforestation and forest degradation and promote sustainable land management as well as actions that strengthen the institutional and policy framework for land use.

16. **Indonesia is one of 18 countries participating in the FCPF Carbon Fund, which is committed to providing results-based finance to incentivize the implementation of policies and actions by the GOI and to complement other forest sector investments.** Complementary finance includes direct investments that reduce deforestation and forest degradation and promote sustainable forest management as well as actions that strengthen the institutional and policy framework for forests. Examples include other World Bank supported operations, like the Forest Investment Program (FIP), Dedicated Grant Mechanism (DGM), Program to Accelerate Agrarian Reform and Social Forestry, as well as development partner finance, including from Germany, Norway, Belantara Foundation, Global Green Growth Institute (GGGI), the Governors' Climate Forum (GCF) Task Force, The Nature Conservancy (TNC) and World Wildlife Fund (WWF).

D. Government's East Kalimantan Jurisdictional Emission Reductions Program

17. **The EK-PERR will pay for ER results generated by policies and a program of activities that are being implemented in East Kalimantan to reduce emissions across the jurisdiction, collectively referred to as the East Kalimantan Jurisdictional Emission Reduction Program (EK-JERP).** The financing provided by the EK-PERR through ERPAs is disbursed in form of payments against ERs that are periodically reported by GOI and independently verified. ERPA payments will then be distributed on the basis of a pre-agreed Benefit Sharing Plan (BSP). The Reference Level (2007-2016 average emissions) in the province serves as a baseline for future payments that get triggered if – and only if - emissions across the entirety of the province decrease. That is, both the estimate of emissions (baseline and future) and the distribution of benefits (via the BSP) follow a rigorous, independent verification protocol and design criteria that are transparent to all parties involved and agreed prior to signing the ERPA. As such, results reported under the ERPA live up to internationally accepted standards as well as transparency and verifiability (key REDD+ principles enshrined in the Paris Climate Agreement).

18. **As part of international efforts, Indonesia has been supported by a number of multi- and bi-lateral partnerships over last decade to establish an enabling framework for REDD+ implementation (see Annex 4 for more information).** More recently, with many of the essential elements of this framework largely in place, the GOI has started to shift focus to sub-national (province-level) implementation to enable REDD+ payments to be leveraged to support a lower-carbon development pathway for a jurisdiction, with the EK-JERP being an important strategic priority.



19. East Kalimantan is Indonesia's third-largest province, with a total area of 12.7 million ha and significant natural resources. Natural forest covers 6.5 million ha (54percent) of the province, mostly found within areas allocated to discrete *Kesatuan Pengelolaan Hutan*¹⁹ (Forest Management Units or KPHs)²⁰ and in conservation areas.²¹ East Kalimantan has a population of about 3.6 million (2018), which includes indigenous *Dayak* and *Kutai*, as well as Javanese, Chinese, Banjarese, Bugis, and Malay people. Around 6percent of East Kalimantan's population was classified as poor in 2018²² and the distribution of poverty is skewed towards rural areas where 9.84percent of the population was classified as poor, compared to 4.14percent of the urban population. The province is rich in natural resources, such as timber, oil, gas, and productive soils. It has hundreds of rivers that flow throughout and form the main transportation infrastructure for the distribution of products extracted from natural resources. East Kalimantan is also habitat for 11 vulnerable and endangered species.²³ According to the 2016 landcover map, natural forest in East Kalimantan consists of dryland, mangrove, and swamp forests. Based on 2017 State Forest Area Zones and according to their function, forests in East Kalimantan are divided into production, protected, conservation, and convertible²⁴ forests and can also be found on land for other purposes (APL).

20. East Kalimantan has contributed significantly to Indonesia's total emissions from deforestation and forest degradation but has successfully started to reduce these in recent years (mirroring the national pattern described above). According to the Government's estimates, deforestation and forest degradation in East Kalimantan between 2007 and 2016 have resulted in average annual emissions of 62 MtCO₂e, which is roughly 10percent of national emissions from these sources.²⁵ As noted above, East Kalimantan's rate of emissions (derived from internationally comparable global data) has been decreasing since 2016, indicating that the implementation of actions included in the EK-JERP appear to be showing early results. The main drivers of forest conversion and degradation in East Kalimantan in the recent past included the expansion of oil palm and timber plantations, agricultural encroachment, fires, mining, and aquaculture. Indirect and underlying drivers include poor spatial planning, lack of enforcement, low productivity of local farming and limited alternative livelihood opportunities for local communities. Until the aforementioned moratorium was in effect (and made permanent in 2019), the palm oil industry had been expanding rapidly in East Kalimantan (from 800,000 ha in 2012 to 1.2 million ha in 2016) and an additional area totaling 3.2 million ha was originally allocated for future oil palm development in the province, including overlapping with 376,414 ha of forests (equivalent to 6percent of the total remaining forest area in the province). While the moratorium seems to be showing some effect (e.g., as reflected in the decrease in primary forest loss and emissions), the EK-JERP will implement activities to enhance its effective implementation. Also, fires occur annually in East Kalimantan and are linked with clearing land

¹⁹ Which covers production and protection forest areas, under the responsibility of and managed by the provincial government.

²⁰ By 2018, 6.5 million ha, or 78percent, of East Kalimantan's State Forest Area had been gazetted as KPH.

²¹ Nature reserves, wildlife reserves and national parks controlled and managed directly by the central Ministry of Environment and Forestry (Kutai National Park, Muarakaman/Sedulang Natural Reserve, Teluk Adang Natural Reserve, Teluk Apar Natural Reserve, Padang Luway Natural Reserve, Tahaha Soeharto).

²² Center of Statistics Bureau for East Kalimantan, 2018.

²³ As a prominent example, the province is home to 2,500 orangutans (*Pongo pygmaeus*; critically endangered), the largest remaining population of the northeast Borneo subspecies. Scientists estimate that the province contains roughly 10percent of the world's remaining wild orangutan population.

²⁴ Area that can be converted for other uses outside of forestry.

²⁵ FCPF Carbon Fund ER Program Document (ER-PD) for the EK-JERP (May 2019).



for estate crops.²⁶ In particular, periods of prolonged drought, such as those linked to El Niño, can lead to severe and large-scale fires (as has been the case in 2019).

21. Given the above characteristics, East Kalimantan was identified by the GOI to pilot an FCPF ER Program. To reduce emissions, the Government's EK-JERP is designed to address drivers of deforestation and forest degradation both within and outside the Forest Area (*Kawasan Hutan*). It aims to do so by supporting underlying governance issues through policy reforms related to land tenure and planning, mining, social forestry, and estate crops (e.g., oil palm), as well as engaging with private sector actors, including oil palm and forestry companies, to adopt more sustainable management practices and working with local communities to enhance their productivity and access to markets for sustainable products (see Table 1). This will be done through five components that engage key land use sectors to improve spatial planning, strengthen forest administration and enforcement, reduce deforestation and forest degradation within licensed areas, and promote sustainable livelihood alternatives:

- a) **Component 1** directly addresses the policy and legal framework to enable ERs, specifically related to overlapping licenses (including mining and estate crops) and conflict.
- b) **Component 2** strengthens the capacity of the government to protect remaining forests.
- c) **Component 3** enhances the management practices of oil palm and forestry companies.
- d) **Component 4** addresses deforestation linked to encroachment and agriculture mainly by providing alternative livelihood opportunities.
- e) **Component 5** includes all activities related to Program management, including monitoring and evaluation.

Table 1: Summary of how the activities under the Government's EK-JERP address drivers of deforestation and forest degradation in East Kalimantan

Key Underlying Drivers	Activities to address drivers	Proximate Drivers Addressed
Poor spatial planning	Component 1: <ul style="list-style-type: none">• Strengthening the licensing regime for mining, estate crops, and social forestry• Dispute settlement• Support for the recognition of <i>adat</i> land• Strengthening village spatial planning	All
Lack of enforcement	Component 2: <ul style="list-style-type: none">• Strengthening management capacity within the State Forest Area through KPH development• Strengthening provincial and district governments to supervise and monitor the implementation of sustainable Estate Crops	All
	Components 1 and 2: <ul style="list-style-type: none">• Reduced investment cost through improved governance Component 3: <ul style="list-style-type: none">• Implementation of high conservation value (HCV) policies for Oil Palm Estates	Oil palm and timber plantations

²⁶ Estate Crops in Indonesia include among others oil palm, coconut, rubber, cocoa, sugarcane, coffee, and cashew.



	<ul style="list-style-type: none"> Implementation of HCV and reduced impact logging (RIL-C) policies for Forestry Concessions 	
Limited alternative livelihood opportunities for local communities	Component 1: <ul style="list-style-type: none"> Improved land access through social forestry Component 3: <ul style="list-style-type: none"> Sustainable Alternatives for Communities 	Agriculture/encroachment, aquaculture
All	Component 1: <ul style="list-style-type: none"> Integration of community-based fire management into village plans Component 2: <ul style="list-style-type: none"> KPHs to focus on supervising, facilitating, and monitoring the implementation of Fire Prevention and Control activities carried out by concessions and local communities Component 3: <ul style="list-style-type: none"> Technical assistance to companies for fire prevention Support for Community Based Fire Management and Monitoring Systems Component 4: <ul style="list-style-type: none"> Support for sustainable swidden agriculture that does not use fire for land clearing 	Fire

22. **The Government's EK-JERP engages the private sector to leverage resources (technical and financial) to reduce emissions in East Kalimantan in the agricultural (e.g., oil palm), mining, and forestry sectors.** The Government has identified policy and regulatory priorities, that are further supported by targeted technical assistance to relevant stakeholders, to create an enabling environment for the private sector to invest in the province sustainably and over the long-term. This includes fiscal incentives, concession mapping, management of social conflicts, and the mitigation and prevention of fires. These activities aim to promote a more stable environment for private sector investments by addressing key risks specific to their activities in the province, such as fire and social conflict. Specifically, the private sector is expected to implement complementary activities related to HCV approaches, fire prevention, and Indonesia Sustainable Palm Oil certification. Additional activities implemented by the government aim to reduce conflicts between the private sector and communities. The EK-JERP will further support private sector companies in adopting sustainable practices through different tools, including improvements to the enabling environment and access to resources under the BSP to reward good practices to improve fire management, application of HCV and RIL-C approaches, and tenure conflict management. In addition, the EK-JERP will facilitate coordination and engagement between government institutions, industry platforms, civil society organizations (CSOs), and others to share best practices and lessons learned.

23. **The total costs of the EK-JERP's activities between 2020 and 2025 are estimated to be US\$90.7 million.** The Program is largely financed by the Government through its national, provincial, district, and village budgets (total estimated at US\$69.5 million), complemented by private sector (total estimated at US\$20.25 million) and development partner financing (US\$3.5 million). Many of these activities continue and build on existing initiatives, including social forestry, RIL-C, and KPHs, as well as common modalities such as land use planning, forest monitoring, technical assistance for the deployment of technology and sustainable approaches, and policy. In addition, new and innovative approaches will be used, including through improvements to the policy and enforcement environment for land use and forest management.



Going forward, as part of implementation, it is important to support the GOI in directing these resources to the intended purpose and to leverage additional complementary finance to ensure the EK-JERP's activities are adequately funded. In addition to the financing identified, payments for performance (ER payments) under the EK-PERR allow the Government to scale-up and maintain activities under their EK-JERP, further reducing emissions and delivering development benefits to stakeholders in East Kalimantan.

24. The revenue from ERPA payments will be distributed amongst relevant stakeholders in accordance with a pre-agreed BSP. Benefits from the ERPA payments include monetary and non-monetary benefits that are intended to reward beneficiaries for their participation in the EK-JERP. In particular, for communities, benefits will contribute to their development and livelihoods through capacity building, investments in forests, agriculture, fire management, and community development projects (e.g., schools, health clinics, etc.). Communities will be able to select the benefits they prefer to access, which will reflect their priorities and incentive mechanisms. Benefits for the private sector will also benefit smallholders and communities living in and around concessions through non-monetary support²⁷ for sustainable plantations, HCV protection, certifications, sustainable forest management, and tenure conflict management. Benefits from ERPA payments will be further compounded by benefits related to the implementation of the Government's EK-JERP ("non-carbon benefits"), including improved access to forest resources for local communities, leading to improved livelihoods; protection of biodiversity; and reduced conflict over land.

25. The GOI's EK-JERP has the potential to significantly reduce deforestation and forest degradation in East Kalimantan, but also pilot innovative approaches in Indonesia. Given the importance of Indonesia's forests, including to the global climate, lessons learned from this pilot Program can inform scaled-up approaches to forest management and reducing emissions throughout the country. In addition, the EK-JERP will be testing approaches to government coordination and the implementation of results-based finance for climate mitigation in Indonesia, which will have value beyond the Program. For more information on East Kalimantan and the GOI's EK-JERP, please see Annex 1.

26. It should also be noted that the recent decision by President Jokowi to relocate Indonesia's capital to a forested part of East Kalimantan is likely to affect emissions in the province. The MoEF has initiated an Environmental Impact Assessment to estimate the broader footprint of the future capital, which will form the basis of an estimation (done by MoEF) of the potential impact on emissions during the ERPA term. Based on initial estimates provided by the GOI, the impacts of the capital relocation (in terms of reducing emissions) appear to be manageable relative to the 22 MtCO₂e contracted under the ERPA (potentially a reduction of approximately 10percent).

27. The impact of the proposed move of Indonesia's national capital on the delivery of the EK-PERR will be managed through several means, including: requirements and design aspects of the Project (payments will not be made if ER results are not achieved and verified, including due to impacts of the capital move); reversal (i.e., relative increase of emissions after previous ER payment) management requirements and conservative estimates of ERs to contract under the ERPAs that result in a significant buffer in the case of under-delivery of ERs; legal remedies in the ERPA, including events of default; and ongoing World Bank engagement with the GOI on natural resource and forest management in East Kalimantan. See Section VI (Key Risks) for more information.

²⁷ Through consultations, private sector stakeholders have noted a preference for non-monetary benefits rather than monetary benefits.



II. PROJECT DESCRIPTION

A. Project Development Objective (PDO)

PDO Statement

28. The Project's development objective is to incentivize reduced deforestation and forest degradation in East Kalimantan, Indonesia, through payment of verified emission reductions (ERs), and to ensure that paid amounts are distributed according to an agreed Benefit Sharing Plan (BSP).²⁸

PDO Level Indicators

29. The achievements of the PDO will be measured through the following indicators:²⁹

- a) Volume of CO₂ Emission Reductions measured and reported by the Program Entity, verified by a Third Party, and transferred to the FCPF Carbon Fund (MtCO₂e);
- b) Payment by the FCPF Carbon Fund for CO₂ Emission Reductions generated by the EK-JERP (US\$); and
- c) Emission Reductions payments distributed in accordance with agreed Benefit Sharing Plan (Yes/No).

B. Project Components

30. **The EK-PERR is the FCPF Carbon Fund's ERPA transaction with Indonesia to pay for verified ERs generated in East Kalimantan.** Given that this operation provides results-based payments, it does not have components as investment operations.³⁰ Rather it is organized as a process that includes (A) Verification of and payment for measured and reported ERs generated by the Government's EK-JERP; and (B) Distribution of ERPA payments according to an agreed BSP. Specifically:

(A) Verification and payment for measured and reported ERs. The basis for payments under the ERPA is verified ERs reported by the Program Entity³¹ (MoEF). In the ER-PD accepted by Carbon Fund Participants in June 2019, Indonesia detailed an approach to measure emissions in East Kalimantan. This approach is consistent with how baseline emissions (Reference Level) were estimated and was rigorously assessed by an independent Technical Advisory Panel (TAP) against the requirements stipulated in the FCPF Carbon Fund Methodological Framework.³² MoEF agreed

²⁸ The international REDD+ framework includes enhancement of carbon stocks (indicated by the '+' in REDD+). However, in Indonesia the overwhelming potential to achieve results that are expected to have a measurable impact come for the reduction of deforestation (approximately 80percent of emissions) and forest degradation. Thus, the GOI's program design of the EK-JERP focuses on activities that reduce emissions and not the sequestration of carbon through enhancements for forest carbon stocks.

²⁹ In addition to the PDO level indicators, the GOI will report on the impacts of their EK-JERP and the outcomes of benefit sharing through the FCPF ER Monitoring Report.

³⁰ The operation follows Bank Guidance on Emission Reduction Crediting (formerly Carbon Finance) Projects under Investment Project Financing June 2, 2020.

³¹ Program Entity is the party that signs the ERPA with the World Bank as the trustee of the Carbon Fund and assumes the responsibilities defined therein.

³² <https://www.forestcarbonpartnership.org/carbon-fund>



to submit three ER Monitoring Reports³³ during the term of the ERPA, which will be independently verified. Verified volumes of ERs will be paid for according to the unit price agreed in the ERPA. As part of these transactions, ERs will be transferred from the Program Entity to the FCPF Carbon Fund via a carbon registry (Carbon Assets Trading System) managed by the World Bank, acting as Trustee of the FCPF Carbon Fund.³⁴ MoEF has agreed with the Carbon Fund that the ERs paid for under Tranche B of the ERPA will be retransferred back to Indonesia so Indonesia can use the retransferred ERs for reporting purposes under their NDC. For more information on the Emission Reduction Crediting aspects of the EK-PERR, please refer to Annex 8.

(B) Distribution of the ER payments according to the BSP. The proceeds from verified ER payments will be shared according to an agreed BSP, designed based on the criteria in the Carbon Fund Methodological Framework and in a manner that is acceptable to the World Bank. It describes the benefit sharing arrangements, including the distribution mechanism, funds flow and rules of allocation of ERPA payments and benefits to agreed beneficiaries. The Indonesian Environmental Fund Management Agency (BLU-BPDLH) will receive and transfer ERPA Payments to eligible Beneficiaries in accordance with the BSP.

The GOI has developed an advanced draft BSP and the arrangements required for executing the BSP. Following review by the World Bank³⁵, the advanced draft BSP was found acceptable by the Carbon Fund Participants.³⁶ The advanced draft BSP was made public by the GOI³⁷ on June 15, 2020, satisfying this FCPF requirement prior to signature.³⁸ As per the ERPA General Conditions³⁹, the Program Entity shall share a significant part of the monetary and non-monetary benefits received in connection with the implementation of the EK-JERP with relevant stakeholders, which in the case of the EK-JERP have been identified as government institutions, private sector, and communities (including *adat* communities). More information on the EK-JERP's BSP is in Annex 5.

C. Project Cost and Financing

31. **By design, ERPA financing is results-based and therefore *ex-post*.** That is, upon independent verification of reported ERs, payments are made to the Program Entity. The estimated volume of ERs to be generated in East Kalimantan during the expected ERPA term (2019-2024)⁴⁰ is 86.3 MtCO₂e

³³ The document through which the Program Entity reports on performance, in particular ERs generated. The ER Monitoring Report will be the basis of verification of the ERs reported.

³⁴ A carbon or REDD+ registry functions like a retail bank, i.e. it has accounts linked to each program to which ERs can be debited and credited. In addition to debits and credits, a REDD+ registry performs additional transactions, such as the management of a portion of ERs as an 'insurance' against natural calamities (e.g., fires that can reverse previous achievements).

³⁵ Through a Quality Enhancement Review in August 2019.

³⁶ A draft BSP was formally reviewed by the World Bank and was then revised and re-submitted to the FCPF Facility Management Team (FMT) in May 2020 to confirm that it met the requirements of an *advanced* draft. Subsequently, the FMT shared the BSP with FCPF Carbon Fund Participants for their confirmation that they did not have any fundamental issues with the BSP that would prevent entering into an ERPA, which was confirmed on June 11, 2020.

³⁷ http://simlit.puspjik.org/files/other/FCPF_Benefit_Sharing_Plan_draft1_6_FINAL_GoI_29042020.pdf

³⁸ If the ERPA is signed with an *advanced* draft BSP, a *final* BSP (finalizing arrangements and responding to CFP feedback) will become a condition of effectiveness (to be met within 12 months of ERPA signature).

³⁹ <https://www.forestcarbonpartnership.org/erpa-general-conditions>

⁴⁰ The first Reporting Period starts with the acceptance of Indonesia's ER-PD by the Carbon Fund Participants in June 2019. The



(corresponding to an average reduction of 31 percent relative to the Reference Level). Over the term of the ERPA⁴¹, 61.3 MtCO₂e would be potentially transferrable to and eligible for payments from the FCPF Carbon Fund after discounting for measurement uncertainty⁴² and reversal⁴³ risk. As ERPA payments are results-based, the actual performance determined after ER reporting and verification may be higher or lower than estimated. Further details on the expected volume of ERs are provided in Annex 1.

32. **The volume of financing (ERPA value) is up to US\$110 million.** The ERPA terms for the Project were agreed during negotiations and subsequently approved by Carbon Fund Participants on a no objection basis in October 2020. The value is based on the ER volume offered as per the Letter of Intent (22 MtCO₂e, i.e. approximately a third of the volume estimated to be generated by the EK-JERP) and a unit price of US\$5/tCO₂e. Payments are projected to be made in three tranches (2021, 2023 and 2025) upon independent verification of reported emissions.

D. Project Beneficiaries

33. **ER payments will be distributed according to an agreed BSP, which outlines the arrangements by which beneficiaries will receive monetary or non-monetary benefits.** These beneficiaries include:

- a) **Government institutions** involved in policy development, and program management at the central government level, and at the sub-national levels; as well as sub-national conservation agencies as representative of MoEF's Conservation of Natural Resources and Ecosystem Directorate General (*Unit Pelaksana Teknis Kementerian Lingkungan Hidup dan Kehutanan*), KPHs, and village governments that are more directly involved in implementing ER activities. Government institutions will receive benefits to support the implementation of the EK-JERP, including Project management and monitoring, conflict resolution, fire prevention and management, and sustainable practices.
- b) **Private sector** companies and stakeholders (e.g., smallholders) that implement ER activities, including estate crop companies, and owners of mining and various types of forestry concessions.⁴⁴ Private sector beneficiaries will receive non-monetary benefits in the form of capacity building, technical assistance, and investments for HCV protection, certifications,

Program Entity proposed to include retroactive ERs under the ERPAs from the period of June 18, 2019. For this, safeguards due diligence is required. The Trustee, therefore, included a condition of effectiveness in the ERPAs to reflect the pending safeguards due diligence (ERPA schedule 1). This requires the submission of evidence by the Program Entity to demonstrate that the ER Program measures generating retroactive ERs were implemented in a manner consistent with the Safeguards Plans.

⁴¹ Estimates are based on the 5-year ERPA term, 2020-2024. The actual reduction in emissions for 2019 will be determined as part of the monitoring for the first reporting period and prorated to correspond to the ERPA term beginning in June 2019. Safeguards due diligence is required to confirm that the ER Program measures generating retroactive ERs prior to ERPA signature were implemented in a manner consistent with the Safeguards Plans.

⁴² The lack of knowledge of the true value due to both random and systematic errors inherent to the statistical methods used to estimate ERs.

⁴³ The Carbon Fund Methodological Framework defines a Reversal as "A situation where the cumulative monitored and verified ERs are less than the currently transferred ERs, i.e., at any point in time more ERs have been transferred than is warranted by the underlying reported and verified results."

⁴⁴ License for utilization of timber in natural forest (*Izin Usaha Pemanfaatan Hasil Hutan Kayu dalam Hutan Alam* or IUPHHK-HA), license for utilization of Timber from Plantation Forest (*IUPPHK Hutan tanaman* or IUPHHK-HT), IUPHK Restoration Ecosystem within natural forest (IUPHHK-RE), license for utilization of Non-Timber Forest Product (*IUPHH Bukan Kayu* or IUPHHBK), and license for utilization of environmental services (*Izin Usaha Pemanfaatan Jasa Lingkungan* or IUPJL).



sustainable forest management, fire prevention and management, and tenure conflict resolution.⁴⁵

- c) **Local communities, including *adat* communities** that live in or near EK-JERP areas where ER activities take place, or that implement activities that lead to ERs such as alternative livelihoods, fire protection, or forest monitoring. For the purpose of the EK-JERP's benefit sharing arrangements, communities will be grouped based on their role and function, including farmer groups and *adat* communities. Communities will receive benefits in the form of capacity building, technical assistance, and investments for forest and fire management, development projects (e.g., health, education, and public facilities), community enterprises, agroforestry, and sustainable agriculture.

34. In order to access benefits under the BSP, communities and private sector stakeholders must submit concept notes defining their contribution to the ER Program, eligibility (according to defined criteria), proposed use of benefits, and use of previous benefits (when relevant). Intermediaries, including CSOs, government institutions, and universities will support communities that lack technical capacity or strong representation. It is envisaged that communities will benefit the most from the EK-JERP and its benefit sharing arrangements. In addition to the benefits communities will directly receive, they will also get value from the implementation of benefits for other beneficiaries: for example, the implementation of social forestry by KPHs, promotion of improved smallholder practices in coordination with private sector companies, and conservation partnerships between communities and Conservation Agencies. See Annex 5 for more details on the EK-JERP's BSP.

35. **In addition to those stakeholders who will benefit directly from ERPA payments from the EK-PERR transaction, many stakeholders in East Kalimantan will benefit from the activities that will be implemented under the Government's EK-JERP in the form of non-carbon benefits.⁴⁶** Specifically, communities, government institutions, civil society, private sector, and academia will benefit from an improvement in livelihoods for forest-dependent communities and the protection of ecosystem services, including biodiversity, improved water quality, soil fertility, flooding and erosion control, and habitats of game and fish. Another key expected non-carbon benefit of the EK-JERP is improved forest governance which will lead to reduced land conflict and an improved investment climate for the private sector.

E. Rationale for Bank Involvement and Role of Partners

36. **Rationale for Bank Involvement.** The GOI and World Bank have a long partnership in poverty alleviation and sustainable development. Consistent with its Climate Action Plan and Forest Action Plan, the World Bank has also been supporting the GOI in achieving the GOI's climate change commitments. Under the Sustainable Landscape Management Program, the World Bank has been supporting the GOI with analytics, technical assistance and investment projects to better manage its resources and promote

⁴⁵ The benefits envisioned for private sector stakeholders under the EK-JERP BSP are similar to approaches taken by other FCPF ER programs. In many cases, provided the drivers of deforestation and forest degradation are primarily related to agriculture, benefits include non-monetary (in-kind) provisions of equipment, inputs, and technical assistance to improve agricultural practices. There can be different modalities for accessing these benefits, including through the submission of reports and proposals, which the EK-JERP is also applying under its BSP.

⁴⁶ Non-carbon benefits are produced by or in relation to the implementation and operation of an ER Program but are not funded by ERPA payments.



sustainable development practices including in agriculture, water, environment and natural resources management, and land sectors. Furthermore, with support from the FCPF Readiness Fund, the World Bank has been supporting the GOI in creating enabling environment conditions, including policies and institutional strengthening, for improved forest management and the generation of ER benefits. The World Bank has been supporting the GOI in the development of a 'sister' BioCF Initiative for Sustainable Forest Landscapes jurisdictional ER Program in Jambi to pilot activities to generate ER benefits consistent with its NDC and to access results-based climate finance. The World Bank's support in Indonesia through the FCPF and BioCF are among 24 ER Programs in 19 key tropical countries that will generate knowledge on scaling-up ER approaches at jurisdictional scale. The World Bank also has a long history of supporting national and local initiatives to establish sustainable financing mechanisms for conservation such as through conservation trust funds, payment for environmental services mechanisms, and fiscal measures. These experiences will be valuable in designing and implementing the Project.

37. **Role of Partners.** The design of the Government's EK-JERP has benefited from development partner support, including from the Government of Norway, GIZ, GGGI, TNC and WWF. Implementation of the EK-JERP will continue to be coordinated with these partners to ensure its objective is realized.

- a) **Government of Norway:** The governments of Norway and Indonesia signed a Letter of Intent on May 26, 2010 that outlines anticipated support for Indonesia's efforts to reduce emissions from deforestation and degradation of forests and peat lands. Under this REDD+ partnership, the Government of Norway has committed up to US\$1 billion to support Indonesia. Furthermore, Norway has also provided technical and financial support through its bilateral cooperation, multilateral institutions and civil society organizations to support Indonesia in meeting its climate change commitments.
- b) **Global Green Growth Institute (GGGI):** GGGI has been a key partner in supporting the development of the Government's EK-JERP, including carrying out studies and providing technical assistance. GGGI's support is linked to the province's green economic development agenda and is focused on strengthening the decentralized forest management strategy, particularly through improved KPH capacity. GGGI plans to invest US\$317,000 in East Kalimantan between 2020-2025.
- c) **German Corporation for International Cooperation (GIZ):** GIZ has been a partner in supporting the development of EK-JERP. It will continue to support the GOI especially through its FORCLIME program in Indonesia, which aims to reduce greenhouse gas emissions from the forest sector while improving the livelihoods of Indonesia's poor rural communities. GIZ FORCLIME plans to invest approximately US\$1 million in East Kalimantan for the period 2020-2025.
- d) **The Nature Conservancy (TNC):** TNC has been supporting the development of the EK-JERP including carrying out studies related to carbon accounting and safeguards management, as well as providing technical assistance. TNC's support is linked to its broader terrestrial and blue carbon programs. TNC is expected to support activities totaling US\$1,625,000 in East Kalimantan between 2020- 2025.
- e) **World Wildlife Fund – Indonesia (WWF):** WWF has been supporting activities related to peat land management, sustainable forest management, sustainable plantations, and village development. WWF has developed an MRV REDD+ portal for East Kalimantan. WWF plans to invest US\$265,000 in East Kalimantan between 2020-2025.



F. Lessons Learned and Reflected in the Project Design

38. The EK-PERR draws on lessons from a range of relevant projects and programs facilitated by the GOI, development partners, and other stakeholders that have produced knowledge and experience related to results-based finance, REDD+, and institutional engagements, commitment, capacity, and political economy.

39. **The EK-PERR has incorporated lessons learned from the World Bank-supported Sustainable Landscape Management Program, particularly related to institutional collaboration and capacity.** Projects such as the FIP, DGM, One Map, and others have tested approaches to inter-agency coordination. As a result of these projects, capacity has been built within implementing agencies and channels for coordination have been tested, which will support the transaction under the EK-PERR.

40. **The design of the EK-PERR has benefitted from the preparation of FCPF Carbon Fund ERPAs for jurisdictional ER Programs in other countries, including Chile, Costa Rica, the Democratic Republic of Congo, Fiji, Ghana, Mozambique, Nepal and Vietnam.** The experience of these countries and the active exchange of lessons across task teams has resulted in a degree of consistency in how *ex-post* ERPA payments relate to underlying investments, the required results and monitoring framework, and approaches to safeguards and benefit sharing. Lessons are being learned and captured at the portfolio level as well, including through guidance notes, knowledge exchanges, and Carbon Fund meetings on fundamental topics, including, MRV, and benefit sharing. In addition, the measurement and reporting of ERs by the Program Entity, and the independent verification, follows a rigorous and internationally accepted methodological framework, which was designed with the input of many countries participating in the FCPF and on the basis of their experiences and capacities in monitoring forests.

41. **Lessons were learned from the FCPF's portfolio on the application of investment lending safeguards operational policy's (OP's) to landscape-level jurisdictional ER Programs and were incorporated in the design of the EK-PERR.** Safeguards preparation considered best practices from other FCPF ER Programs, especially those in Vietnam and Costa Rica because they have similar Program activities to the Government's EK-JERP. These ER Programs provided examples for the safeguards instruments and documents prepared for the EK-PERR, including the Strategic Environmental and Social Assessment (SESA), Environmental and Social Management Framework (ESMF), Indigenous Peoples Planning Frameworks (IPPF), and Feedback and Grievance Redress Mechanism (FGRM), amongst others. Furthermore, the EK-PERR benefitted from existing safeguards instruments for FIP, DGM, and One Map projects in Indonesia.

42. **Under the BSP, benefits will flow through the BLU-BPDLH, which builds on lessons from other operating BLUs and similar fund channeling mechanisms such as the Indonesia Climate Change Trust Fund managed by the Ministry of National Development Planning (Bappenas).** Such lessons include the need for clear disbursement guidelines, strong transparency, streamlined approval processes, and complementary capacity building support for community organizations. The BLU-BPDLH has incorporated these lessons, including by establishing conditions for channeling benefits to beneficiaries to ensure that appropriate capacity and governance systems have been established. The BLU-BPDLH was legally established in October 2019 through various regulations, though there are a number of requirements that have not been met in order to make the BLU-BPDLH operational and able to receive and distribute funds. These requirements include recruiting key staff and the development of several procedural documents, including a Governance Document, Business Plan, Minimum Standards Plan, and Template for Financial



Reporting. Drafts of these documents have been developed, building on examples from other BLUs. Key staff and these documents to be in place in the third quarter of calendar year 2020, well ahead of the projected first ERPA payment in 2021. Should the BLU-BPDLH not be operational at the time ERPA payments are made, an existing BLU will receive the payments and channel benefits with similar arrangements to those described in the BSP. While this is not anticipated, if the existing BLU is unable to receive the ERPA payments, the earmarked transfer from central to local government using on-granting mechanism will be used.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

43. **Coordination between levels of government as well as between sectors is required to sufficiently address the drivers of deforestation forest degradation in East Kalimantan.** Therefore, institutional arrangements have been designed to manage emissions caused by the expansion of oil palm, timber plantations, and mining, since the authorities that regulate these activities are within both national and provincial government structures. Institutional arrangements for the GOI's EK-JERP and the EK-PERR are defined and differentiated based on the diverse line of authorities responsible for Program implementation, ERPA transaction, and execution of the BSP. See Annex 2 for more information on institutional arrangements and roles of each entity.

44. **As the Program Entity, MoEF is responsible at the national level for the implementation of the government's EK-JERP.** MoEF is the cabinet-level ministry responsible for managing the national Forest Area (*Kawasan Hutan*) as mandated by the Forestry Law 41/1999 and, as detailed in MoEF regulation 70/2017 on procedure of REDD+, Role of Conservation, Sustainable Management of Forest, and Enhancement of Forest Carbon Stocks, has the mandate and capacity to manage and implement REDD+ programs. MoEF will be the primary agency to implement the EK-JERP, including alignment with the national policy framework. Within MoEF, the Center for Socio-Economics, Policy and Climate Change (*Pusat Penelitian dan Pengembangan Sosial Ekonomi Kebijakan dan Perubahan Iklim*, or P3EKPI) of the Forestry and Environmental Research Development and Innovation Agency (FOERDIA) and the Directorate of Climate Change Mitigation of the Directorate General of Climate Change (DGCC) will work in close coordination with other relevant ministries/agencies that will provide guidance during implementation. In addition, the REDD+ sub-directorate of DGCC will be the national secretariat of ER programs, including being primarily responsible for communication and coordination with donors.

45. **At the provincial level, the responsible party for EK-JERP implementation is the Provincial Secretary of East Kalimantan (*Sekretaris Daerah Provinsi Kalimantan Timur*, or SEKDA).** Working Groups are supporting SEKDA in the implementation and coordination of activities. The Forestry Agency (*Dinas Kehutanan* or *DISHUT*) is coordinating the Safeguards Working Group, the Environmental Agency (*Dinas Lingkungan Hidup* or *DLH*) is coordinating the Monitoring Measurement and Reporting (MMR) Working Group, the Provincial Economic Bureau is coordinating the Benefit Sharing Working Group, and the Provincial Planning and Development Agency (Bappeda) is coordinating the Planning and Budgeting Working Group. The Regional Council on Climate Change (*Dewan Daerah Perubahan Iklim* or DDPI) in East Kalimantan Province is a key partner in the implementation of the EK-JERP. DDPI is a multi-stakeholder organization, established through East Kalimantan Governor regulation Nr.9/2017, that coordinates the planning and implementation of low-emission development in East Kalimantan. It has significant experience in and operational infrastructure for the management of donor development funding. DDPI



will play a key role in facilitating coordination amongst key stakeholders (local government agencies, universities, development partners, etc.) and providing guidance for implementation at the district level.

46. Daily implementation of the EK-JERP at the sub-national level will be managed by a Program Management Unit (PMU) at the provincial level. The PMU would be led by the Economic and Development Administrative Assistant of East Kalimantan Province Regional Secretary, supported by the Economic Bureau as head of secretariat. The PMU will be staffed with consultants and led by a manager to support and assist the ER Program's implementation. The PMU will be established with the expertise required to manage the day-to-day needs of the EK-JERP, including in safeguards, financial management, procurement, and technical issues. The PMU has been developed and will be formalized by Governor Regulation.

47. At the district/city level, implementation of the EK-JERP will be done by relevant Sub-National Technical Unit Organizations (OPDs).⁴⁷ OPDs are sub-national government agencies, some of which have offices at the district level, such as the Environmental Agency. Each respective district/city government will be responsible for implementation in its region. At the village level, the village governments, including local communities, are responsible for implementation in their respective village.

48. To ensure effective coordination amongst the various implementing agencies to support the objectives of the broader EK-JERP, a National Steering Committee (NSC) will be established with representation from relevant ministries of the national and provincial governments and observers from civil society and other entities. The NSC is chaired by the Secretary General of MoEF, and its members consist of FOERDIA and DGCC (MoEF), Director General of Estate Crops (Ministry of Agriculture), Deputy of Maritime and Natural Resources Affairs (Bappenas), Director General of Treasury and Director General of Fiscal Policy (MoF), and Regional Secretary (East Kalimantan Provincial Government - Bappeda). A National Technical Committee is embedded in the NSC with echelon two⁴⁸ representation of the respective ministries to provide technical advice and resources to the NSC to support their decision-making process. The NSC will meet at least once a year, except when urgent issues or necessary decisions arise that require additional meetings. The World Bank, donors, and CSOs will participate in the NSC as observers.

49. MoEF is the Program Entity to sign the ERPA.⁴⁹ During negotiations, MoEF submitted a draft joint government letter on September 16, 2020 that reflects the authority of MoEF to sign the ERPA and the ability to transfer title to ERs generated from the ER Program.⁵⁰ The Program Entity also sent to the Trustee the Memorandum of Understanding between MoEF and the Provincial Government of East Kalimantan on the Greenhouse Gas Emission Reduction Program through the Implementation of Jurisdictional Basis of REDD+ in East Kalimantan on 11 March 2020 ("MoU") (Number: PKS.3/SETJEN/ROKLN/KLN.0/3/2020;

⁴⁷ Sub-National Technical Unit Organizations (OPDs) are sub-national government agencies. Due to the Regional Government Law 23/2014, several agencies only exist at the provincial level (e.g. Forestry Agency), while others also exist at district level (e.g. Environmental Agency). OPDs are determined by the characteristic of the regional area, and therefore are different for each province and district.

⁴⁸ Second layer hierarchical position under the Minister, with the role of Director of a Directorate under Directorate General.

⁴⁹ MoEF has the authority under the Environmental and Forestry Ministerial Regulation No. P.18/MenLHK-II/2015 about Organization and Work Procedures of the Ministry of Environment and Forestry and as confirmed by Presidential Regulation No. 16 Year 2015 on the Ministry of Environment and Forestry to sign the ERPAs on behalf of the GOI.

⁵⁰ A legal opinion (May 8, 2020) Harvady, Marieta & Mauren (independent law firm) supporting the draft joint letter on ER title transfer and ERPA signing authority was also provided to the Trustee. The draft joint letter was reviewed and cleared by LEGEN (World Bank legal department) during the negotiations.



197/2439/B.Humas-III), which was cited in the legal opinion and serves as one of the legal instruments for the Program Entity to demonstrate its ability to transfer title to ERs. MoEF is required to provide evidence (a final joint government letter) demonstrating its ability to transfer Title to ERs, which is a condition of ERPA effectiveness.

50. **The transfer of the ERPA payments will be overseen by MoF, as the entity responsible for fiscal and financial policy at the national level.** Distribution and utilization of EK-PERR transaction is determined by MoF regulation. Under MoF, the transfer of ERPA payments will be managed by the BLU-BPDLH, which was legally established in October 2019 through various regulations and to meet requirements to become operational (to be able to receive and distribute funds) in the third quarter of calendar year 2020, well ahead of the projected first ERPA payment in 2021.⁵¹ The BLU-BPLDH has a strong legal basis for its development given Government Regulation 46/2017 on Environmental Economic Instrument (IELH) as the realization of Law 32/2009 on Protection and Management of Environment. The BLU-BPLDH will only release payment to the sub-national level according to ER contracts based on performance in reducing emissions. At the national level, the BLU-BPLDH will transfer funds to MoEF's DGs involved in the ER Program, including DGCC and FOERDIA. The transfer mechanism to national government institutions will be through non-tax revenue (PNBP) and its utilization will be included in MoEF's budget (DIPA) in accordance with activities in the BSP.

51. **At the subnational level, funds will be transferred by BLU-BPDLH as part of EK-PERR to provincial treasury account under provincial finance and asset management services (*Badan Pengelolaan Keuangan dan Aset Daerah*).** Other beneficiaries (KPH, OPD) will access the fund in the provincial treasury account using subnational treasury mechanism. The fund utilization will be included in the subnational government budget (DPA).

52. **The institutional arrangements for the EK-PERR are relatively complex, reflecting the integrated approach to addressing emissions from forests across an entire province.** This complexity will be managed through the clarification of roles and responsibilities, including through a Project Operations Manual (POM), and through the supervision of the World Bank during implementation, which will identify challenges and risks to institutional arrangements to enable the effective delivery of the Project.

B. Results Monitoring and Evaluation

53. **To make ER payments under the ERPA, the monitoring and evaluation approach for the results of the EK-JERP will be performed as follows:**

- a) **Reporting Periods.** The Program Entity (MoEF) will coordinate the measurement and reporting of ERs and submit ER Monitoring Reports during regular Reporting Periods specified in the ERPA. The agreed Reporting Periods are 2019-2020⁵², 2021-2022 and 2023-2024, followed by verification and respective ERPA payments in the subsequent year. In other words, the actual

⁵¹ Should the BLU-BPDLH not be operational at the time ERPA payments are made (expected in 2023), an existing BLU will receive the payments and channel benefits with similar arrangements to those described in the BSP. While this is not anticipated, if the existing BLU is unable to receive the ERPA payments, the earmarked transfer from central to local government using on-granting mechanism will be used.

⁵² The First Reporting Period starts in June 2019. The required due diligence for compliance with social and environmental safeguards for retroactive ERs is currently being performed by the Program Entity.



disbursement of ERPA Payments would occur in the year following the respective reporting period (expected in 2021, 2023 and 2025).

- b) **ER Monitoring Reports.** ERs generated through the implementation of the EK-JERP will be measured in tCO₂e/year and represent the key metric for ER payments, coinciding with the main PDO indicator. The baseline for the indicator, against which results will be measured, will be the Reference Level (RL) endorsed by CFPs with the acceptance of the ER-PD. ERs corresponding to the Accounting Area⁵³ will be measured and reported by the Program Entity as described in an ER Monitoring Plan and in accordance with the National MRV system for REDD+ and the Carbon Fund Methodological Framework. The Monitoring Plan is included in Annex 2.
- c) **Verification.** All ERs generated in the Accounting Area during each Reporting Period are verified by an independent reviewer contracted by the World Bank, acting as Trustee of the FCPF Carbon Fund. The MoEF has put in place its own internal verification procedures to ensure quality and accuracy of results reported by the jurisdiction, which will be applied prior to reporting to the Carbon Fund.
- d) **ER Transaction Registry.** The MoEF has indicated that it will use the centralized registry (Carbon Assets Trading System) developed and managed by the World Bank, as Trustee for the Carbon Fund, for the issuance and recording of verified and buffer ERs from the EK-JERP. In the meantime, Indonesia has also developed a national registry system (*Sistem Registri Nasional* or SRN⁵⁴), that records REDD+ program information and will eventually record ERs reported by jurisdictions. The Indonesian system was only recently established and is still being operationalized. As a result, it currently lacks the necessary functionality required by the Carbon Fund, including the avoidance of double-counting and/or claiming of the transacted ERs, the accounting for set-asides to manage risks (uncertainty and reversal risk, as noted above) as well as the issuance, serialization, transfer and cancellation of ERs.
- e) **Interim Progress Reports.** During the ERPA term, performance indicators for each mitigation measure, implementation of Safeguards Plans, and implementation of the BSP will be monitored through regular Bank supervision missions (at least every semester) and documented in Interim Progress Reports and ER Monitoring Reports, in form and substance satisfactory to the Bank.
- f) **Non-Carbon Benefits.** The Program Entity shall provide information on its efforts to generate and/or enhance Priority Non-Carbon Benefits as part of each ER Monitoring Report and Interim Progress Report. Safeguards reporting incorporated into the ESMF developed for the Program will also track performance on non-carbon benefits including biodiversity and forest conservation, and social impacts.

C. Sustainability

54. **The EK-PERR builds on GOI's policy commitments made nationally, the program of interventions in East Kalimantan, and the broader engagement of the World Bank in Indonesia.** Specifically, the sustainability of the EK-PERR is reinforced by: (i) the level of commitments from the national and local government including other key stakeholders; (ii) inclusion of program activities in the Mid-term Regional

⁵³ The geographic area for which the RL is established and over which emissions and removals from forests are being measured, reported and verified.

⁵⁴ <http://srn.menlhk.go.id/index.php?r=home%2Findex>



Development Plan that will be supported by budget allocation in the Regional Budget and Expenditure; (iii) alignment with national sectoral policies and international commitments (e.g., Indonesia's NDC); (iv) a participatory process with forest stakeholders at the national and provincial levels throughout the preparation and validation process that built stakeholder ownership of the government's EK-JERP; (v) the alignment of national and sub-national policies and initiatives in the East Kalimantan; and (vi) the leverage of collaborative management to promote ownership. The EK-PERR is also consistent with, and builds on, the Bank's strategic multi-sector Sustainable Landscape Management Program, which includes: (i) sustainable management of priority lowlands landscapes; (ii) improved land information system; and (iii) improved fire management.

IV. APPRAISAL SUMMARY

A. Economic and Financial Analysis

55. **A cost-benefit analysis was conducted for the program of activities included in the GOI's ER-JERP. In combination, these yield positive results across a variety of sensitivity analyses and data assumptions (see Table 2 and Annex 10).** This analysis contrasts the actual costs with economic benefits, both discounted to 2020 (the baseline year).

56. **The Net Present Value (NPV) is estimated to be US\$1.6 billion and the Benefit Cost Ratio (B/C Ratio) is 14.9.** This result is robust as demonstrated through sensitivity analyses and application of different discount rates (5percent, 10percent and 20percent). The benefits are much larger than the costs for all scenarios, even though this analysis did not include all benefits, such as positive effects arising from better land and forest governance. Benefits might be further enhanced if the effects of new policies, financial and governance capacity building or the improved of land rights were considered. Furthermore, even with a conservative cost of carbon (US\$40/tCO₂e) and lower performance (10percent), the EK-JERP yields positive results at all discount rates.

57. **The economic benefits are likely to include significant development impacts given the broader economic framework for implementation.** The potential for the EK-JEPR to catalyze important development momentum for natural resource management is high, with potential for replicability and continuity beyond the implementation time frame (2020-2024). Benefits accrue from: (i) reduction of GHG emissions resulting from improved spatial management and community forest management; (ii) increased biodiversity habitat conservation thereby contributing to protection and sustainable management of biodiversity including iconic wildlife, which also generates ecotourism benefits; (iii) economic value from the socio-cultural benefits, including communal use of forestry and other ecosystem services; and (iv) livelihood benefits from formalizing access to communities, community forestry and improved spatial planning which includes benefits from forestry and non-forestry products. Preliminary estimates put the worth of EK-JERP benefits at least at US\$1.5 billion, comprising a range of social values of carbon worth US\$814 million, biodiversity and related tourism benefits worth US\$540 million, economic value from the socio-cultural benefits to communities worth US\$22 million and economic value from forestry worth US\$112 million.

Table 2: Summary of economic simulation results

	All Benefits with	All Benefits with Low	Without Carbon Benefits
--	-------------------	-----------------------	-------------------------



	Average Carbon Price			Carbon Price (US\$ 40)					
	5%	10%	20%	5%	10%	20%	5%	10%	20%
NPV [in US\$ billion]	1.6	1.4	1.1	1.2	1.0	0.8	0.5	0.4	0.3
B/C – Ratio	14.9	13.5	11.3	11.2	10.2	8.5	4.6	4.1	3.3
Sensitivity analysis	10% performance			10% performance					
NPV [in US\$ billion]	0.6	0.5	0.4	0.5	0.5	0.4			
B/C – Ratio	5.6	5.0	4.1	5.2	4.7	3.8			

58. While the EK-JERP is already viable, it is to be noted that benefits accrue beyond those quantified and, if included, will only increase benefits from current investments. A key expected benefit is from improved land governance and avoided costs of inaction from forest loss and degradation, biodiversity loss, forest fires and GHG emissions. For example, the World Bank estimated that the cost of the 2015 fires to Indonesia was at least US\$16.1 billion or about 1.9percent of Gross Domestic Product.⁵⁵ The EK-JERP is expected to spur indirect benefits beyond East Kalimantan, as the experience from its implementation could inform the design and implementation of other areas in the coming years.

59. **Rationale for public financing.** Land governance challenges have led to severe externalities from forest fires, deforestation and biodiversity loss, which have been costly for the country's economy, environment and people. Considering these high costs of inaction largely from global public goods, and since the EK-JERP has significant economic returns and no financial returns, there is a clear need for public finance. The greatest stream of benefits accrues from ERs, which are expected to result from improved spatial plans in forest areas and improved community engagement and practices.

B. Technical

60. The design of the EK-PERR complies with the Carbon Fund Methodological Framework⁵⁶, as well as the UNFCCC REDD+ framework⁵⁷, both of which specify requirements for the implementation of the transaction. The Government's EK-JERP, which forms the basis of the transaction under the EK-PERR, will support a combination of enabling conditions and sustainable management practices that will directly address the underlying drivers of emissions resulting from sectoral activities including, timber plantation and estate crop expansion, subsistence agriculture, aquaculture, and unsustainable logging practices. The EK-JERP's design considers the distribution of remaining forests, the threats to those forests, and key stakeholders that need to be reached under the Program. As part of the FCPF Carbon Fund's business process, a TAP assessed the Government's EK-JERP against the Methodological Framework's criteria and indicators and the FCPF Carbon Fund Participants also conducted a desk review of the Program and provided comments. The result of these assessments, and the comparison of the Government's EK-JERP against the FCPF and UNFCCC's requirements, resulted in the inclusion of the Program in the portfolio of

⁵⁵ Indonesia Economic Quarterly (IEQ), December 2015, The World Bank, pp 18-25. The same analysis on the economic impact of 2015 fires was also published as a knowledge note titled: "Cost of Fire", February 2016.

⁵⁶ The Methodological Framework includes a series of technical criteria (38) and indicators (78) built around five sections, namely: (i) level of ambition; (ii) carbon accounting; (iii) safeguards; (iv) sustainable program design and implementation; and (v) ERs program transactions.

⁵⁷ The UNFCCC REDD+ framework includes a set of interrelated Decisions that were completed at COP21.the 21st session of the Conference of Parties.



the FCPF Carbon Fund in June 2019. This achievement underscores the quality and robustness of the technical design of the Program and its readiness for the EK-PERR transaction.

C. Financial Management

61. **A financial management assessment of the adequacy of the implementing agencies' financial management system to produce timely, relevant and reliable financial information on Project activities in accordance with the agreed BSP was performed.** The assessment's recommendation is incorporated in the advance draft of BSP including: (i) financial management arrangements for the use of ERPA payments such as: eligibility, budgeting, reporting, fund flow and auditing; (ii) the transfer from BLU-BPDLH to the recipient is treated as an earmarked budget transfer that can only be utilized for the purpose described in the BSP; (iii) clear arrangement of approval processes prior to ER fund transfer from BLU-BPDLH to recipient (iv) the contract between BLU-BPDLH and the recipients will include eligibility of the use of ER payment; (v) clear financial reporting arrangements and oversight, including audit by BPK on the financial reports. The further detail of financial management arrangement including the financial report format will be included in the POM agreed with the Bank. BLU-BPDLH will also appoint financial management staff to provide support and oversight on the financial management aspect of ERPA payment utilization by the recipient. The BLU-BPDLH was legally established in October 2019 through various regulations and to meet requirements to become operational (to be able to receive and distribute funds) in the fourth quarter of calendar year 2020, well ahead of the projected first ERPA payment in 2023.⁵⁸ Further assessment will be conducted prior to the first ERPA transfer to ensure adequate systems are in place for the BLU-BPDLH to manage ERPA payments in accordance with the BSP. Additional information can be found in Annexes 2 (implementation arrangements) and 5 (benefit sharing).

D. Procurement

62. **The World Bank's Procurement Regulations do not apply under the Project.**⁵⁹ No procurement activities are expected to verify and provide results-based finance for the performance of the Government's EK-JERP in reducing emissions. Once the dedicated payment is made to the GOI against results in reducing emissions, it becomes government revenue to be used following their own procedures including their own procurement procedures. The GOI will utilize the revenue from verified ER payments to share benefits with stakeholders, including government institutions, private companies and local communities. The ERPA payments will be shared according to an agreed BSP. The main activities will be related to operational costs and capacity building, and it is expected that individual consultants, consulting firms and procurement of small goods will be procured by beneficiaries.

E. Social (including Safeguards)

63. **The SESA informed the preparation of an ESMF and associated instruments to address identified social risks,** including an Indigenous Peoples Planning Framework (IPPF), a Resettlement Planning

⁵⁸ If the BLU-BPDLH is not established at the time the ER Monitoring Report is submitted to the World Bank for the first reporting period, an existing BLU will be used to receive the first ERPA payment. While this is not anticipated, if the existing BLU is unable to receive the ERPA payments, the earmarked transfer from central to local government using on-granting mechanism will be used. The FCPF ER Monitoring Report requires the GOI to provide information on the establishment of the benefit sharing mechanism in an annex to the Report. If the BLU-BPDLH is established and fully functional during the time between the submission of the ER Monitoring Report and the disbursement of the ERPA payment, GOI will need to re-submit the ER Monitoring Report annex on benefit sharing, evidencing this establishment and operationalization, to the World Bank at least six months prior to the anticipated ERPA payment.

⁵⁹ As advised by Chief Procurement Officer. See Bank Guidance on ERC projects under IPF, June 2, 2020.



Framework (RPF), which includes a Process Framework (PF), and a Feedback and Grievance Redress Mechanism (FGRM). The EK-PERR triggers OP 4.12 (Involuntary Resettlement) and 4.10 (Indigenous Peoples). No resettlement impacts are expected as the Government's EK-JERP's underlying activities are largely focused on technical assistance, policy reform, and increased enforcement. However, the RPF considers potential small-scale impacts that may occur under productive projects supported by the BSP as well as any impacts resulting from land-tenure strengthening activities. Potential restrictions of access to resources by communities and individuals from conservation and reduced forestry/land conversion resulting from the Program are considered in the PF.

64. **Risks related to Indigenous Peoples (OP 4.10) potentially stem from slow recognition of *adat* tenure rights due to overlapping claims, existing conflicts, lack of legal evidence, and political processes for communities to gain such recognition, which may potentially exclude some communities from the EK-PERR's benefits.** In response to such risks, the BSP seeks to manage access barriers through a contractual mechanism which allows village-level recognition as a pre-requisite for accessing benefits (instead of through district regulations and/or land titles being issued, which the current regulatory regime requires). The Project's IPPF also provides guidance for Free, Prior and Informed Consultations (FPIC) and management of adverse risks potentially affecting Indigenous Peoples. While it is acknowledged that such a contractual mechanism may reduce access barriers at the Project level, requirements for legal recognition for *adat* communities may still present barriers for these communities from accessing equal benefits compared to other communities who have been formally recognized.

65. **Project-level management and oversight will be under coordination from the DGCC (National REDD+ Focal Point) at the national level and provincial Secretary (SEKDA) at the provincial level.** Some capacity gaps exist for the application of social and environmental safeguards (see Annex 7 for more information) and resources have been identified to address these gaps in the first year of Project implementation. Together with the proposed safeguards institutional arrangements and the resources allocated for implementation, all the above frameworks will form the safeguards "system" for the overall ER Program's operations in the Province.

66. **The use of benefits under the BSP (both monetary and non-monetary) will be subject to safeguards requirements as stipulated in the ERP's ESMF, IPPF, RPF, PF and FGRM.** Screening against environmental and social risks will be carried out by respective agencies with oversight from the MoEF for each concept note submitted by the private sector and communities through their respective agencies⁶⁰ (i.e. forestry and estate crops agencies for the former and Concept Notes to Community Empowerment Services for the latter). For KPHs, such screening and due diligence processes will be carried out by the Provincial Forestry Service. Proposed activities or financing that will not be funded with ERPA payments (summarized in a 'negative list') will be excluded from the proposals. Legal covenants for safeguards compliance will be included in the ER contracts signed by the BLU-BPDLH and village governments and Forestry and Estate Crops Services. Upon signing these contracts, these entities will be mandated to provide oversight and technical facilitation for the implementation of the ESMF, IPPF, RPF, PF and FGRM.

67. **The ER Program in East Kalimantan was developed through extensive consultations with sub-national stakeholders, which have been on-going since 2016 under the leadership of the Regional Council on Climate Change (DDPI).** Identification of key drivers of deforestation and degradation was

⁶⁰ In order to access benefits under the BSP, communities and private sector stakeholders must submit concept notes defining their contribution to the ER Program, eligibility (according to defined criteria), proposed use of benefits, and use of previous benefits (when relevant).



conducted through a series of consultative workshops between May 2017 and March 2018, involving the provincial government (Bappeda, the Office of the Environment, and Government offices), district governments (Bappeda, Environmental agencies, and estate crop agencies), local and international CSOs in East Kalimantan, an Indigenous Peoples Organization (AMAN Kaltim), academics, and Employers' Associations (including some forestry and plantation companies). All inputs were compiled by DDPI East Kalimantan, and discussed with the East Kalimantan Secretary, FOERDIA and DGCC. Inputs pertaining to safeguards have been documented in the SESA, including risks related to existing tenurial conflicts and disputes, institutional capacity constraints in managing environmental and social issues, community engagement and participation, governance risks, lack of an effective and accessible FGRM, gender inequalities, and social exclusion and access restriction risks for forest dependent communities. In response to these consultation outcomes, relevant considerations have been addressed in the safeguards instruments for the program.

68. **Grievance redress has been a specific focus of preparation of the EK-PERR.** A Feedback and Grievance Redress Mechanism (FGRM) applicable to the government's EK-JERP's Program activities and to the BSP has been developed. The FGRM is based on the existing national systems of grievance redress that exist at village, provincial, and national levels. The grievance redress mechanisms are located in MoEF, land, and other enforcement agencies, as well as in village and provincial institutions. Depending on the type of grievance, a different mechanism would apply and escalate to other levels should resolution not be achieved. The FGRM describes these mechanisms and a review of capacities and effectiveness is currently ongoing. This is necessary given the FGRM has flagged that existing mechanisms need more support for awareness of the ER Program and to strengthen the capacity to respond and report grievances. The reporting of grievances will be linked to the national Safeguards Information System (SIS) which will also be strengthened as part of implementation.

F. Environment (including Safeguards)

69. **The EK-PERR is expected to generate overall positive environmental impacts at global, national, and local levels.** This is expected to be achieved through reduced of land-based carbon emissions, increased carbon storage, reduced land degradation, and protection of globally threatened ecosystems and endemic biodiversity. Small-scale negative impacts may result from the support of sustainable production activities under both the government's EK-JERP and the BSP. Sub-projects will be screened for environmental risks and impacts such as increased pesticide use from agricultural intensification; pollution potential from ecotourism, small-scale non-timber forest product (NTFP) processing, or cottage industries; unsustainable use of natural resources from extractive projects; invasive species from productive and plantation activities; and others. The Project triggers OP 4.01 Environmental Assessment, Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Pest Management (OP 4.09), and OP/BP 4.11 Physical Cultural Resources.

70. **The ESMF includes mitigation measures and Environmental Codes of Practice (ECOP).** The ESMF has been publicly consulted and will continue to be improved as the consultation process with stakeholders is recurrent, further mitigation any potential risks. Under the ESMF, each sub-project will be screened to identify: (i) the safeguards policies triggered; (ii) the related environmental assessment category; and (iii) safeguards instruments and associated analyses needed to incorporate risk and impact minimization, mitigation measures, and monitoring approaches. Based on the results of this screening, specific safeguards mitigation plans for each sub-project will be developed.



71. **The impacts of the program on East Kalimantan's forests are also expected to be positive, however, displacement of emissions to other provinces may occur from increased enforcement and focus on deforestation in East Kalimantan.** The design of the EK-PERR monitors this risk as part of the annual monitoring of deforestation across the entire country and accounting for emissions in the provinces. In addition, it is expected that the government's EK-JERP's Program activities are not limited solely to East Kalimantan given the scope of the national REDD+ program, particularly as the country seeks to achieve its NDC. Still, a dialogue will be maintained with the GOI regarding measures to be taken if monitoring indicates displacement is occurring.

72. **In compliance with OP 4.01 on environmental assessment, an initial identification of potential risks, impacts, and mitigation measures has been conducted.** A SESA and ESMF have been developed based on the risks identified from the initial SESA process and other earlier assessments and consultations. Relevant risks, impacts and mitigation measures as part of safeguards requirements are aligned with the analysis of the drivers of deforestation and degradation and subsequently, informed the design and selection of the government's EK-JERP's Program activities. The use of country systems such as Environmental Impact Analysis (AMDAL) or Environmental Management and Monitoring Efforts (UKL-UPL) in lieu of the assessments mentioned, will also be applicable as per GOI's regulations. Other Program and/or activity-level environmental assessments (Environmental and Social Impact Assessment (ESIA), AMDAL, or UKL-UPL) will be part of the requirement for Program activities in accordance with the existing Government regulatory frameworks on environmental management.

73. **The EK-PERR is classified as Category B for environmental assessment because the potential environmental impacts are not significant, complex, large in scale, sensitive and unprecedented.** The EK-JERP's Program activities have distinct boundaries (see Annex 7) to allow proper environmental mitigation measures to be undertaken using the existing methods or mitigation tools available to the EK-PERR.

74. **Key safeguards risks related to lack of capacity in preparing and implementing safeguards instruments, have been identified both at provincial and district levels.** Capacity building needs related to the SESA and ESMF have also been identified and budgeted as part of the government's EK-JERP's underlying Program activities related to Program management. Some of the identified challenges that may impact safeguards are related to capacity and resource constraints which affect oversight ability amongst Program Entities, incentives for compliance and reporting of safeguards performance to the Safeguards Information System (SIS) for REDD+, lack of awareness of the broader REDD+ program, and safeguards requirements at the local and community levels. The most effective way to mitigate this risk is by providing close and intensive support and mentoring on safeguards implementation to the PMU (national and subnational), DGCC, DDPI, Provincial Secretary (SEKDA), as well as to community groups and facilitators during implementation. At the same time, sub-national governments will receive necessary support from World Bank team during supervision missions.

75. **The scope of the World Bank's supervision will be consistent with the OESRC memo⁶¹ and its subsequent supplemental briefing note.⁶²** The World Bank, as Trustee of the FCPF program, will focus on the performance of agreed safeguards systems for screening, due-diligence, supervision and technical

⁶¹ OESRC Memo on Forest Carbon Partnership Facility (FCPF): Managing Safeguards in the FCPF Emission Reduction Phase issued on November 14, 2017.

⁶² Supplemental Briefing Note to the OESRC: Managing Environmental and Social Risks for the FCPF Emission Reductions Programs issued on April 22, 2019.



support for safeguards implementation as defined in the ESMF and ensure that the Program Entity has sufficient capacity and resources to implement the ESMF. Given that the activities under the EK-JERP (which underpins ER performance under the EK-PERR) will be mostly financed and implemented by or under the supervision of entities other than the World Bank, including government agencies, bilateral donors and private sector actors, the World Bank as Trustee will be responsible for:

- a) Prior to implementation, ensuring the Program Entity has the capacity and resources sufficient to implement the ESMF. This institutional capacity assessment has been done and a safeguards capacity action plan has been prepared to also form part of the ESMF to address capacity gaps;
- b) During implementation, the Bank's role is to take steps to demonstrate that the Safeguards Plans continue to function effectively at the system level. This includes confirming that: budgets and staffing are adequate to support the implementation of the Safeguards Plans; the Program Entity can demonstrate credibly that environmental and social assessments and management plans are prepared in accordance with the safeguard frameworks; mechanisms for self-reporting and Third Party monitoring are in place and functional; grievance redress and dispute resolution mechanisms are established and functional; and the implementing entities have demonstrated the ability to solve issues of non-compliance.

76. Consistent with the supplemental briefing note to the OESRC (dated 22 April 2019), the EK-PERR will be required to undertake independent third-party monitoring to be financed by the World Bank (FCPF FMT). The third-party monitoring would be separate from verification of ERs generated from the ER Program, and the World Bank, acting as Trustee, will review the information from third-party monitoring, along with the self-reporting and verification report (verifying the volume of ERs generated) to determine whether or not to make payments under the ERPAs in whole or in part to the Program Entity. Further clarifications on the above approaches are outlined in Annex 7.

G. Other Safeguard Policies (if applicable)

77. **No other World Bank safeguard policies are triggered.** However, Indonesia will also report on the UNFCCC Cancun safeguards for REDD+ (Dec.1/CP16) through its National Communications (Safeguards Information System).

78. **All safeguards instruments have been completed, consulted, cleared by the World Bank, and made publicly available.** The final safeguards instruments were publicly disclosed on the World Bank's website on December 1, 2019. The GOI publicly disclosed the documents on December 12, 2019 on their websites⁶³, both at the national and sub-national levels. In addition, the Appraisal stage Project Information Document-Integrated Safeguards Data Sheet (PID-ISDS) was publicly disclosed on May 17, 2020.

H. Gender Analysis

79. **Indonesia is a largely patriarchal society, even among matrilineal groups and, in particular, land tenure and forest management processes in the country tend to be male dominated.** While regulatory frameworks (such as those for community participation, marital property and inheritance) in Indonesia are not discriminatory towards women, challenges remain for the implementation of these frameworks and ultimately the local realities for women. A gender analysis was performed for this Project and

⁶³ <http://puspijak.org/Portal/read/430>; <http://ditjenppi.menlhk.go.id/peraturan-perundangan.html>; ddpi.kaltimprov.go.id



identified gaps in women's participation in forest policy decision-making, potential to access benefits from the Project, equal access to forest-related information and skills enhancement, equal access to credit for forest-related enterprises, and active participation in forest management bodies.

80. **The GOI acknowledges that mainstreaming gender and social inclusion are key to ensuring the sustainability of its EK-JERP and the EK-PERR transaction.** In order to address gaps, Indonesia has adopted several measures and plans to strengthen approaches prior to and during the implementation of their ER Program. First, a twin-track policy approach for gender mainstreaming and women's empowerment has been adopted to incorporate gender-specific activities in relevant policies and legal frameworks. Second, the GOI's National REDD+ Strategy includes principles for ensuring gender sensitivity and considerations in the implementation of REDD+, including through transparency, capacity building, and benefit sharing to ensure the meaningful participation of women and other marginalized groups. Third, the EK-JERP utilizes several approaches to enhance women's access to the ER Program, which is buttressed by the SIS-REDD+ and the REDD+ Social and Environmental Standards (SES-REDD+) for East Kalimantan, which were designed in a participatory manner to ensure key land and natural resource governance issues are captured in safeguards monitoring systems, including gender equality and inclusive participation of marginalized and vulnerable groups. The EK-JERP is also developing a minimum standard for gender mainstreaming and social inclusion, in consultation with all relevant stakeholders. Finally, the GOI has committed to promoting gender equity and social inclusion in benefit sharing in both the National REDD+ Strategy and the EK-JERP's ER-PD, however this needs to be adequately reflected in the final BSP.⁶⁴ More information on the Project's gender analysis can be found in Annex 11.

V. GRIEVANCE REDRESS SERVICES

81. **Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address Project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

82. **The overall risk rating for the operation is High.** A description of the key risks and mitigation measures is provided below.

Risk Categories	Rating
Political and governance	High

⁶⁴ An *advanced draft* BSP has been publicly disclosed but a *final* BSP will need to be prepared and disclosed as a condition of effectiveness of the ERPA.



Macroeconomic	Moderate
Sector Strategies and Policies	Substantial
Technical design of Project	Substantial
Institutional Capacity for Implementation and Sustainability	High
Fiduciary	High
Environment and Social	Substantial
Stakeholders	Moderate
Other: Reputational, relocation of national capital, and COVID-19	High
Overall	High

83. **Political and governance (High).** The success of this operation (i.e. the eventual payment for ERs and their distribution as per the agreed BSP) is highly dependent on the achievements of the Government's EK-JERP. That is, the national and provincial governments need to continue to increase their ambition in reducing emissions in light of political economy that tends to have an effect in the opposite direction (e.g., continued economic and policy pressure to expand oil palm plantations, exploitation loopholes in moratoria, etc.). This requires political commitment to implement, enhance and enforce the current policy framework, encourage strong multi-sectoral responses and to allocate sufficient resources to the activities that are included in the EK-JERP. While the implementation of policies has shown a positive effect (as evidenced in the reduction of emissions in the past two years), the degradation and loss of forests as a result of estate crop expansion into forest and peatland areas continues, which indicates the need to strengthen enforcement (appropriately, a key focus of the ER-JERP is to enforce the existing rules and regulations).

84. While these risks are highest in the forest-rich provinces, they are partially mitigated in East Kalimantan, where strong leadership has allowed to advance policies that expand and deepen the national policy framework (e.g., more restrictive licenses and stronger enforcement). Also, the engagement of local government and stakeholders has been high and was further strengthened through the development of the EK-JERP. Given the key design features of the Project – including transparent reporting of results and independent verification – is expected to result in better accountability, transparency and participation. This in turn would attract other investments and development partner resources that could further enhance ambition. In addition, the previous provincial government formulated a climate change management regulation (approved by parliament), which provides the necessary continuity and commitment by current and future leadership in East Kalimantan. For example, since July 2018, East Kalimantan has been led by a Governor who campaigned on a platform of support to mining industries. To mitigate this political risk, the leadership in MoEF with the support from task team, has actively reached out to the Governor to bolster the political support for the program. Against this backdrop, the remaining political and governance risk is considered *high*.

85. **Sector strategies and policies (Substantial).** The success of the EK-PERR hinges on the GOI's ability to effectively coordinate across sectors and promote an integrated approach to address drivers of deforestation and forest degradation in the province. This requires actions both within the mandate of the MoEF, i.e. pertaining to the Forest Estate, within the mandate of the Ministry of Agriculture on Estate Crop development (in areas designated as APL). Historically, lack of effective coordination across sectors has been one of the underlying issues that impacted forests and remains one of Indonesia's key forest governance challenges. This risk has been recognized in the design of the ER-JERP and is mitigated by the



agreed institutional arrangements, which include multi-sectoral coordination units at the national and provincial levels. In addition, there are sector risks outside GOI's and stakeholders' control that could impact the program's ability to generate of ERs. These include increased fires during extreme dry seasons, or a surge in commodity prices leading to greater incentives for forest conversion. To mitigate this risk, the Project is applying the FCPF Carbon Fund's risk management approach for the unintended reversal of ERs (e.g., due to fire) that requires a certain proportion of verified ERs is set aside in a buffer account to allow for replacement if needed. Still, the residual risk related to sector strategies and policy is rated *substantial*.

86. **Technical design of the Project (Substantial).** The basic design of the EK-PERR encompasses the verification of and payment for results (ERs) reported by GOI and the distribution of such payments according to the BSP. As such, it depends on the performance of the Government's EK-JERP to generate these results. The risk of underperformance is partially mitigated by the Government's indication that the EK-JERP will produce more emissions than are expected to be paid for by the FCPF Carbon Fund, i.e. to be conservative, only a portion of the projected ERs are put forward to be included in the ERPA. An additional risk is that ERPA payments alone are not sufficient to fully incentivize the necessary actions. To mitigate this risk, the program design includes key non-carbon benefits that are expected to be achieved through the implementation of the activities included in the EK-JERP. These provide important incentives to stakeholders to engage in the program. Non-carbon benefits include support for capacity building, livelihood improvement, improvements in governance, such as greater legal certainty, or reduced costs associated with conflict. Another technical design risk is related to the institutional functions - many of which are yet to be tested - required to measure, report, validate, and manage ERs. However, the EK-PERR transaction applies methodological approaches that are aligned with FCPF Carbon Fund and UNFCCC guidance, and that ensure that only ERs that meet international requirements are paid for. The residual technical design risk is considered *substantial*.

87. **Institutional capacity (High).** REDD+ has not yet been tested at scale in Indonesia, with the Government's EK-JERP being the first pilot jurisdictional ER program. Given that the EK-PERR transaction will depend on the proper functioning of several new and complex mechanisms, including the MRV system, registry systems, benefit sharing mechanism (BLU-BPDLH), and safeguards management systems, a risk arises from the institutional capacity to operationalize these systems across the entire province. This risk can be partially mitigated through resources for technical assistance provided by FCPF readiness preparation grant, which is currently being extended to overlap with the inception phase of the EK-PERR. There is a risk also associated with the coordination of implementation in East Kalimantan, across multiple Director Generals within MoEF, and multiple ministries, as well as at different levels of government (provincial, district and village level). This risk is partially addressed by having the Provincial Secretary of East Kalimantan as the overall lead for the implementation of the Government's EK-JERP. DDPI will also contribute to implementation by ensuring multi-stakeholder coordination and conflict resolution. Given this structure is already in place and operational, this reduces institutional risks of the EK-JERP. Despite these measures, the residual risk related to institutional capacity is *high*.

88. **Fiduciary risk (financial management)⁶⁵ (High).** The key component of the EK-PERR is the distribution of ER payments through the benefit sharing mechanism (BLU-BPDLH) in accordance with the BSP. Given that the BLU-BPDLH was only recently legally established and to become operational (able to receive and distribute funding) in late 2020, this poses a high fiduciary risk and it is difficult to fully assess

⁶⁵ The Bank's Procurement Regulations does not apply to BSPs as part of jurisdictional ERPAs.



its capacity. There are risks related to the provincial institutions' limited experience in managing World Bank-funded operations, the timely availability of budget in central and local government institutions (which could delay the intended use of ER payments), and the BLU-BPDLH's capacity to compile and submit accurate and timely financial reports. These risks are partially mitigated through close coordination with the Government to ensure the BLU-BPDLH and provincial institutions meet World Bank and FCPF Carbon Fund requirements through defined operational details that will be documented in the POM prior to the first ERPA payment. The BLU-BPDLH will draw on existing operational documents from existing BLUs to develop its procedures, which provides opportunities to replicate successful approaches and avoid unsuccessful ones. Also, the use of earmarked transfers minimizes the risk of ERPA payments being used for activities other than those agreed in BSP. As a fallback option (in case the BLU-BPDLH is not ready to receive the first ERPA payments), an existing BLU will be used. While this is not anticipated, if the existing BLU is unable to receive the ERPA payments, the earmarked transfer from central to local government using on-granting mechanism will be used. The implications of both approaches have been elaborated in the advanced draft BSP and reviewed by World Bank Financial Management specialists. Despite these measures, the risk related to fiduciary issues remains *high*.

89. **Environment and social (Substantial)** Limited governance capacity around Indonesia's natural resources has led to extensive social conflicts, particularly regarding access to land and land tenure rights. These are long-standing issues, stemming from unclear systems for land management and allocation that have led to competing claims and a lack of a shared understanding between different stakeholders – including government, private sector, communities, and other civil society actors – as to who has rights to land and its use. Forest boundaries are rarely demarcated, most of Indonesia's provinces lack legally binding spatial plans, and customary land rights have not been fully mapped or recognized. Key social risks have been assessed as part of the SESA and include access, resettlement, land tenure, and social exclusion risks. Gender inequality and participation of vulnerable groups (including women and youth) and *adat* and indigenous communities are of critical concern to the EK-PERR. On the other hand, the EK-PERR is expected to generate overall positive environmental impacts at global, national, and local levels. Key safeguards risks will be partially mitigated through the application of the Project's safeguards instruments. The residual environmental and social risk is *substantial*.

90. **Other risks (High).** There are three additional categories of risk that are likely to have an important bearing on the success of the operation. One is the reputational risk that arises from the Bank engaging in a sector with a highly complex political economy and long-standing governance issues that frequently make headlines in Indonesia and beyond (as most recently in the context of the 2019 fire season). Second is the recently announced relocation of the national capital to East Kalimantan brings a new dimension of risk and some unknowns (but also potential opportunities to deepen and broaden the engagement with GOI). Also, the COVID-19 pandemic poses a risk to the Project given the potentially increased pressure on forests during the economic recovery. Combined, these three risks are considered *high*, and are being mitigated to the extent possible by the project.

91.

- a) **Reputational risk (Substantial):** It is not possible to stop deforestation and degradation of forest, and eliminate the associated emissions, immediately or entirely across a jurisdiction the size of East Kalimantan. However, a comprehensive programmatic approach (policy changes, enforcement, strategic investments etc.) and a broad-based engagement of stakeholders, as in the EK-JERP, have the potential to achieve measurable results in coming years. That is, given the scope (accounting of emissions across the entire jurisdiction) and mechanisms of this operation



(independent verification and payments based on clearly documented results), ERs can be achieved against a residual (but shrinking) rate of forest conversion or seasonal fires. And, by design, the Bank will not disburse payments unless the rate of emissions has been demonstrably reduced below the average rate of the recent ten-year (2007-2016) period. Also, payments are contingent on the satisfactory implementation of the safeguards approach designed for provincial-scale implementation. This dramatically reduces the risk that payments are made for results that are 'not real' or were achieved without adhering to the required safeguards. Plus, payments associated with a second or third verification of results will only be made if previous payments were distributed according to the agreed BSP. Nonetheless, there is a residual risk that the Bank – by virtue of the fact that payments go to East Kalimantan – could be seen as associated with events or actors linked to forest destruction or degradation (fires or otherwise), even if those may be linked to legal land use practices that are gradually being improved (e.g., through the implementation of fire management plans or sustainability certification of commodity production). In such cases, the Bank can refer to a sound, rigorous and transparent process that delivered verifiable results on forest cover representing a significant improvement to the situation of previous years and a framework that incentivizes further positive action.

- b) *Relocation of the national capital (Substantial):* The planned relocation of Indonesia's national capital to East Kalimantan (announced in September 2019) is likely to have a bearing on the EK-JERP's ability to generate ERs. While the precise site of the new capital is not yet decided, it is expected to be situated in a partially forested area (secondary or degraded forests) in the eastern central part of the province between Balikpapan and Samarinda. In addition to impacts on forest resources at the site level, there are potential environmental impacts emanating from the associated development of infrastructure or real estate, and migration. Similarly, the time frame for construction is not yet fully known, though it can be reasonably expected that impacts will accumulate over many years (and mostly after the ERPA term). To inform the site selection, the MoEF is currently performing an environmental impact assessment. Also, a technical assessment is being performed to estimate the potential impacts on emissions and the effect on the originally estimated volume of ERs for the ERPA. The results-based nature of the Project mitigates some risks because payments will only be made if deforestation and forest degradation are managed in East Kalimantan and emissions are reduced. A number of risk mitigation approaches are built into the design of the Project, including:
 - i. The results-based nature of the Project mitigates some risks because payments will only be made if deforestation and forest degradation are managed in East Kalimantan and emissions are reduced.
 - ii. FCPF requirements on reversals (i.e., relative increase of emissions after previous ER payment), including setting aside a proportion of ERs generated in a buffer that can only be accessed by the country if reversals do not occur. In addition, the FCPF will only contract a fraction of the ERs that are projected to be generated (50-70 percent, subject to performance), which is a conservative approach to committing capital for ERs from each ER program. Other commercial terms under the ERPA (reporting periods, contract ER volume, etc.) were considered to further mitigate ER delivery risks.
 - iii. The timeline for construction of the proposed capital in East Kalimantan, and its likelihood that this will occur after the ERPA term.



- iv. Legal remedies included in the ERPA, including events of default, which provide leverage for the World Bank to manage realized impacts on the delivery of the Project.
 - v. The added value of engaging on this Project with the GOI, which provides concrete means for measuring the impacts of the proposed capital on forests in East Kalimantan and discussing ways of managing these impacts.
 - vi. In light of the overall objective of East Kalimantan to be ‘green’, there may be opportunities for the GOI to develop the capital as a modern, more sustainable city with reduced environmental impacts, including emissions.
- c) *COVID-19 risks (Moderate)*: while the COVID-19 pandemic poses a multitude of substantial risks in Indonesia, those most directly related to the Project include the potential increase in pressure on the environment and natural resources to support community livelihoods (as evidenced during previous financial crises). However, the GOI now has various policies, programs, and mechanisms in place to mitigate the overall impact, including through support to communities and smallholders for alternative livelihoods. The EK-JERP supports communities and has the potential to stimulate local economic activities that can buffer against the potential economic impacts of the COVID-19 pandemic. In addition, the World Bank and GOI are exploring how current engagements can be adjusted to further mitigate impacts and help with recovery (e.g., through enhancements to community-based activities, such as the DGM that supports community business development. Also, the East Kalimantan provincial government is currently developing adjustments to activities due to the COVID-19 to directly mitigate potential impacts. The residual risk of impacts from the pandemic is moderate.

**VII. Results Framework and Monitoring****Results Framework**

COUNTRY: Indonesia

Project Development Objective: to incentivize reduced deforestation and forest degradation in East Kalimantan, Indonesia. The PDO will be achieved through payment of verified emission reductions (ERs), and to ensure that paid amounts are distributed according to an agreed benefit sharing plan.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Volume of CO ₂ Emission Reductions measured and reported by the Program Entity, verified by a Third Party, and transferred to the FCPF Carbon Fund		tCO ₂ e (million)	0	22	3x (2020, 2022, 2024)	MRV System	MoEF
Name: Payment by the FCPF Carbon Fund for CO ₂ Emission Reductions generated by the EK-JERP		US\$ (million)	0	110	3x (2021, 2023, 2025)	ER Registry	World Bank



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Emission Reductions payments distributed in accordance with agreed Benefit Sharing Plan		Yes/No	No	Yes		Progress Report	MoEF
Target Values							

Project Development Objective Indicators

Indicator Name	Baseline	YR1 (2020)	YR2 (2021)	YR3 (2022)	YR4 (2023)	YR5 (2024)	YR6 (2025)	End Target (2025)
Volume of CO ₂ Emission Reductions measured and reported by the Program Entity, verified by a Third Party, and transferred to the FCPF Carbon Fund	0	5	0	8	0	9	0	22
Payment by the FCPF Carbon Fund for CO ₂ Emission Reductions generated by the EK-JERP	0	0	25	0	40	0	45	110
Emission Reductions payments distributed in accordance with agreed Benefit Sharing Plan	No	n/a	Yes	n/a	Yes	n/a	Yes	Yes

**ANNEX 1: Detailed design of the EK-JERP and Expected Emission Reductions**

The following annex refers to the activities and components of the Government's EK-JERP, which underpin the EK-PERR's components detailed in section II.B.

Drivers of Deforestation and Forest Degradation in East Kalimantan

1. According to the 2016 landcover map, natural forest in East Kalimantan consists of secondary dryland forest (4 million ha), primary dryland forest (2.1 million ha), secondary mangrove forest (130,700 ha), and secondary swamp forest (111,064 ha), primary mangrove forest (36,275 ha), and primary swamp forest (22,674 ha). Dryland forest in East Kalimantan is dominated by Dipterocarps species that are used commercially for the timber industry. Based on its function, land in East Kalimantan is divided into (Figure A12.1): limited production forest (2.5 million ha), protected forest (1.8 million ha), production forest (1.3 million ha), conservation forest (155,762 ha), convertible production forest (area that can be converted for other uses outside of forestry; 47,408 ha), and land for other purposes (APL; 818,017 ha). APL is managed by the Agrarian Ministry and is available for other uses including agriculture, settlement, and other uses except forestry. MoEF is responsible for managing the area in protection forest, conservation forest, limited production forest, production forest, and convertible production forest.

2. East Kalimantan had a decline of 700,280 ha of forested area between 2006 and 2016. Degradation of primary forest to secondary forest occurred on 71,672 ha over the same period. Deforestation between 2006 and 2016 was driven by expansion of oil palm plantations (51percent); overlogging and poor timber concession management (22percent); mining (10percent); illegal logging (7percent); and agricultural expansion (6percent).⁶⁶ Other key drivers of deforestation and forest degradation are encroachment, fires, and aquaculture (Table A1.1). Deforestation and forest degradation have led to CO₂e emissions averaging 29 million tons per year.

Table A1.1: Estimated share of deforestation, by driver

Driver	Area Deforested since 2006 (ha)	Share of total deforestation
Oil Palm	353,775	51%
Timber plantation/ Poor Concession Management	95,783	14%
Mining	68,976	10%
Overlogging/Poor Concession Management	58,568	8%
Illegal Logging	47,148	7%
Agriculture	44,393	6%
Unlicensed land clearing	24,404	3%
Aquaculture	6,782	1%
Total deforested area since 2006	700,280	100%

⁶⁶ Qualitative information on the drivers of deforestation and forest degradation was collected through a series of consultative meetings, conducted with local stakeholders between October 2015 and March 2018. Spatial analysis of land cover changes provides evidence for the drivers identified in the consultative meetings through identification of the land cover (in 2016) of the areas that had been deforested since 2006.



3. Indonesia's palm oil sector has long been criticized for causing deforestation and has been identified as a leading contributor to GHG emissions.⁶⁷ In recent years, the Indonesian palm oil industry has expanded rapidly, positioning the country as the largest global producer of palm oil supplying approximately half of the commodity globally from both large private enterprises (50percent) and smallholdings (35percent).⁶⁸ Growing demand for palm oil as cheap cooking oil especially from China and India, and increasingly as a biofuel, is likely to sustain the sector well into the future. As land for expansion of large oil palm estates on the island of Sumatra has become less available, new development is targeted in Kalimantan and Papua.⁶⁹ While oil palm can be planted in a wide range of soils, estate companies often favor previously forested areas.⁷⁰ East Kalimantan's area of oil palm in 2016 was 1.2 million ha, up from 800,000 ha in 2012. A total of 3.2 million ha is currently allocated for oil palm development across East Kalimantan and the remaining forest in this area is 376,414 ha, or 6percent of the total remaining forest area in the province. While these forests are under most direct threat from conversion to oil palm, further expansion of oil palm is also likely to occur outside of the areas that are currently licensed. This includes unlicensed expansion as well as expansion associated with the issuance of further licenses.

4. Fires occur across administrative land use zones and are linked to several of the drivers described above, in particular to land-clearing for estate crops and agriculture. Fires occur annually in East Kalimantan, but periods of prolonged drought, such as those linked to El Niño events, can lead to severe and widespread fires that cover significant areas. In addition to the use of fire for land clearing, additional underlying drivers of anthropogenic fires are poor land governance (which reduces accountability and undermines fire monitoring and control) poor management of natural forests, and overlogging that leads to a buildup of dead biomass (which serves as fuel for fires allowing them to burn out of control). Peat fires are linked to clearing and drainage of peat areas for cultivation, including for oil palm and timber plantations, which allows otherwise wet peatlands to burn. Smallholder farmers, including swidden cultivators, often lack alternatives to burning for land clearing.

5. In 1982/83, fires destroyed about 3.5 million ha of forests in East Kalimantan.^{71,72} In 1997/98, after a prolonged El Niño event, fires burned approximately 5 million ha or 25percent of the forests in the province.⁷³ In 2004, East Kalimantan had the highest numbers of hotspots (5,440 fires) compared to the other provinces in Kalimantan.⁷⁴ In 2015 and 2019, two recent major El Niño years, East Kalimantan recorded 3898 and 2484⁷⁵ hot spots, which represents a measurable improvement compared to previous episodes. Also, fires tend to concentrate on APL and forest production land, which are key focus intervention areas of the EK-JERP.

6. Underlying drivers of deforestation and forest degradation include poor spatial planning, lack of government capacity to oversee forests, low productivity of local farming, and limited alternative livelihood opportunities for local communities (Table A1.2).

⁶⁷ Ministry of Finance Regulation (or *Peraturan Menteri Keuangan*) 2008.

⁶⁸ Pittman in Chelsea Petrenko, Julia Paitseva, and Stephanie Searle. "Ecological Impact Palm Oil Expansion in Indonesia". International Council on Clean Transportation. Washington D.C., 2016.

⁶⁹ World Bank 2010.

⁷⁰ Fairhurst and McLaughlin 2009.

⁷¹ Malinau, Tarakan, Nunukan, and Bulungan were still part of East Kalimantan.

⁷² <http://www.fire.uni-freiburg.de/Manag/CiF-Ch-8-East-Kalimantan.pdf>

⁷³ Malinau, Tarakan, Nunukan, and Bulungan were still part of East Kalimantan.

⁷⁴ Yulianti et al 2012.

⁷⁵ Until November 12, 2019.

**Table A1.2: Drivers and underlying drivers of deforestation and forest degradation**

PROXIMATE CAUSES	KEY UNDERLYING DRIVERS
MINING	Poor spatial planning Ineffective forest supervision and administration
TIMBER PLANTATIONS	Poor spatial planning Ineffective forest supervision and administration Weak policies for forest protection Lack of incentives for sustainable management practices
ESTATE CROPS	Poor spatial planning Ineffective forest supervision and administration Weak policies for forest protection Lack of incentives for sustainable management practices
AGRICULTURE/ENCROACHMENT	Poor spatial planning Ineffective forest supervision and administration Limited alternative livelihood opportunities for local communities
AQUACULTURE	Poor spatial planning Ineffective forest supervision and administration Limited alternative livelihood opportunities for local communities
FOREST AND LAND FIRES	Poor spatial planning Ineffective forest supervision and administration Lack of fire management capacity and lack of alternatives for land clearing Climate factors
UNSUSTAINABLE LOGGING PRACTICES	Poor spatial planning Ineffective forest supervision and administration Weak policies for forest protection Lack of incentives for sustainable management practices

EK-JERP's Program Measures

7. The Government's ER Program in East Kalimantan (EK-JERP) will support a combination of enabling conditions and sustainable management practices that will directly address the underlying drivers of emissions resulting from sectoral activities including, timber plantations, estate crops, subsistence agriculture, aquaculture, and unsustainable logging practices. The design of the Program considers the distribution of remaining forests, threats to those forests, and key stakeholders in the Program area.

8. **Components 1 and 2** address the two cross-cutting governance issues that were identified in the drivers of deforestation analysis: weak spatial planning and weak forest supervision and administration. These issues underlie much of the deforestation associated with each of the eight proximate drivers. These components build on the significant ongoing reforms taking place at the national level and within East Kalimantan. The governance improvements are essential for achieving long-lasting impacts and form an important part of the strategy for managing risks of reversal and for producing equitable outcomes and non-carbon benefits. These components will also contribute to improving the incentives framework for sustainable investment by creating a more level playing field.

9. Component 1 directly addresses issues related to overlapping licenses and to conflict. Component 2 strengthens the capacity of the government to protect remaining forests. Within the Forest Area, this will be achieved by strengthening the capacity of forest management institutions to provide oversight. On



land outside of the Forest Area, the Program will strengthen the role of villages in implementing sustainable development and the role of government agencies in the administration of estate crops.

10. **Component 3** is concerned with the management practices of oil palm and forestry companies. The ER Program will work with key actors to support them in adopting and implementing sustainability approaches, centered around the recently developed HCV and RIL-C policies. In addition, the component includes activities for addressing the underlying drivers of fire through technical assistance to companies for fire prevention and support for Community Based Fire Management and Monitoring Systems.

11. **Component 4** addresses deforestation linked to encroachment and agriculture mainly by providing alternative livelihood opportunities. The component will support the government's social forestry programs, as well as partnerships around conservation areas. The component will seek to provide sustainable livelihood opportunities to local communities, also through village development programs, thereby addressing a key driver of encroachment.

12. **Component 5** includes all activities related to program management, including monitoring and evaluation.

EK-JERP's Costs and Cashflow

13. The total costs for the Government's EK-JERP over the period 2020-2025 is estimated at US\$90.7 million. The breakdown of costs by components, land use, and year is presented in the following tables:

Table A1.3: The estimated total cost of EK-JERP 2020 – 2025 by component

COMPONENT	BUDGET (US\$) COMPONENT	Share
1. Improving Spatial Planning	903,995	1.0%
2. Strengthening Government Capacity for Forest Administration	9,228,881	10.2%
3. Reducing deforestation and degradation within licensed areas	25,117,505	28%
4. Sustainable Alternatives for Communities	48,260,119	53.2%
5. Program Management and Monitoring and Evaluation	7,191,239	7.9%
TOTAL	90,701,740	100%

Table A1.4: Estimated total cost of EK-JERP 2020-2025 by land use/driver

DRIVER	Million US\$	%
Oil Palm	11.3	12.5%
Timber plantation	9.4	10.4%
Mining	0.002	0.0%
Overlogging/Poor Concession Management	8.4	9.2%
Illegal Logging	3.4	3.8%
Agriculture	5.8	6.4%
Unlicensed land clearing	43.9	48.4%
Aquaculture	1.3	1.5%
Cost for Project Management (not driver)	7.2	7.9%
TOTAL	90,701,740	100%



Table A1.5: Summary of the total costs of EK-JERP, including expected use of funds by year

COMPONENT	BUDGET (US\$)	2020	2021	2022	2023	2024	2025
1. Improving land governance	903,995	156,348	130,942	145,702	144,796	161,314	164,892
2. Strengthening Government Capacity for Forest Administration	9,228,881	994,427	873,032	1,352,134	1,357,980	2,596,496	2,054,811
3. Reducing deforestation and degradation within licensed areas	25,117,505	1,749,612	2,253,012	3,290,025	4,560,845	6,320,239	6,943,772
4. Sustainable Alternatives for Communities	48,260,119	3,913,793	1,961,151	7,584,089	3,066,465	13,459,410	18,275,211
5. Program Management and Monitoring and Evaluation	7,191,239	1,058,333	215,898	4,103,443	245,864	1,287,713	279,988
TOTAL	90,701,740	7,872,514	5,434,036	12,595,020	9,130,085	22,791,488	27,438,687

Financing Strategy

14. The main source of funding for the EK-JERP is the GOI, through its national, provincial, district and village budgets. The national and provincial governments are committed to the successful implementation of the ER Program, and they will integrate the Program into their development and budget plans. For example, the East Kalimantan Representative Council is preparing a Provincial Regulation that will lead to ER activities being included in the Provincial Kalimantan Medium Term Development Plan 2018-2023. The largest share of the domestic budget will be from the village budget which will support activities at the village level. Programs under the MoEF and the Ministry of Agriculture will be funded by their respective ministry budgets. The total government budget support to the EK-JERP will be US\$69.5 million.

15. The second largest source of funding for the EK-JERP is the private sector, which has committed US\$20.3 million to the Program.

16. A number of development partners have committed support for the ER Program. Commitments so far total US\$3.5 million and are from:

- a) *WWF Indonesia*, which will support activities related to peat land management, sustainable forest management, sustainable plantations, and village development;
- b) *The Nature Conservancy*, which will provide support through its terrestrial and blue carbon programs;
- c) *GGGI* which will support activities linked to green economy and to strengthen KPHs;
- d) *The Governors' Climate and Forum (GCF) Task Force*;
- e) *Belantara* which will support HCV management and village activities; and
- f) *GIZ*.



17. Total identified funding from the budget, the private sector, and development partners, is US\$93.3 million.

Expected Emission Reductions (ERs)

18. The reference level of emissions for the 2020-2024 ERPA period is 68.4 million tCO₂/year, of which 73percent is caused by deforestation, 21percent by degradation of primary to secondary forest, 2percent by mangrove loss, 2percent by peat decomposition and 3percent by fire.

19. The largest share of projected ERs will come from reduction in emissions arising from deforestation (Table A1.6). Similarly, the interventions in the EK-JERP are expected to gradually reduce emissions from forest degradation, mangrove soils, peat decomposition and fires (Table A1.7), resulting in a total volume of ERs of 86.3 million tCO₂e in the 2020-2024 period.

Table A1.6: Ex-ante estimation of the ERs expected from reduced deforestation

Driver	Share of total historical deforestation	2020-2024 RL Emissions (MtCO ₂ e)	Estimated reduction (%)	Projected Emissions
Oil Palm	51%	126.8	30%	88.8
Timber plantation/ Poor Concession Management	14%	34.8	30%	24.4
Mining	10%	24.9	20%	19.9
Overlogging/Poor Concession Management	8%	19.9	30%	13.9
Illegal Logging	7%	17.4	20%	13.9
Agriculture	6%	14.9	20%	11.9
Unlicensed land clearing	3%	7.5	20%	5.9
Aquaculture	1%	2.5	20%	2.0
Total	100%	248.7	27%	180.8

Table A1.7: Estimated emissions (MtCO₂e) during ERPA term and total expected gross ERs

Year	Deforestation	Degradation	Mangrove soil	Peat Decomp	Fire	Total emission	RL Emissions	ER
2020	36.2	13.2	1	0.9	1.7	53	68.4	15.4
2021	36.2	12.5	1	0.9	1.6	52.1	68.4	16.3
2022	36.2	11.8	0.9	0.8	1.5	51.1	68.4	17.3
2023	36.2	11	0.9	0.8	1.4	50.2	68.4	18.2
2024	36.2	10.3	0.8	0.7	1.3	49.3	68.4	19.1
Total	180.8	58.8	4.6	4.2	7.4	255.7	342	86.3

20. **Net ERs after accounting for uncertainty and buffer.** The level of uncertainty of the RL estimate has a mean of 27percent based on a Monte Carlo analysis, requiring a conservativeness factor of 4percent to be applied to the ex-ante ER estimate. After subtracting the buffer set-aside for reversals of 26percent, the total net expected ER are 61.3 MtCO₂e (Table A1.8).

**Table A1.8: Total expected net ERs (MtCO₂e)**

Year	Gross ER	ER after 4% Uncertainty	26% Reversal Buffer	Risk	Net ER
2020	15.4	14.8	3.8		10.9
2021	16.3	15.7	4.1		11.6
2022	17.3	16.6	4.3		12.3
2023	18.2	17.5	4.5		12.9
2024	19.1	18.4	4.8		13.6
ERPA Period	86.3	82.8	21.5		61.3

**ANNEX 2: Implementation arrangements****Overall EK-JERP and EK-PERR Implementation**

1. Government institutions responsible for forestry and agriculture sector management are arranged from the national to provincial and district levels of government. At the national level, the MoEF is responsible for the implementation of the government's EK-JERP (as the "Program Entity"), while MoF through the BLU-BPDLH is responsible for managing the EK-PERR transaction. The MoEF is the cabinet-level ministry responsible for managing the national Forest Area (*Kawasan Hutan*) and by law has the legitimacy and capacity to manage and implement REDD+ programs. MoEF will be the primary managing agency for the government's EK-JERP through the Center for Socio-Economics, Policy and Climate Change (*Pusat Penelitian dan Pengembangan Sosial Ekonomi Kebijakan dan Perubahan Iklim*, or P3SEKPI) of FOERDIA and in close coordination with the Directorate of Climate Change Mitigation of the DGCC. MoF is the entity responsible for every fiscal and financial policy at the national level. These along with other relevant Ministries/Agencies will implement the ER Program, provide guidance, perform supervision, and ensure alignment with the national policy framework.

Table A2.1 National agencies involved in the implementation of the EK-JERP and EK-PERR

National Agency	Status	Roles
Secretary General of Ministry of Environment and Forestry	MoEF Representative	<ul style="list-style-type: none">• Submission of ER-Program Idea Note and ER-PD• Chairman of Steering Committee
DG of FOERDIA (MoEF)	Technical Advisory	<ul style="list-style-type: none">▪ Signing ERPA▪ Program Design▪ Consultation for Methodologies (technical assistance)▪ Preparation for agencies for field implementation▪ Consultation and Communication with Facility Management Team▪ A member of Steering Committee
Director General Climate Change (MoEF)	National Focal Point of REDD+	<ul style="list-style-type: none">▪ Management of the National Registry▪ Development and management of the FREL▪ Management of the MMR▪ Finalization and implementation of safeguards plans▪ Finalization and implementation of the FGRM▪ Technical Assistance▪ Recommendation for Payment (BSP)▪ A member of Steering Committee
Ministry of Finance (DG BLU)	Financial Authority	<ul style="list-style-type: none">▪ Oversees the BPDLH (BSP)▪ Channels funds to the BPDLH and government agencies (BSP)▪ A member of Steering Committee



2. At the provincial level, the responsible party for EK-JERP implementation is the Provincial Secretary of East Kalimantan (*Sekretaris Daerah Provinsi Kalimantan Timur*), assisted by the Provincial Environmental Service (*Dinas Lingkungan Hidup*), Forestry Agency (*Dinas Kehutanan*), Provincial Economic Bureau (*Biro Ekonomi*), and Provincial Planning and Development Agency (*Bappeda*), as coordinator for Safeguards, Benefit Sharing, MMR, and Budget and Planning. The Regional Council on Climate Change (*Dewan Daerah Perubahan Iklim* or DDPI) in East Kalimantan Province is a key partner in the implementation of the EK-JERP. DDPI is a multi-stakeholder organization, established through East Kalimantan Governor regulation Nr.9/2017, that coordinates the planning and implementation of low-emission development in East Kalimantan. It has significant experience in and operational infrastructure for the management of donor development funding. DDPI will play a key role in facilitating coordination amongst key stakeholders (local government agencies, universities, development partners, etc.) and providing guidance for implementation at the district level.

3. At the district/city level, implementation of the EK-JERP will be done by relevant sub-national Technical Unit Organizations (OPD).⁷⁶ OPDs are sub-national government agencies, some of which have offices at the district level, such as Environmental Agency. Each respective district/city government will be responsible for implementation in its region. At the village level, the village governments, including local communities, are responsible for implementation in their respective village.

4. At the subnational level, provincial treasury is the main entity that will receive funds transferred from the BLU-BPDLH as part of the EK-PERR. Transfer to other beneficiaries (KPH, Other Provincial Government Services (OPD), and village government) will be conducted by the provincial treasury based on performance of each beneficiary group in implementing the EK-JERP. This includes transfer to OPD that supervise private sector companies to provide non-monetary benefits to companies according to criteria described in the BSP. At both the national and provincial levels, the BLU-BPDLH will utilize a custodian bank for fund transfer (see Annex 5 for more information).

Table A2.2 The Sub-National Agencies and Organizations involved in the Implementation of the East Kalimantan EK-JERP and EK-PERR

Agency	Status	Role
Provincial Secretary (SEKDA)	Executing Agency at Province Level	<ul style="list-style-type: none">• Responsible for Implementation and achievement of ER Program in the Province• A member of Steering Committee
The Regional Council on Climate Change (DDPI)	Advisory	<ul style="list-style-type: none">• Providing advice and inputs to local government in relation to ER Program• A Member of Steering Committee
East Kalimantan Environment Service (<i>Dinas Lingkungan Hidup</i>)	Implementing agency	<ul style="list-style-type: none">• Local responsibility for FREL and MMR• ER Program implementation
Forestry Agency	Implementing agency	<ul style="list-style-type: none">• Local responsibility for safeguards
Provincial Economic Bureau	Implementing agency	<ul style="list-style-type: none">• Benefit Sharing
Provincial Planning Board (Bappeda) East Kalimantan	Coordinate implementation at	<ul style="list-style-type: none">• Coordinate all activities done by OPD in relation to ER Program

⁷⁶ Sub-national Technical Unit Organizations (OPDs) are sub-national government agencies. Due to the Regional Government Law 23/2014, several agencies are only existed at provincial level (e.g. Forestry Agency), while others also existed at district level (e.g. Environmental Agency). The OPDs are determined by the characteristic of the regional area, therefore will be different for each province and district.



Province	provincial level	<ul style="list-style-type: none"> Budget and planning
Other Provincial Government Services (OPD)	Implementing Agencies	<ul style="list-style-type: none"> ER Program implementation Leading consultation processes within their respective jurisdictions Implementation of non-monetary benefits for private sector (BSP)
Development Partners (Prov. & Kab/Kota)	Partner	<ul style="list-style-type: none"> Provide supporting funds and technical advice to DDPI or District/City Government
University/CSOs (Prov. & Kab/Kota)	Partner	<ul style="list-style-type: none"> Provide scientific supports and facilitation to DDPI and District/City Government A Member of Steering Committee (observer)
District/City Secretary	Executing Agency at District/City Level and Field Site	<ul style="list-style-type: none"> Responsible for Implementation and achievement of ER Program in the District and Field Site
Bappeda District/City	Coordinative implementation at district/city level and field site	<ul style="list-style-type: none"> Coordinate all activities done by OPD in relation to ER Program at District/City level
OPD District/City	Implementing Agencies	<ul style="list-style-type: none"> Implementing ER Program at District/City and Field Site

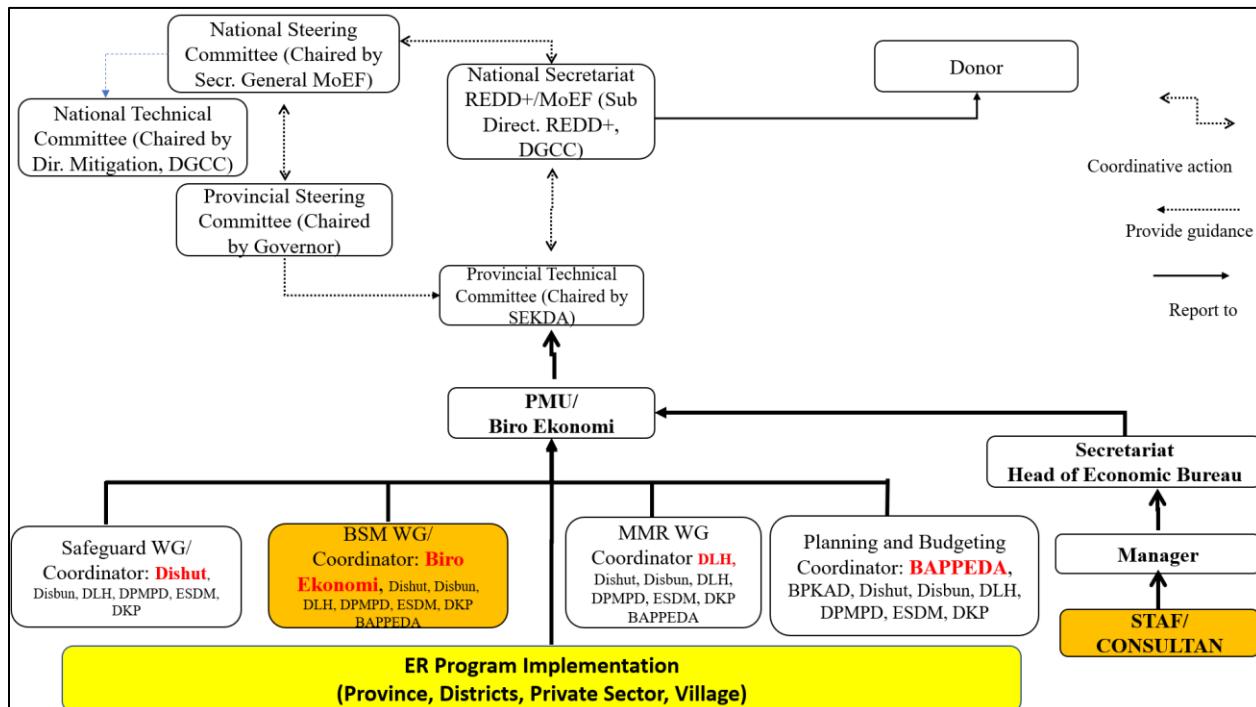


Figure A2.1 Project institutional arrangements.

5. To ensure effective coordination amongst the various implementing agencies to support the objectives of the broader EK-JERP, a Steering Committee will be established with representation from



relevant ministries of the national and provincial governments and observers from civil society and other entities. The National Steering Committee (NSC) is chaired by the Secretary General of MoEF, and its members consist of Director Generals of MoEF (FOERDIA and DGCC), DG of Estate Crops (Ministry of Agriculture), Deputy of Maritime and Natural Resources Affairs (Bappenas), DG of MoF (Directorate General of Treasury and Directorate General of Fiscal Policy), and Regional Secretary (East Kalimantan Provincial Government - Bappeda). The World Bank, donors, and CSOs will participate in the NSC as observers. A Technical Committee will be established to provide technical advice and resources to the NSC to support their decision-making process. The Technical Committee consists of echelon two⁷⁷ staff from the NSC's key institutions. These institutional arrangements will be formalized through Ministerial Decision Letter to ensure its legal reference.

Table A2.3 Steering Committee of the EK-JERP

Number	Ministry	Directorate General	Directorate
1	Ministry of Environment and Forestry	FOERDIA	P3SEKPI
		DGCC	GHG Inventory
		Sectoral and Regional Resources Mobilization	
		Forestry Planology and Environmental Management	Inventory and Monitoring of Forest Resources
		Secretariat General of Ministry of Environment and Forestry	Planning Bureau
			Foreign Cooperation Bureau
2	Ministry of National Planning and Development	Deputy of Maritime and Natural Resources Affairs	Forestry and Water Resources Conservation
3	Ministry of Agriculture	Estate Crops	Directorate of Estate Crops
4	Ministry of Finance		Investment Management System
			Center for Climate Change and Multilateral Policy
5	East Kalimantan Provincial Government		Bappeda
			DDPI

6. Daily implementation of the EK-JERP will be managed by Program Management Units (PMUs) at both the national and provincial level. The make-up and membership of the PMUs will be decided based on implementation needs, but they will be supported by government staff and consultants from implementing agencies. The PMUs will have the expertise required to manage the day-to-day needs of the EK-JERP, including in safeguards, financial management, procurement, and technical issues. Tasks related to implementation vary for each of the entities involved (see Table A2.4).

⁷⁷ Echelon two is a second layer hierarchical position under the Minister, with the role of Director of a Directorate under Directorate General.

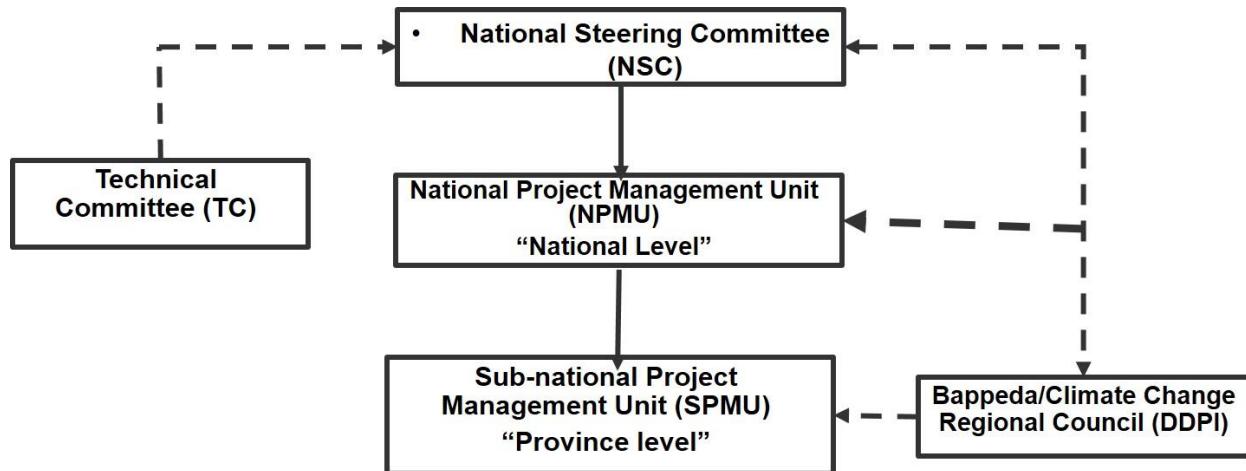


Figure A2.2 Institutional arrangements of the EK-JERP and EK-PERR

Table A2.4 Responsibilities and tasks of each entity involved in EK-JERP and EK-PERR implementation

Entity	Tasks
National Steering Committee	<ul style="list-style-type: none"> - Approval of Annual Work Plan and Budgets - Provide strategic directions - Review implementation progress - Ensure budget tagging as planned
Technical Committee	<ul style="list-style-type: none"> - Provide technical references to NSC for decision making - Provide technical guidance for National Program Management Unit and Sub-national Program Management Unit - Recommends inputs and comments on implementation
Bappeda/Regional Council on Climate Change (DDPI)	<ul style="list-style-type: none"> - Provide guidance for program implementation at provincial and district levels - Coordinate activities at provincial and district levels
National Program Management Unit	<ul style="list-style-type: none"> - Effective and efficient program implementation - Monitoring, evaluation, and reporting of implementation - Review and ensure budget tagging of activities as planned - Consultation and communication with FMT
Sub-national Program Management Unit	<ul style="list-style-type: none"> - Provincial level implementer - Program design - Methodological consultations and technical assistance - Support the arrangement of implementation, including at the district level - Consultation and communication with SC members

Responsibilities for ER Monitoring

7. The EK-JERP's organizational structures for measurement, monitoring and reporting (MMR) of emissions estimates are presented in Figure A2.3. There are separate arrangements to generate estimates for (i) deforestation and degradation and (ii) peat and forest fires.

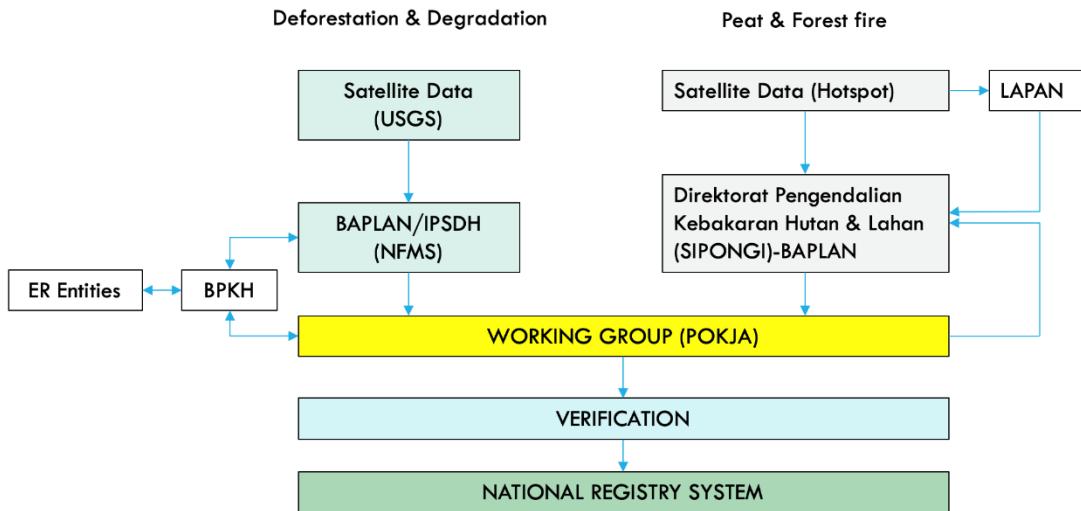


Figure A2.3: Organizational Structure for measurement, monitoring and reporting

Organizational Structure for MMR for deforestation

8. MMR is institutionally integrated with the National Forest Monitoring System (NFMS; Figure A2.4). The generation of national forest and land cover change data from satellite images is conducted by the Regional Office for the Management of Forest Area (BPKH) in East Kalimantan Province under the direction of the Directorate of Forest Resources Inventory and Monitoring (*Inventarisasi dan Pemantauan Sumber Daya Hutan* or IPSDH), which is under the Directorate General of Forestry Planning and Environmental Arrangement (BAPLAN). The BPKH will receive satellite data from ISPDH. The satellite data are first acquired by the National Institute of Aeronautics and Space, which also does pre-process of data up to mosaicking before sending the data to the respective institutions (including ISPDH). The visual interpretation is conducted by the BPKH using a standard methodology for land cover mapping. Results of the processing and ground check by BPKHs are sent back to ISPDH for validation by ISPDH including some necessary edge-matching as appropriate, as part of the quality assurance/quality control process. Finally, the accuracy of the interpretation is assessed by comparing the land cover maps to field data from the ground checks.

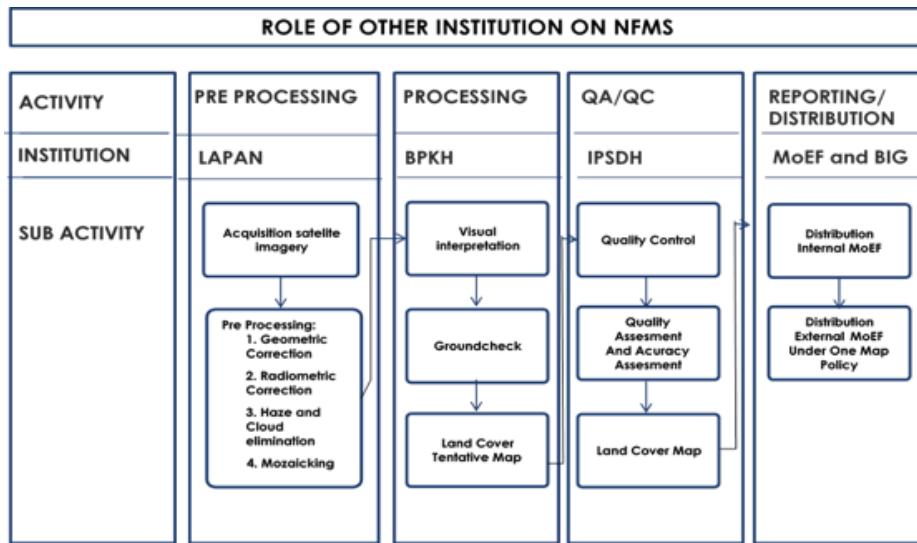


Figure A2.4: Related institutions on NFMS management

9. The ER Program (through the Working Group) will analyze the data from the BPKH to estimate emissions from deforestation and degradation, peat decomposition, and loss of mangrove soil from the conversion of mangrove to aquaculture. Results of the estimation are then submitted to the Environmental Agency for internal verification. The Environmental Agency will then submit the results of the verified estimation to the national registry and verification system.

10. To facilitate the work of the Working Group, the Government of East Kalimantan has developed a web portal for the sub-national MRV system for managing all the processed data from the national and from local governments. The system can perform calculations of the emissions using the national data. The system is to be operated by the DLH as the East Kalimantan MRV Focal Point. The system at present is still using the temporary server of WWF Indonesia.⁷⁸ The system will be migrated to East Kalimantan Province soon after the infrastructure for the server is ready. This MRV web portal will increase public participation of Other Provincial Government Services (OPD) to village communities or indigenous people to participate in monitoring the condition of forests and changes in the forest/land that occurs.

11. The process of the production of land cover maps will be on an annual basis. The timeline of the process is shown in Table A2.5. The collection of the Landsat image is conducted throughout the year by National Institute of Aeronautics and Space and the pre-processing of the image is conducted as the data available for producing the mosaic. The mosaic will be available by June to be distributed to IPSDH and to BPKH. BPKH under the supervision of IPSDH will do manual interpretation of the image during the period July-October, while land cover data from field visit (with defined coordinate) are collected in the period March-September. In October, all the results of the interpretation conducted by BPKH will be compiled to the national by IPSDH for quality assurance/quality control and accuracy assessment. By December the result of the interpretation is finalized and reported.

⁷⁸ <http://mims.wwf.id/kaltim/index.php>



Table A2.5: Timeline of land cover change analysis under the current NFMS

No	Activity	Year (n-1)												Year (n)											
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D						
A	LAPAN																								
	Collecting Landsat Satelite Image																								
	Finalization of Mozaik (M)																			M					
B	IPSDH																								
	Techncail Evaluation																								
	Supervision																								
	Quality Control																								
	Data Finalization (DF)																								
	Reporting																								
C	IPSDH/BPKH																								
	Data Distribution (DD)																								
	Interpretation																								
	Ground Checking																								
	National Compilation of Results (NC)																								NC

12. Village governments, community groups, concessions will participate in monitoring deforestation and will be involved in conducting ground checking and in monitoring and reporting the occurrence of deforestation in the accounting area to the Working Group.

Organizational Structure for MMR for peat and forest fires

13. Estimation of peat burnt area will use data derived from hotspots sourced from the National Aeronautics and Space Administration (NASA). The processing of the hotspot data is conducted by National Institute of Aeronautics and Space for the Directorate for Forest and Land Fire Control, of MoEF. The Working Group will access and analyze the hotspot data to estimate burnt area and greenhouse gas emission. Results of the estimation are then submitted to BAPLAN for internal verification. The Environmental Agency will then submit the results of the verified estimation to the national registry and verification system.

**ANNEX 3: Implementation Support Plan****Strategy and Approach for Implementation Support**

1. The task team has been supporting Indonesia's REDD+ efforts since 2011 through an initial US\$200,000 formulation grant and US\$3.6 million Recipient-Executed REDD+ Preparation Support grant, as well as a US\$650,000 Bank-Executed grant specifically for the preparation of the ERPA. An Additional US\$5 million Funding Grant for REDD+ Readiness was signed in 2016 and will be implemented through 2019.
2. The implementation support strategy for the EK-PERR builds on the support provided during the readiness process, focusing on the functions and activities typically monitored by World Bank task teams during supervision, including monitoring of technical activities, management arrangements, financial management, and compliance with safeguards operational policies, including appropriate stakeholder engagement. Special attention will be directed to methodological aspects of carbon accounting to ensure that the Project complies with the Carbon Fund Methodological Framework. The World Bank task team will include technical specialists with expertise in a range of areas from within the institution. World Bank safeguards specialists will be available to provide close support and detailed, hands-on guidance to their counterparts during the initial months following approval. Technical specialists with highly technical expertise may be recruited externally, as necessary. Aspects of financial management will be focused primarily on the benefit sharing arrangements given the nature of the Project (i.e., a standalone Emission Reduction Crediting).
3. The frequency of implementation support missions may be higher at the beginning of Project implementation (possibly up to four per year) to monitor closely the launch of the EK-PERR and ensure any eventual conditions of effectiveness are met in a timely manner and will decrease to the usual two missions per year after the Project reaches a good implementation pace. Field visits will focus on compliance with safeguards operational policies. The Implementation Support Strategy will be revisited regularly, taking into account implementation progress and continuous risk assessment.
4. Regular meetings with the Project team will be held between missions in the first year, potentially on a monthly basis, to ensure timely progress on the implementation of the EK-PERR. These meetings will review agreed actions for the Project, using the Project Operations Manual (POM) as guidance. Technical and safeguards monitoring will also be done during these meetings.

Implementation Support Plan

5. The FCPF provides a lifetime allocation of \$800,000 in Bank-Executed funding to each task team working on a Carbon Fund project. The main focal areas of expected implementation support activities are summarized in Table A3.1. The required skills for the implementation support effort are illustrated in Table A3.2. Implementation support is expected to be particularly intense during the first 12 months of implementation. Implementation support missions will be reduced from (up to) four to two in the years following the first year, although support provided remotely by the task team will remain continuous. Table A3.3 lists the partners that will support the implementation support effort through related initiatives. There could be additional implementation support needs throughout the lifetime of the Project, especially given its complexity.



Table A3.1: Main focal areas of implementation support activities

Time	Focus	Skills Needed	Resource Estimate
<i>First twelve months</i>	<ul style="list-style-type: none"> • Benefit Sharing Plan finalization • Program Implementation Plan • Institutional arrangements 	<ul style="list-style-type: none"> • Project planning and management • Safeguards • Legal aspects • Carbon finance 	<ul style="list-style-type: none"> • 3-4 implementation support missions • Remote support from HQ office
<i>12-48 months</i>	<ul style="list-style-type: none"> • Program Implementation Plan • Carbon accounting • Monitoring and Reporting 	<ul style="list-style-type: none"> • Project planning and management • MRV • Safeguards • Carbon finance 	<ul style="list-style-type: none"> • 2 implementation support missions • Remote support from HQ office
<i>Years 4-onwards</i>	<ul style="list-style-type: none"> • Program Implementation Plan • Monitoring and Reporting 	<ul style="list-style-type: none"> • Project planning and management • MRV • Safeguards • Carbon finance 	<ul style="list-style-type: none"> • 2 implementation support missions • Remote support from HQ office

Table A3.2. Required skills

Skills Needed	Number of Staff Weeks	Number of Missions
Task Team Leader	<ul style="list-style-type: none"> • 12 weeks per year (Year 1) • 8 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3-4 in Year 1 • 2 in Year 2 onwards
Carbon finance specialist	<ul style="list-style-type: none"> • 6 weeks per year (Year 1) • 4 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3-4 in Year 1 • 2 in Year 2 onwards
Forestry specialist	<ul style="list-style-type: none"> • 6 weeks per year (Year 1) • 4 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3-4 in Year 1 • 2 in Year 2 onwards
Financial management specialist	<ul style="list-style-type: none"> • 2 weeks per year 	<ul style="list-style-type: none"> • 1 per year
Operations specialist	<ul style="list-style-type: none"> • 8 weeks per year 	<ul style="list-style-type: none"> • 3-4 per year
Monitoring and evaluation specialist	<ul style="list-style-type: none"> • 6 weeks per year 	<ul style="list-style-type: none"> • 2 per year
Social specialist (safeguards)	<ul style="list-style-type: none"> • 6 weeks per year (Year 1) • 4 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3-4 in Year 1 • 2 in Year 2 onwards
Environmental specialist (safeguards)	<ul style="list-style-type: none"> • 6 weeks per year (Year 1) • 4 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3-4 in Year 1 • 2 in Year 2 onwards
Legal specialist	<ul style="list-style-type: none"> • 2 weeks per year 	<ul style="list-style-type: none"> • 1 per year
Procurement specialist	<ul style="list-style-type: none"> • 2 weeks per year 	<ul style="list-style-type: none"> • 1 per year

Table A3.3. Partners

TNC	Private Sector	US	Australia
WWF	Norway	FAO	
GGGI	UK	GIZ	

**ANNEX 4: Indonesia's REDD+ Readiness and Participation in the FCPF****Indonesia's REDD+ Readiness**

1. The majority of international climate finance to incentivize ERs in the land-based sector is expected to come through results-based finance linked to REDD+. The REDD+ mechanism forms an integral part of the 2015 Paris Climate Agreement and was initially introduced in the negotiations of the UNFCCC in 2005. First major decisions of the Conference of Parties (COP) under the UNFCCC on REDD+ were adopted in Bali (COP-13, 2007) and Cancun (COP-16, 2010), and the 'Warsaw Framework' (COP-19, 2013) defines the basic international architecture for REDD+. The principal idea of the REDD+ mechanism is to channel international climate finance to forested developing countries in the form of payments for measured, reported and verified ERs as an incentive. The Paris Agreement also included scope for a market-based mechanism linked to REDD+, the detailed modalities for which are currently being developed under the UNFCCC.
2. International results-based finance for reduced emissions from forest and land sectors require an enabling framework ("REDD+ readiness"). This framework principally includes a carbon accounting system that allows emissions to be monitored in a transparent and rigorous manner. To have a reference for payments, countries need to have the capacity to develop a historical emissions baseline ("reference emissions level") based on agreed methodologies and a robust and transparent forest monitoring system that allows the periodic MRV of emissions going forward. In addition, countries need to develop a mechanism to distribute the proceeds from carbon payments (through a benefit sharing mechanism), put in place a system that keeps track of emissions reduction (i.e., REDD+ registry) and report on safeguards (through a SIS), and create a platform to meaningfully engage stakeholders.
3. Several multi-lateral initiatives have informed the development of the international REDD+ architecture through piloting an operational framework. The FCPF was created in 2008 as a multi-lateral initiative managed by the World Bank to promote REDD+ readiness in partner countries and to pilot an incentive system that would leverage results-based finance for REDD+ at scale (having pioneered such carbon finance at the project level for more than 10 years). Many multilateral and bilateral partnerships have supported Indonesia in this regard since 2008, most notably Norway through funding of up to US\$1 billion to support Indonesia's REDD+ efforts as part of a bilateral agreement on "Cooperation on Reducing GHG Emissions from Deforestation and Forest Degradation" signed in 2010.
4. The GOI also provides budget allocation to support REDD+ related activities from the State Budget (or *Anggaran Pendapatan dan Belanja Negara*). Between 2015-2019, the GOI has allocated US\$67.61 billion State Budget through the Directorate General of Climate Change, MoEF.
5. Indonesia has made significant progress toward national REDD+ Readiness. Following COP13, Indonesia has been an active participant in REDD+ negotiations and important international REDD+ programs, including the FCPF Readiness Fund and the UN-REDD Programme. The Bank – through resources provided by the FCPF Readiness Fund since 2011⁷⁹ – has supported Indonesia to advance the national framework and to engage effectively internationally. In September 2017, Indonesia presented its

⁷⁹ The Bank has signed two grant agreements to support Indonesia REDD+ readiness. A first grant (\$3.6 million from 2011-16) focused on the analysis of drivers of deforestation, strengthening the forest monitoring system and supported a Strategic Environment and Social Assessment for REDD+. An Additional Funding grant (\$5 million from 2016-19) provides resources to complete national REDD+ readiness and strengthening sub-national implementation capacity in two priority provinces, East Kalimantan and Jambi.



Readiness Package to the Participants Committee of the FCPF (representing 47 REDD+ countries and 29 donor countries), which is an important and internationally recognized milestone towards REDD+ implementation centered around a comprehensive assessment of progress. The Committee commended Indonesia for the progress made to date and encouraged Indonesia to take important steps towards REDD+ implementation at the sub-national level. This includes strengthening the framework to mitigate potential environmental and social risks associated with REDD+ implementation and the effective implementation of the ongoing policy reform process in relation to forests.

6. Indonesia has begun developing and implementing policies and programs to address key drivers of deforestation and forest degradation. In 2011, through the issuance of Presidential Regulation (No.61/2011) the GOI developed a National Action Plan to Reduce GHG Emissions (*Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca*, or RAN-GRK). The RAN-GRK is an umbrella plan to reduce emissions by 2020, focusing on mitigation actions on five priority sectors (agriculture, forestry and peatlands, energy and transportation, industry, and waste management). At the provincial level, the government developed a Regional Action Plan to reduce GHG emissions (*Rencana Aksi Daerah Penurunan Emisi gas Rumah Kaca*, or RAD-GRK) in accordance with the targets in the RAN-GRK, including the Long-term Regional Development Plan and Provincial/District Spatial Plan (*Rencana Tata Ruang Wilayah Provinsi/Kabupaten*), as mandated by the regulation.

7. In 2012, the GOI launched the National REDD+ Strategy which aims to ensure that forests are a net carbon sink by 2030. The overall objectives of this strategy are to: (i) improve overall forest and land governance as a precondition for sustainable forest management; (ii) implement sustainable forest and land use management; and (iii) achieve the carbon and co-benefits of the sustainable forests and land use system. So far, the main actions taken by the GOI to address the drivers include: a moratorium on the issuance of new land use licenses on primary forest and peat land; a temporary moratorium on the issuance of new oil palm licenses; efforts to improve land administration (the One Map Initiative⁸⁰); Forest Law Enforcement, Governance and Trade (FLEGT) license; reviews of concession licenses; social forestry development for communities (12.7 million ha target); land reallocation/land tenure reform (9.2 million ha target); transformation in forests and land fire management from focusing on suppression to prevention; legal recognition to the rights of indigenous people; creation of an agency tasked with restoration of over 2 million ha of degraded peat land; and the implementation of small scale REDD+ pilot activities. MoEF, under DGCC, which has led the drafting of a government regulation for Environmental Economic Instruments⁸¹ including a climate change funding mechanism, will house, channel and disburse funds for climate change (and other environmental) projects. This mechanism will be in the form of the BLU (*Badan Layanan Umum*) – a public service agency that will have a window for REDD+ and the ability to accept, channel, and distribute results-based finance.

8. While continuing to advance the national framework, Indonesia is now shifting focus towards implementation of REDD+ programs at the provincial level, which has the potential to leverage significant payments for ERs if successfully implemented. Working at the jurisdictional (i.e., provincial) level is aligned with Indonesia's REDD+ readiness process and decentralization efforts, and provides an opportunity to

⁸⁰ The One Map Initiative allows the GOI to have a consistent, public, geo-referenced national inventory of all land parcels. The Initiative aims to clarify forest boundaries across the country, which enables the emission reduction programs to be successfully designed and implemented.

⁸¹ The Government Regulation on Environmental Economic instrument (PP46/2017) was issued in November 2017, followed by Presidential Regulation on the Environment Public Service Agency (*Badan Layanan Umum – Pengelolaan Dana Lingkungan Hidup*) - PerPres 77/2018 – which was issued in September 2018.



demonstrate how policies, programs and systems can be strengthened to reduce emissions and improve natural resource-based livelihoods. In terms of scope, implementation through provinces facilitates coordination of district-level activities, while providing a sufficiently large accounting area with sizeable potential emissions reductions. Furthermore, following recent changes in Indonesia's decentralization process, the provinces play a renewed and important role in forest management, and consequently in REDD+ implementation. For example, provincial governments are responsible for the management of most of the Forest Area (*(Kawasan Hutan)*; law no. 23 of 2014 on local government), in particular through their responsibility for production and protection KPHs, while conservation forests remain under the authority of national government. However, capacities at the provincial level lag those at the national level and there is a need to continue to support the REDD+ implementation framework and strengthen capacities at the provincial and sub-provincial levels. The government's ER Program in East Kalimantan (EK-JERP) is scalable to other provinces across Indonesia and can provide valuable experience to advance REDD+ implementation nationally.

Forest Carbon Partnership Facility (FCPF)

9. The FCPF is a global partnership of countries, business and civil society with the objective to help build capacity in IBRD and IDA member countries in the tropics to reduce emissions from deforestation and forest degradation, forest carbon stock conservation, the sustainable management of forests, and the enhancement of forest carbon stocks (commonly referred to as REDD+). The Facility was announced at COP13 to the UNFCCC in Bali in December 2007 and became operational in June 2008. The World Bank is the Facility's Trustee as well as one of its Delivery Partners. It also houses the FCPF Facility Management Team (FMT) that is responsible for the operation of the Facility. The FCPF currently comprises 46 partner developing countries (17 in LAC, 18 in Africa, and 11 in the Asia-Pacific Region) and 17 financial contributors from both the public and private sectors.

10. The FCPF has two separate yet complementary funding mechanisms - the Readiness Fund and the Carbon Fund.

- a) The **Readiness Fund** supports developing countries in preparing themselves to participate in a future, large-scale, system of positive incentives for REDD+. This includes adopting national REDD+ strategies; developing forest reference emission levels (FRELs); designing MRV systems; and setting up REDD+ national management arrangements, including proper environmental and social safeguards.
- b) The **Carbon Fund** supports performance-based payments for REDD+ interventions at the jurisdictional level in countries that have made significant progress in their REDD+ readiness investments. Such payments are made based on the level of reduction of carbon emissions generated through REDD+ interventions. The FCPF Charter stipulates that a country needs to have its Readiness-Package (R-Package) endorsed by the Participants Committee of the FCPF before the country can submit an ER-PD to the Carbon Fund for its consideration. The Readiness Package thus is a major milestone under the FCPF process and comes at the transition from REDD+ readiness to piloting performance-based activities.

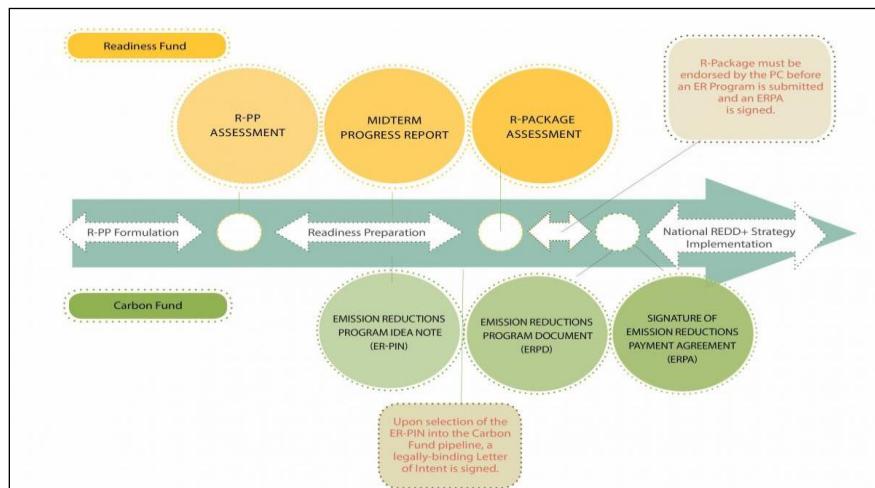


Figure A4.1: Milestones under the FCPF Readiness and Carbon Funds

11. Indonesia submitted a Readiness Preparation Proposal to the FCPF in June 2009, identifying a broad set of activities aimed at strengthening the technical and institutional capacities of a variety of stakeholders for enabling the country to participate in a future REDD+ mechanism. The overall financial envelope for carrying out these activities was estimated at approximately US\$4 billion, supported by several multilateral and bilateral financing arrangements in addition to the Government's own contribution. Following a due diligence process by the World Bank as the Delivery Partner, Indonesia signed first a formulation grant agreement (US\$200,000) in March 2011 shortly followed by a Readiness Preparation Grant Agreement in June 2011 (US\$3.6 million).

12. Indonesia later expressed its interest in participating as a pilot country in the FCPF Carbon Fund and submitted an Emissions Reduction Project Idea Note in June 2016. After addressing feedback provided by Carbon Fund Participants, Indonesia's ER Program Idea Note was included in the Carbon Fund pipeline through an Letter of Intent signed with the World Bank (represented by the Country Director) in September 2017, for a Maximum Contract Volume up to 22 MtCO₂e and received a (Bank-executed) US\$650,000 preparation grant. Consistent with this two-phase structure of the FCPF, the readiness preparation process was executed in parallel with the preparation of the ER Program for the Carbon Fund.

13. In December 2013, Indonesia presented a Mid-Term Report (MTR) on the progress made with its readiness activities to the FCPF, acknowledging that there was still a financial gap to fully implement its REDD+ readiness phase. Accordingly, the Participants Committee of the Readiness Fund decided to allocate additional funding totaling US\$5 million to Indonesia. Following the World Bank due diligence process, Indonesia signed an additional Readiness Preparation Grant Agreement in November 2016, in the amount of US\$5 million.

14. In September 2017, Indonesia's Readiness Package was approved by the Participants Committee of the FCPF at its 24th Meeting in Lao PDR.

15. Indonesia's final ER-PD was submitted in December 2018 and was presented during the 19th Meeting of the FCPF Carbon Fund Participants in February 2019. The ER-PD describes in detail the EK-JERP's technical design, operational and financial planning, stakeholder consultation, methodological aspects, safeguards application, benefit sharing arrangements, and institutional arrangements. As part of the review process agreed by Carbon Fund Participants, the ER-PD was assessed by an independent TAP.



In February 2019 at the 19th meeting of the Carbon Fund, the Carbon Fund Participants decided to provisionally include Indonesia's ER-PD into the portfolio of the Carbon Fund dependent fulfillment of the conditions set out in the [Resolution CFM/19/2019/1](#). Indonesia revised and resubmitted its ER-PD to the FMT in May 2019, which was subsequently reviewed by the TAP and Carbon Fund Participants. In June 2019, the Participants agreed, through a 'no objection process', to the inclusion of the revised ER-PD of Indonesia into the portfolio of both Tranche A and Tranche B of the Carbon Fund.

16. The complete documentation related to Indonesia's MTR, R-Package and ER-PD, can be found at: [*https://www.forestcarbonpartnership.org/country/indonesia*](https://www.forestcarbonpartnership.org/country/indonesia)

**ANNEX 5: Benefit Sharing Arrangements/Use of ERPA Payments**

1. The GOI developed a draft BSP that was reviewed through a World Bank Quality Enhancement Review meeting in August 2019. The BSP was subsequently revised and met the FCPF's requirements for an 'advanced draft'⁸² on June 11, 2020, and disclosed on GOI website on June 15, 2020.⁸³ A final BSP, incorporating feedback on the advanced draft BSP from the ongoing FPIC process as well as FCPF Carbon Fund Participants as part of no-objection, will be developed and publicly disclosed. This is required as a condition of effectiveness of the ERPA, to be met within 12 months after the ERPA is signed.

The advanced draft of BSP contains the following:

Beneficiaries

2. Beneficiaries are the recipients of monetary and non-monetary benefits which may include sub-entities and other relevant stakeholder (FCPF Carbon Fund Methodological Framework, 2016). The categories of beneficiaries are consistent with the key roles and responsibilities in (i) policy development, implementation and administration by government institutions; (ii) the implementation of activities under the ER Program on the ground; and (iii) the rights to benefits due to rights to land where ERs take place. Thus, the following beneficiaries are identified:

- **Government institutions** involved in policy development, and program management at the central government level, and at the subnational levels. This also includes the National Park Agency/Conservation Management Unit who manage the conservation areas at the sub-national level (MoEF Technical Implementation Unit at the sub-national level); the KPHs (Forest Management Units or FMUs) who administer forest land under the sub-national government; and village governments that are more directly involved in implementing ER activities. The roles and responsibilities of the different levels of government follow the existing laws and regulations in Indonesia that distinguish the authority of national and sub-national governments. The national government will engage in memorandum of agreements with the sub-national governments to describe the roles and responsibilities of each government entity.
- **Private sector** includes those stakeholders that implement ER activities, including estate crop companies, smallholders and various types of forestry concessions such as logging concession (IUPHHK-HA), timber plantation concession (IUPHHK-HT), restoration ecosystem concession (IUPHHK-RE), Non Timber Forest Product concession (IUPHKBK), and Ecosystem Service concession (IUPJL). Private sector companies and stakeholders will only be rewarded if they perform beyond compliance and do more than their business-as-usual activities. Mining companies are not included as beneficiaries as they will not implement any ER activities.⁸⁴
- **Local communities including Adat**⁸⁵ Community who live inside or close to areas where ER activities are implemented, or who implement activities that lead to ERs such as alternative livelihoods, fire protection, or forest monitoring. Local communities can be in the form of

⁸² An advanced draft BSP includes a detailed description of benefit sharing arrangements (beneficiaries, monetary and non-monetary benefits, and benefit distribution mechanism), as well as monitoring provisions, and stakeholder consultations to date/any evidence of stakeholder buy-in. See [Note on Benefit Sharing for ER Programs Under the FCPF and BioCF ISFL](#).

⁸³ <http://puspijak.org/Portal/read/463>

⁸⁴ The Governor Regulation No 1 year 2018 (replacing the Governor Regulation no. 17/2015), suspends new coal mining permits, and adds additional requirements for companies who want to extend their permits.

⁸⁵ See Section 4.4 of the ERPD (version May 2019) for further information on Adat Communities.



community groups such as *adat* communities or farmers groups. The benefit for community groups might go directly to the group's institution (if they meet eligibility criteria) or through the village government according to the program activities. All communities are under village governments, so there is no gap in geographic coverage.

Eligibility criteria for beneficiaries

3. To be eligible to receive benefits from the ER program, beneficiaries are required to play their roles and deliver their responsibilities in implementing the program activities as described in the ERPD (version May 2019). Beneficiaries' performance in implementing the activities will be validated using the Measurement, Monitoring, and Reporting (MMR) system at the sub-national level, and will be verified using the Monitoring, Reporting, and Verification (MRV) system at the national level to ensure the benefits are distributed to the eligible beneficiaries. These eligibility criteria are applied to all beneficiaries including all levels of government, private sectors, and community groups. Thus, these criteria are prerequisite for beneficiaries.

Benefits

4. The monetary and non-monetary benefits for all beneficiaries will be implemented under the ER Program and are aligned with the medium-term development plan to demonstrate the coherence between sub-national development program and the activities of the ER Program. The types of benefits for each category of beneficiaries are outlined in table 3.1 below.

Table 0.1. The types of benefits for each category of beneficiaries.

Beneficiaries	Types of benefits	Rationale
Government institutions		
<i>National Government</i>	Monetary benefits for covering operational costs, defined as expenditures related to the technical support (e.g., MRV, safeguards) and administrative and financial management of the ER Program including the BLU-BPDLH	The monetary benefit is given to incentivize the roles and responsibilities taken under the ER Program implementation.
	Non-monetary benefits for capacity building in financial management system for ER Program, strengthening institution for ER project management, coordination across sectors and support for implementation of ER Program activities.	The non-monetary benefit is given as a support for activities to ensure the implementation of the ER Program at the national level.
<i>National Park Agency/Conservation Management Unit</i>	Monetary benefits for covering	The monetary benefit is given as an incentive for the operational cost under the ER Program implementation.



Beneficiaries	Types of benefits	Rationale
	operational costs ⁸⁶	
	Non-monetary benefits for support on conflict identification and resolution, joint protection and fire prevention control in conservation areas	The non-monetary benefit is given as support for activities to improve the National Park Agency/Conservation Management Unit implementation at the sub-national level.
<i>East Kalimantan Government</i>	Monetary benefits for covering operational costs, strengthening policy and support for implementation of ER Program activities	The monetary benefit is given to incentivize the roles and responsibilities taken under the ER Program implementation.
	Non-monetary benefits for support on capacity development on monitoring ER, improving data through ground truthing, developing HCV monitoring system, training on SESA and ESMF	The non-monetary benefit is given as support for activities to improve the ER Program management and implementation at the sub-national level.
<i>District Governments</i>	Monetary benefits for covering operational costs, strengthening policy and support for implementation of ER Program activities	The monetary benefit is given as an incentive for the operational cost under the ER Program implementation.
	Non-monetary benefits for support on enhancing sustainable mangrove practices, sustainable peat land agriculture, training on RIL and HCV management	The non-monetary benefit is given as a support for activities to ensure the implementation of the ER Program at the district level.
<i>Village Governments</i>	Monetary benefits for covering operational costs, strengthening policy and support for implementation of ER Program activities	The monetary benefit is given as an incentive for the operational cost under the ER Program implementation which is different from the Allocations to communities (for performance and reward).
	Non-monetary benefits for capacity development training in managing funding for community, supervising the ER Program implementation on village level	The non-monetary benefit is given as support for activities to improve the capabilities in managing and implementing the ER Program on the ground in village level.

⁸⁶ While the National Park Agency/Conservation Management Unit are in sub-national level, the operational cost will be separated with the sub-national and categorized as national government.



Beneficiaries	Types of benefits	Rationale
KPHs	Monetary benefits for covering operational costs and support for implementation of ER Program activities	The monetary benefit is given as an incentive for the operational cost under the ER Program implementation.
	Non-monetary benefits for capacity building, including for facilitation with communities (e.g., awareness, conflict resolution, etc.); capacity building/training and equipment for Sustainable Forest Management, RIL, HCV, forest and fire management, social forestry, and livelihoods opportunities for communities	The non-monetary benefit is given as support for activities to improve the KPHs' capabilities in managing and implementing the ER Program regarding the collaboration with stakeholders on forest-land status.
Private Companies		
Estate crop concessions; Timber plantation concessions; Forest management concessions	Non-monetary benefits in the form of capacity building/training on sustainable plantations, HCV protection, certifications (e.g., FSC/PHPL, The Roundtable on Sustainable Palm Oil /Indonesia Sustainable Palm Oil), sustainable forest management (e.g., RIL-C), fire management, and tenure conflicts/public complaints; Non-monetary benefits for equipment and inputs (e.g., planting stock) to support sustainable practices	The non-monetary benefit is given to improve the private companies' capabilities in managing their land for the achievement of the ER Program's objectives.
Local Communities Including Adat Communities		
Community groups	Monetary benefits ⁸⁷ will be in the form of cash for the community for forest management activities such as wages for community patrols and monitoring.	The monetary benefit is given to reward the community achievement in reducing emissions and to implement long-term strategies for protecting forests and improving community livelihoods, as community is the key actor in environmental protection.

⁸⁷ Still under community consultations.



Beneficiaries	Types of benefits	Rationale
	Non-monetary benefits for forest and fire management, including equipment and capacity building/training; investment to provide long-term impact under the poverty alleviation and environmental sustainability framework such as seeds for farm, agroforestry, livestock, and similar investment which will incentives the village than individual community; Development projects (e.g., health, education, public facilities) that do not contribute to deforestation and forest degradation; Additional livelihood support for community businesses, including capacity building/training, equipment, market access, or agricultural inputs	The non-monetary benefit is given as support for activities to improve the communities' capabilities not only in implementing the ER Program, but also in improving livelihoods to avoid any potential reversal risk of deforestation and forest degradation.

Benefit Distribution

5. The implementation of the ER Program involves a wide range of considerations, from the strategy to implement ER activities, the needs to strengthen actor's capabilities in implementing ER activities, the necessity to secure policies and regulations in ER Program, the needs to improve community livelihoods and increase sub-national economic growth, and the potential gain (or loss) of investment and opportunity cost associated with implementing the ER Program. Thus, for the ER Program and the BSP to be viable, all these considerations should be properly considered in the implementation of the ER Program. Hence, three main allocations of benefits are agreed⁸⁸ in this BSP: a) Responsibility Allocation to incentivize governments in governing the ER Program; b) Performance Allocation to incentivize beneficiaries in reducing emissions; and c) Reward Allocation to incentivize communities who have demonstrated continued protection of forests.

⁸⁸ Discussed in October 2018, agreed in Mission in December 2018. The Responsibility Allocation comes up in April 2019 Stakeholder Consultation (SC) which then agreed to replace the operational cost (in ERPD) in May 2019 SC.

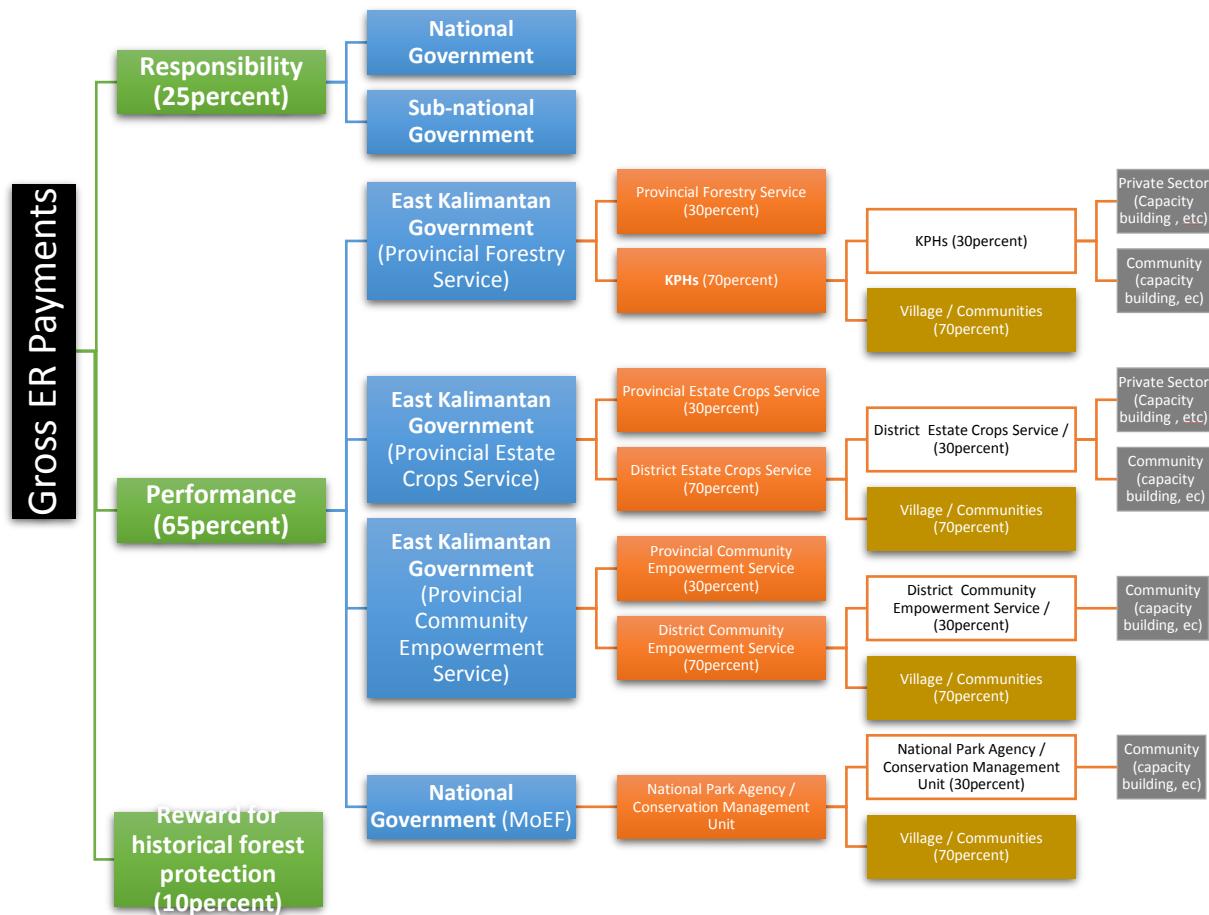


Figure 0-1. The benefit sharing proportion.

Responsibility

6. The Responsibility Allocation is made to provide an incentive for government institutions to continue supporting ER policies that contribute to program sustainability and reduce the risk of reversals. This portion of funding will be allocated to government institutions based on their roles in policy development, program development, program management, and monitoring. The 25percent Responsibility Allocation will be distributed to the National Government (MoEF) and the Sub-national Government (Provincial, District, and Village Governments). The proportion distributed to each government entity will be based on criteria, namely: the operationalization costs in implementing the program management and monitoring systems, the initiatives in policy developments to support the ER Program, and the roles and responsibility of each government to be accountable in supporting the ER Program. While the National Park Agency/Conservation Management Unit and KPHs are administered under the National Government and Provincial Government respectively, they have different roles in the government level especially in policy development and are considered as independent beneficiaries. Thus, they will not receive benefit from the Responsibility Allocation but from the Performance Allocation.

7. As much as 13percent from the total 25percent Responsibility Allocation will be the ceiling for operational costs, while 12percent will be used as non-monetary benefits to incentivize government



institutions to continue supporting ER policies that contribute to program sustainability and reduce the risk of reversals.

Performance

8. The Performance Allocation is made to incentivize beneficiaries' performance in reducing emissions. This portion of funding will provide benefits to National Park Agency/Conservation Management Unit, KPHs, private sector, community groups, and village governments. The benefits under the Performance Allocation will provide resources to further invest in ER Program activities based on the ERPD and forthcoming Governor Regulation on Benefit Sharing Mechanism. The private sector will get non-monetary benefits in the form of capacity building, improvement in utilization management, and other activities that can achieve ERs, through the relevant benefit managers.⁸⁹ The National, Provincial, and District Governments are benefit managers (who deliver benefits to the beneficiaries) and will receive monetary benefit from the Responsibility Allocation as well as deliver benefits under the Performance Allocation. Village governments will receive benefits under both the Responsibility Allocation and the Performance Allocation due to their roles in assisting communities and reducing emissions from their village boundary. The proportion of benefits distributed to each beneficiary under the Performance Allocation will be based on the beneficiary's contribution to reducing emissions from their managed areas by implementing ER Program activities at the KPH or District level, and based on several assessment criteria developed by the Provincial Benefit Sharing Working Group⁹⁰ that will use information contained in reports sent by beneficiaries to the registry system.

9. The ER Program activities under the Performance Allocation are mostly reflected on "Component 3: Reducing Deforestation and Degradation within Licensed Areas" and "Component 4: Sustainable Alternatives for Communities" that sum up to 81percent of the budget cost which was the largest cost in implementing the ER Program (see section 6of the ER-PD). Corresponding to the cost, the allocation from ER Payment to incentivize performance in reducing emissions should also be the largest. Thus, 65percent of the ER Payments is allocated for the Performance Allocation. This Allocation will be purely performance-based.

Reward

10. The Reward Allocation is made to reward communities who have had net-zero or low deforestation rates in the past⁹¹ and who can demonstrate continued protection of forests. This portion of benefits will be allocated for communities, to recognize their past-good practices and to ensure they are continuing such good practices. This could also encourage other communities to adopt good practices. This Reward Allocation will apply only to communities, including adat communities, whose forests have remained protected. The rewarded communities will be processed based on the land cover maps since 2006, and the selection will follow the principles of equitable, transparent, effective, respect customary rights to lands and territories and reflect broad community support and have clear legal status on rights to carbon and relevant lands. The main criteria for communities to receive this Allocation is that the communities have to show net-zero or low deforestation rates in given reporting periods against the 2006

⁸⁹ Stakeholder Discussion in April 2019.

⁹⁰ The Provincial Benefit Sharing Working Group was formed by the Provincial Government to help implementing benefit sharing plan in East Kalimantan Province, consist of stakeholder selected by the East Kalimantan Government.

⁹¹ Land cover maps will be the basis of this measurement and are available since 2006.



baseline, as they will not be eligible in receiving the Performance Allocation funding. Thus, communities who receive the Reward and the Performance Allocations will be different.

Process for the Distribution of Benefits

11. The World Bank will transfer the ER Payment to a custodian account set up by the BLU-BPDLH. Following MoF regulation, the BLU-BPDLH will charge management and custodian bank fees. The remainder of the ER payment will be distributed to the three Allocations: Responsibility, Performance, and Reward.

12. ER Payment from the Carbon Fund will be managed by the BLU-BPDLH at national level to avoid possible bureaucratic delays. The required regulations to establish the BLU-BPDLH are all in place, including the Government Regulation, the Presidential Regulation, the Coordinating Ministry Regulation, the Ministry of Administrative and Bureaucratic Reform (MenPAN/RB) regulation, and the Ministry of Finance Regulation. The BLU-BPDLH is not dependent on the funding stream from the ER Payment, as it has already secured its own operational budget. The BLU-BPDLH will adopt international standards for fund management and distribution, and it will use a custodian bank as trustee. The selection of the custodian bank will be conducted by BLU-BPDLH and agreed by the World Bank. Since all required regulations are in place, and budget to operationalize the BLU-BPDLH is already secured for 2020, the risk of the BLU-BPDLH not being operational prior to disbursement of ER payments is minimal.

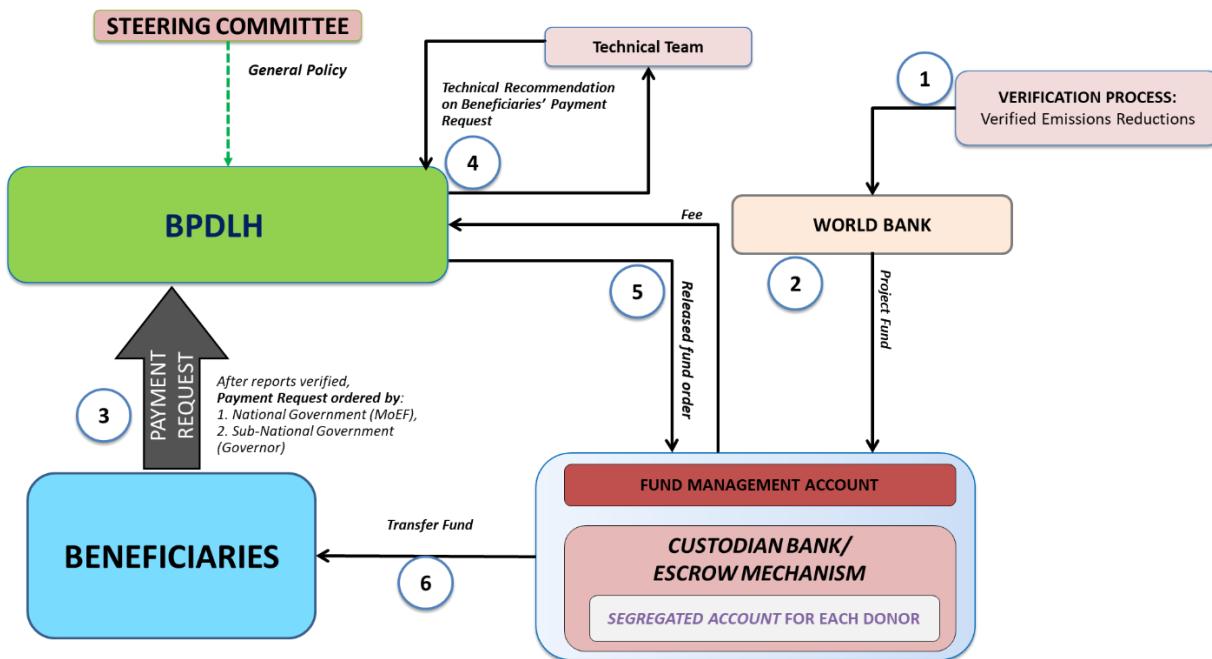


Figure 0-2. The schematic diagram of requesting payment in ER Program implementation.

Monitoring and Reporting

Institutional Arrangement



13. At the sub-national level, the responsible party for decisions, funds flow, and reporting will be the Governor of East Kalimantan Province through the Provincial Secretary (SEKDA Provinsi Kaltim). In implementing the BSP, SEKDA will be helped by the Provincial Economic Bureau as the coordinator of Provincial Benefit Sharing Working Group. The access to the ER Payment will have to follow regular budgeting processes. The OPD (Sub-national Technical-unit Organization, Organisasi Perangkat Daerah) will have to present an annual workplan (beginning in January of every year) to the Provincial Planning Agency (BAPPEDA). At the national level, the MoEF will be responsible for consolidating the reports to the World Bank as they will also be signed by the Secretary General of the MoEF. The BLU-BPDLH is responsible for preparing the annual financial statement subject to audit by BPK. The format of the financial statement will be provided in the POM. The report on the use of fund will be disclosed publicly as specified by the ERPA.

Reporting

14. In accessing and reporting the fund, there are two types of reporting needed, the first report is the ER Monitoring Report to trigger the payments from the World Bank, and second is the report on the BSP Implementation and the use of fund. **The ER Report** will be delivered in three given reporting periods to trigger three ER Payments. The first reporting period is planned from June 18, 2019, when Indonesia's program was unconditionally selected into the portfolio, until December 31, 2020.⁹² The ER Monitoring Reports from the Sub-national Government will be prepared February 2021, to be verified by the National Government (MoEF MRV team), and submitted to the World Bank for verification by an independent third-party. From submission of the ER Monitoring Report to the World Bank to payment is expected to take approximately a 9 month process (completed December 31, 2021). The second and third reporting periods (January 1, 2021 - December 31, 2022 and January 1, 2023 - December 31, 2024) are expected to follow similar timeframes with ER Monitoring Reports from the Sub-national Government prepared in February 2023 and 2025, and verification by the National Government (MoEF MRV team) and independent third-party until December 31, 2023 and 2025, respectively. The **BSP Report** on the BSP Implementation and the use of fund will be delivered within 6 months after receiving the first ER payment, and every year afterward. Thus, beneficiaries at provincial level must prepare the report 5 months after the receipt of fund and submit it to the national level. There will be no ER Performance calculation in BSP Report. The BLU-BPDLH will consolidate the financial reports and submit the report to the DGCC. The BSP report that includes the financial report will be submitted by the DGCC to the World Bank.

Safeguards

15. The benefit recipients under the BSP (both monetary and non-monetary) will be subject to social and environmental safeguards requirements as stipulated in the ERP's Environmental and Social Management Framework (ESMF), Indigenous Peoples Planning Framework (IPPF), Resettlement Planning Framework (RPF), Process Framework (PF) and FGRM. Any activities financed through the BSP will undergo screening and apply environmental and social mitigation measures required under these safeguard instruments. Consistent with the benefit distribution process under the BSP, respective agencies who are responsible for oversight (Forestry and Estate Crops Services as well as Provincial Forestry Service) will report to the Governor through the Provincial Environmental Service (DLH) for the

⁹² A due diligence report needs to be submitted by the Government of Indonesia to the World Bank, to determine safeguards compliance for ERs generated prior to ERPA signature.



overall implementation of safeguards. Such reporting will complement the ERP's FGRM, which is being developed to address future BSP implementation. Program-level oversight for this oversight and grievance management will be under coordination from a Program Management Unit (PMU) at the national level and provincial government. ER Program entities and benefit recipients are required to monitor and report safeguards compliance, along with reporting to the Registry System, over the duration of the ER Program unless agreed otherwise or there is a dedicated resource allocated for such monitoring and reporting to continue following the Program's closure.

Consultation and Communication

16. Below is a summary of stakeholder consultations on the BSP:

- An initial workshop was held in December 2015 in Jakarta to discuss the channeling of funding from the Ministry of Finance to the province. This workshop included representatives from MoEF, Ministry of Finance, the East Kalimantan Government, development partners and national NGOs. The meeting helped to identify the on-granting mechanism as a potential component of the benefit-sharing arrangements. A study on the Benefit Sharing Mechanism in East Kalimantan was conducted in 2016.
- Benefit sharing arrangements were discussed further between the MoEF and the Provincial Treasury Agency (BKAD). In November 2017, the Provincial Treasury Agency and provincial development planning agency (BAPPEDA) discussed the appropriate benefit sharing arrangement for East Kalimantan.
- A consultation between the national and provincial government was held in October 2018 and the discussion included:
 - A proposal that the Provincial Government would have exclusive authority to manage and disburse the ER payments from the provincial level to the field level (village level).
 - A discussion of the allocation of benefits between central and provincial governments with a proposal that the majority of the funds will be disbursed to the province.
 - The BLU-BPDLH was confirmed as the national agency for channeling benefits to the Provincial Government once ER performance reports have been verified by MoEF.
- A follow-up consultation was held in April 25th, 2019 to discuss the BSP outline, the beneficiary's criteria, and the parameters used to allocate each beneficiaries' proportions within the ER Payment allocations.
- Another consultation was held in May 9th-10th, 2019 discussing the transfer mechanism for the ER payments, and the detailed benefit allocation proportion for each beneficiary. Stakeholders from the MoF and the Ministry of Interior attended the consultation. Thus, a clear mechanism on transfer from the BLU-BPDLH to the Sub-national Government and the Village Government were confirmed and agreed. The proportion for each beneficiary was also consulted based on the parameters and criteria discussed in the earlier stakeholder consultation (April 25th, 2019) albeit no agreements were made.
- In July 2019, public consultations as part of the Free Prior Informed Consultation (FPIC) Mechanism of the East Kalimantan FCPF ER Program were held in East Kalimantan.

Consultation Plan

17. Due to Covid-19 pandemic, the East Kalimantan team assessed various options for required consultation activities in 150 villages located across 7 Districts and 1 city. Several factors were considered including availability and quality of technology for virtual consultation, advice from the health authorities



and logistical arrangement in the program locations. The assessment concluded that face-to-face meeting applying strict health protocol was the best approach for consultation. Issues discussed during consultation include explanation of the FCPF ER Program, Social and Environmental Safeguards, Benefit Sharing Mechanism, FGRM, Measurement, Monitoring and Reporting. All consultation activities will be recorded and upon the completion of consultations, a report will be shared with the World Bank. It is acknowledged that the advanced draft BSP has been disclosed through GOL website and at workshops conducted by the MoEF and East Kalimantan Provincial Government before ERPA signing.



ANNEX 6: Financial Management

1. Financial management aspects at the central level are managed by the Environmental Fund Management Agency (BLU-BPDLH) which will receive funds from the World Bank, distribute funds to the recipients, and consolidate the reports of the fund utilization by the recipients to be ultimately reported to the World Bank. As required, in order to be acceptable to the World Bank, the BSP includes detailed financial management arrangements for the use of ERPA payments. The key financial management arrangements are described below:

- a) **Budgeting.** Budgeting follows existing government procedures, including budgeting for BLUs, national government, and local government institutions. ERPA payments will be included in the BLU-BPDLH's budget documents (RBA), national government budget (DIPA) and provincial and district governments budgets (DPA). For the recipients of ERPA payments, the fund will be recorded as "earmarked miscellaneous revenue" to ensure it will be used for activities specified in the BSP.
- b) **Accounting and reporting.** The BLU-BPDLH, national government, and sub-national governments maintain accounting records for all payment orders (SPM) and remittance orders (SP2D) on a cash basis in accordance with Ministry of Finance regulation 224/PMK.05/2016 (for the national government) and Ministry of Home Affairs regulations 13/2006 (for sub-national governments). All financial transactions are recorded in the government accounting system. For the BLU-BPDLH, it will be included in the Ministry of Finance's financial report and for the local governments, it will be included in the provincial and districts' financial statements. The ERPA payment recorded as "earmarked miscellaneous revenue" will be tagged at the program level to allow tracking on its use. The BLU-BPDLH will prepare a set of consolidated financial reports in a form agreed by the World Bank providing information on the use of ERPA payments by all beneficiaries. The report is made 6 months after the first ERPA payments made by the Bank and annually afterward and due 45 days after the end of each reporting period. The format of the report will be included in the POM and consistent with the ER Monitoring Report template for the FCPF,⁹³ where necessary.
- c) **Internal Control.** The payment verification process on the use of ERPA payments will rely on government systems. Direct and independent documentary evidence will need to be furnished to the related implementing agencies for them to verify completion before payments are released to third parties. Direct original supporting evidence will be attached and retained for audit purposes. Internal control measures at the community level, including Bank account requirements, segregations of duties, and reporting requirements will be developed and included in the POM. Benefits to beneficiaries will be based on concept notes that report on performance and the proposal for the use of benefits that become basis of contractual between the BLU-BPDLH and the beneficiaries.
- d) **Fund Flow.** An account denominated in US\$ will be opened under the BLU-BPDLH in the custodian bank specifically to receive and to disburse ERPA payments. At the national level, BLU-BPDLH will transfer funds to MoEF's Directorate Generals that are involved in the ER Program, including DGCC and FOERDIA. The transfer mechanism to central government

⁹³ <https://www.forestcarbonpartnership.org/system/files/documents/CF19%204b.%20FCPF%20Carbon%20Fund%20ER-MR%20template%20Jan%2031%202019.pdf>



institutions will be through non-tax revenue (*Penerimaan Negara Bukan Pajak* or PNBP) and its utilization will be included in MoEF's budget (DIPA) in accordance with the BSP. Transfers will be regulated through Ministry of Finance Regulations. The fund flow to the provincial level, including KPHs, will be based on contracts between the BLU-BPDLH and the East Kalimantan Provincial Government. Transfer to district governments and to other recipients (e.g., village governments and Services) will be based on contracts between the BLU-BPDLH and the recipients, with the East Kalimantan Provincial Government (Governor) as witness. The funds will flow directly from BLU-BPDLH to the recipient's bank account. Village governments will be responsible for transferring funds/benefits to local and *adat* communities within their jurisdiction.

- e) **Audit.** The Project will be subject to external audit by the Audit Board of the Republic of Indonesia (*Badan Pemeriksa Keuangan* or BPK). The audit will cover the consolidated financial statements developed by BLU-BPDLH on the use of ER fund by recipients. Each audit will cover a period of one fiscal year of the recipient. The audits will be conducted based on a Terms of Reference (TOR) agreed with the Bank. The first audit will cover the year when the first ERPA payments are made by the Bank to BLU's account. Audit reports and audited financial statements will be furnished to the Bank no later than six months after the end of the relevant fiscal year and shall be made available to the public. The audit will go beyond merely providing an opinion on the financial statements to also include opinions on internal control frameworks and compliance with the grant covenants and related regulations.
- f) **Disbursement.** The Bank's Financial and Accounting Services Department (WFACS) has prepared a Disbursement and Information Letter (DFIL) for the ERPAs. The eligible expenditure is the payment, or 'ER payment', made by the Bank to the recipient country based on verified ERs as regulated in the ERPA. The transfer will be made to the account in the custodian bank opened by the BLU-BPDLH.

**ANNEX 7: EK-JERP Safeguards Approaches, Issues, and Options****A ER Program Boundaries for Safeguards**

1. The EK-JERP applies an “enhanced” business-as-usual approach by MoEF within its ongoing program of forestry and productive activities. This is advantageous in the sense that the focus is on strengthening the national system of forest management to address the NDC under UNFCCC however, it creates a much broader boundary for safeguards management potentially subject to World Bank Operational Policies (OPs).

2. Although the entire province is under the ER Program, most of the reductions in carbon emissions are expected from a targeted number of activities and areas. These include:

Table A7.1: ER Program Boundaries

ER PD Component	Activity	Targets/Boundaries
1. Forest and Land Governance	1.1 Strengthening the licensing regime	Revoking 809 out of 1404 mining permits 341 social forestry licenses delivered by 2024 Review of 373 licenses for Oil Palm Estates
	1.2 Dispute Settlement	No target
	1.3 Support for the recognition of adat land	Participatory mapping for 200 IP villages
	1.4 Strengthening village spatial planning	Village Development Plans - 150 priority villages
2. Improving Forest Supervision and Administration	2.1 Forest Management Units	20 KPH business plans completed by 2022
	2.2 Province/District supervision of Estate Crops	Restore 640,000 ha of natural forests Restore 50,000 ha of peat land (2030 target) Supervision of 100 Palm Oil Estates (2024) Declaration on sustainable estate crops is signed by seven districts
3. Reducing Deforestation and Forest Degradation within Licensed Areas	3.1 HCV on Palm Oil Estates	100 estate crop license holders
	3.2 Smallholder fire mgmt. and monitoring	180 local farmer groups trained in forest fire suppression
	3.3 HCV/RIL Policies in Forestry Concessions	26 trainings on HCV and RIL 11 logging concessions and 4 KPHs would implement RIL 20 timber plantation companies will identify and manage HCV forests inside their concessions (by 2024)
4. Sustainable Alternatives for Communities	4.1 Sustainable livelihoods	Demonstration plots - 10 villages in 2 districts
	4.2 Conservation partnerships	Training for 18 village communities on alternative livelihoods around 6 conservation areas
	4.3 Social Forestry	341 licenses issued for Social Forestry (2024)



		85 villages targeted 50 villages trained 70 business plans prepared
--	--	---

3. The villages and private sector operations have not been specifically selected at this stage.

B Key Issues/Risks and Safeguards Approaches

4. The project components reflect the key drivers of deforestation that have been identified for targeting under each of the jurisdictions selected for the ER-JERP. Activities within these components are expected to reflect the ongoing MoEF programs under its national REDD+ strategy and forestry programs, applying its national environmental and social regulatory framework to these activities.

5. While access restriction risks (OP 4.12) resulting from forest zoning, determination of forest utilization blocks and/or forest tenure settlements (Component 1.2, 1.3 and 2.1) are envisaged, resettlement risks are considered remote. The GoI commits to ensuring amicable conflict resolution and seeks tenure conflict resolution through social forest schemes to enable forest dependent communities to access forest lands. There may be some residual risks following tenure dispute settlements, which may renounce one's claims over state lands.⁹⁴

6. Risks related to Indigenous Peoples (OP 4.10) potentially stem from slow/prolonged recognition of *Adat* tenure rights due to overlapping claims, existing conflicts, lack of legal evidence and political processes for communities to gain such recognition. Furthermore, communities who may not sufficiently qualify as *Masyarakat Hukum Adat* (Customary Law Communities) under the existing GOI's legal framework may potentially not be recognized and/or excluded from the Program's benefits.

7. Table A7.2 summarizes ER Program activities, risks, impacts, mitigation measures and relevant Safeguards Instrument within the World Bank.

⁹⁴ Under the governing forest tenure settlements (PPTKH) regulation (clause no. 10), resettlement may be considered as an option for the forest tenure settlement in the event that the forest area in question is classified within the conservation zone regardless of the use (e.g. settlements, agricultural land, and other land uses). In provinces where the total size of the forest estates equals to or is less than 30percent of the total size of watersheds and/or land masses within provincial administrative jurisdictions, resettlement can also be applicable to address occupation (either for settlements and/or establishment of public and social facilities) within production forests based on recommendations from PPTKH inventory and verification teams. In the East Kalimantan context, the total size of forest estates (Kawasan Hutan) is 8,411,680 ha, which represents more or less 66percent of the total provincial area (12,743,859 ha). Such a ratio should theoretically rule out the above resettlement risks within the EK-JERP accounting areas.



Table A7.2: Environmental and Social Risks and Safeguards Instruments

ER PD Component	Activity	Type of Activity	Risk/Potential Impact	World Bank Policy	Mitigation Measures and Relevant SG Instrument
1. Forest and Land Governance	1.1 Strengthening the licensing regime	TA/Enforcement	Conflicts and Disputes	4.01	ESMF and FGRM
			Loss of livelihoods (mine closures, etc.)	4.01/4.12	Social impacts to be covered in ESMF or access restrictions covered under PF
			Displacement of emissions	4.01/4.04 4.36	Policy and enforcement related Monitoring of ER Program
	1.2 Dispute Settlement	TA/Land Conflict Resolution	Conflicts and Disputes	4.01/4.12	ESMF/RPF and PF, FGRM
	1.3 Support for the recognition of <i>adat</i> (IPs) land	TA/Land Title Resolution	Conflicts and Disputes Access restrictions	4.10/4.12	ESMF/RPF and PF, IPPF and FGRM
	1.4 Strengthening village spatial planning	TA/Planning	Conflicts and Disputes	4.01	ESMF, IPPF, and FGRM
			Poor planning may result in forest degradation or overuse of resources	4.36 4.04/4.11	ESMF including TOR/approach for TA
2. Improving Forest Supervision and Administration	2.1 Forest Management Units	TA/Planning	Overall operations may not be compliant or have social conflict	4.36	ESMF including TOR/approach for TA EK-JERP to build on the FIP 2 ESMF
	2.2 Province/District supervision of Estate Crops	TA/Enforcement & Planning	Overall operations may not be compliant or have social conflict	4.36	ESMF including TOR/approach for TA
3. Reducing Deforestation and Forest	3.1 HCV on Palm Oil Estates	TA/Planning	Overall operations may not be certified or have social conflict	4.36	ESMF including TOR/approach for TA
			Poor planning may result in forest	4.36/4.04	ESMF including



ER PD Component	Activity	Type of Activity	Risk/Potential Impact	World Bank Policy	Mitigation Measures and Relevant SG Instrument
Degradation within Licensed Areas			degradation or overuse of resources		TOR/approach for TA
	3.2 Smallholder fire mgmt. and monitoring	TA - Training	Health and safety issues with fire suppression	4.01	ESMF with H&S provisions, capacity-building and budgets
	3.3 HCV/RIL Policies in Forestry Concessions	TA/Planning	Overall operations may not be compliant or have social conflict	4.01 4.36/4.04	Advice compliant with OP 4.36 – ESMF including TOR/approach for TA
			Poor planning may result in forest degradation or overuse of resources	4.36/4.04	Advice compliant with OP 4.36 – ESMF including TOR/approach for TA
4. Sustainable Alternatives for Communities	4.1 Sustainable livelihoods	TA/Investment/CDD	Small-scale impacts related to agriculture, ecotourism, NTFP, and forestry sub-projects	4.01/4.36 4.04/4.09 4.10/4.11 4.12	ESMF procedures for small-scale sub-projects, IPPF, RPF and PF
	4.2 Conservation partnerships	TA/Investment	Poor planning may result in forest degradation or overuse of resources	4.36/4.04	ESMF including TOR/approach for TA
	4.3 Social Forestry	TA/Forest Mgmt. Planning	Poor planning may result in forest degradation or overuse of resources	4.36/4.04	ESMF including TOR/approach for TA, IPPF
Benefit Sharing		Investment/Non-monetary/CDD	Small-scale impacts related to agriculture, ecotourism, NTFP, and forestry sub-projects, potential exclusion of Indigenous Peoples who may not be recognized	4.01/4.36 4.04/4.09 4.10/4.11 4.12	ESMF procedures for small-scale sub-projects, IPPF, RPF and PF, BSP



C System Analysis, Gaps, and Capacity Assessment

16. A summary assessment of the country's systems against the key provisions of the relevant World Bank's safeguards is provided in Table A7.3. Further assessments are provided in the ESMF.

Table A7.3: Gap and Capacity Assessment

World Bank Policy	Gap(s)	Capacity & Risk
OP 4.01 Environmental Assessment	<p>Under Indonesian Law (Law 32/2009 Environmental Management, GOI Regulation 27/2012 Environmental Permit and its derivative regulations), the project activities are pre-determined to have significant impacts (addressed by AMDAL/ESIA), insignificant impacts (addressed by UKL-UPL), or very minor impacts/negligible impacts (addressed by SPPL). This triggers the gaps in the environmental screening. Environmental screening based on technical thresholds only will result in inappropriate extent and type of environmental assessment. In addition, the screening process does not consider the presence of social impacts due to land acquisition/involuntary resettlement, impact towards indigenous peoples as defined in OP 4.10 and physical cultural resources as defined in OP 4.11.</p> <p>There is lack of reference to legal and administrative framework such as international environmental treaties, agreement, international standard policies etc. The current regulation only refers to "other data and information".</p> <p>There is lack of analysis about project area of influence, ancillary facilities, induced impacts and site selection analysis for activities requiring UKL-UPL.</p> <p>There are often insufficient follow up, analysis, use of environmental monitoring data for evaluation and continual improvement.</p> <p>The depth of the assessment of cumulative impact needs more enforcement and capacity enhancement in the implementation.</p> <p>The source of fund for ESMP implementation and the requirement for public disclosure of final safeguards documents are not covered in the Ministry of Environmental Regulations.</p>	<p>Capacity: Uneven capacity in the consulting firms, particularly in assessing socio-economic impacts and in applying quantitative analytical techniques. Uneven capacity in the government, particularly local agencies, in reviewing and approving the impact assessment.</p> <p>The capacity in some of the decentralized regulatory authorities to monitor and enforce implementation of environmental permit conditions and environmental management and monitoring measures is constrained by lack of resources.</p> <p>Insufficient capacity development and training for implementation of environmental and social management plans.</p> <p>Risk: Substantial</p>



OP 4.12 Involuntary Resettlement	<p>The policy is triggered in the context of access restrictions following forest zonation, tenure regularization and HCV protection in both forest and non-forest areas. No resettlement risks are envisaged under the current ER Program.</p> <p>The current framework for handling tenure settlements in Forest Areas (PPTKH) as set out in the Presidential Regulation No. 88/2017 does not address livelihoods restoration measures in the context of access restrictions nor resettlement. Social forestry schemes are generally considered as the GoI's measure to offset such access restrictions through provision of usufruct rights to forest-dependent communities. However, these schemes may be limited to those with recognized legal personality and/or formal recognition, which may exclude communities without recognizable claims, such as Indigenous Peoples. Similarly, in non-forest areas in the context of HCV protection within oil palm concessions, management of conflicts will hinge upon concession holders' good-will to address conflicts with communities claiming parts or whole of their land. While the on-going Agrarian Reform seeks to address such issues by providing tenure security to the landless and land poor, such an initiative may only be feasible in expired and/or abandoned concessions.</p> <p>In addition, there are no existing provisions of replacement costs to mitigate impacts related to access restrictions as envisaged above.</p>	<p><u>Capacity:</u> management of land in forest and non-forest areas falls under two distinct institutions with the Ministry of Environment and Forestry (MoEF) responsible for the former and Ministry of Agrarian Affairs/Land Agency (ATR/BPN) responsible for the latter. Such a dual institutional arrangement has consequently led to lack of transparency, poor coordination and conflicts. While a new Presidential Instruction No. 2/2018 was enacted to enable inter-agency coordination, implementation remains a challenge. Recently, the GoI launched a One Map Policy to address dualism in the land administration system, lack of clarity over ownership, claims and current land uses – owing to lack of community consultations and ground-truthing - often prevent land and forest management and impacts on the successes of tenure conflict settlements. ATR/BPN is currently implementing a Systematic and Complete Land Registration (PTSL), but its scope is currently limited to non-forest areas.</p> <p><u>Risk:</u> Substantial</p>
OP 4.10 Indigenous Peoples	<p>Under the Indonesian law, only those communities who are recognized as customary law communities (<i>Masyarakat Hukum Adat</i>) have legal personality and hence, are eligible to receive tenure recognition and other Program benefits. This remains a significant gap, given that only a handful of East Kalimantan have been recognized by their regional government. The great majority of indigenous groups thus falls outside of this scope and will be dependent on their village governments to receive benefits.</p> <p>Under OP 4.10, applying principles of gender and intergenerational inclusivity are required. Yet how these principles will be applied during the program's engagement with Indigenous Peoples remains to be defined and relevant operational measures need to be strengthened. A potential gap in this regard is the distribution of benefits to Indigenous Peoples and how these will be shared in an inclusive manner.</p>	<p><u>Capacity:</u> sub-national capacities and legal frameworks will need to be strengthened to support recognition of Indigenous Peoples and their land rights. These also include sub-national capacities to settle existing tenure conflicts and disputes involving Indigenous Peoples, companies and government institutions</p> <p>The FGRM states that customary councils will play the important role of grievance handling of complaints related to customary land/assets. Yet, it is highly questionable whether these councils will in practice be able to handle dispute resolution in an effective way, especially when grievances are related to the zonation of the Forest Estate or conflicts involving private companies/concession owners. Customary councils do not have the authority to decide</p>



	<p>As is reflected under OP 4.10, access restrictions to lands may not only impact livelihoods, but also the collective sense of identity and culture of Indigenous Peoples. Currently, the Indonesian legal framework is silent on these aspects.</p>	<p>over government jurisdictional issues. Hence, it is necessary to assess the synergy and coordination between customary councils and government stakeholders. An on-the-ground assessment of targeted villages might provide more clarity on the need for support in this regard.</p> <p>Risk: Substantial</p>
OP 4.36 Forests	<p>The country has established several laws and regulations concerning forestry (Law 41/1999 and its derivative regulations), biodiversity conservation (Law 5/1990 - currently under review - and its derivative regulations) and environmental protection/management (Law 32/2009 and its derivative regulations). However, the quality of the assessment of impacts to biodiversity, to the rights and welfare of people and their level of dependence upon or interaction with forests is often weak.</p> <p>The regulation does not specifically mention critical forests and habitat as per OP 4.36 although there are provisions for protection of mangroves, wetlands, lakes and other environmentally sensitive areas. Consequently, what would be considered critical forests by the Bank may be commercially harvested under Indonesian law, especially if the assessment is not robust.</p> <p>There is gap for the forest certification system as there is no specific clause on the measures of biodiversity conservation and maintaining environmentally sound multiple benefits accruing from the forest in certification process.</p> <p>In addition, Indonesia ratifies many of international agreements and treaties on environment, such as ratification of UN Conventions on Law of the Sea (Law No 17/1985), Conservation of Biodiversity and Its Ecosystem (Law No 5/1990), and Paris Agreement through Act No. 16 Year 2016: this Act indicates the commitment of the Government of Indonesia to join the global commitment to combat adverse impact of climate change and to reduce the global emission of GHGs. These conventions have been incorporated into national law and the local specific conditions have been considered.</p>	<p>Capacity: Uneven capacity in the consulting firms, particularly in assessing impacts to critical forests, socio-economic impacts and in applying quantitative analytical techniques. Uneven capacity in the government, particularly local agencies, in reviewing and approving the assessment.</p> <p>The capacity in some of the decentralized regulatory authorities to monitor and enforce implementation of forestry license/permit conditions and environmental management and monitoring measures is constrained by lack of resources.</p> <p>Risk: Substantial</p>
OP 4.04 Natural Habitats	<p>The country has established several laws and regulations concerning forestry (Law 41/1999 and its derivative regulations), biodiversity conservation (Law 5/1990 - currently under review - and its derivative regulations) and environmental</p>	<p>Capacity: Uneven capacity in the consulting firms in assessing impacts to biodiversity, particularly for natural habitat and critical</p>



	<p>protection/management (Law 32/2009 and its derivative regulations). However, the quality of the assessment of impacts to biodiversity is often weak.</p> <p>The regulation does not specifically mention critical habitat and natural habitat as per OP 4.04 although there are provisions for protection of mangroves, wetlands, lakes and other environmentally sensitive areas.</p> <p>The screening process may not be responsive to the presence of natural habitats or cultural resources that do not have official protected status. The UKL-UPL (or AMDAL) documents only provide limited information on natural and/or critical habitats. Physical investments located in protected areas automatically require AMDAL, but Indonesian regulations do not prohibit or restrict activities that involve conversion or degradation of critical natural habitats or natural habitats including critical forests.</p>	<p>habitat. Uneven capacity in the government, particularly local agencies, in reviewing and approving the assessment.</p> <p>The capacity in some of the decentralized regulatory authorities to monitor and enforce implementation of forestry and environmental license/permit conditions and environmental management and monitoring measures is constrained by lack of resources.</p> <p>Risk: Substantial</p>
OP 4.09 Pest Management	<p>Several GOI regulations relevant to pesticide use are available, namely GOI Regulation 7/1973 concerning Monitoring of Distribution, Storage and Use of Pesticide, Ministry of Health Regulation 258/MENKES/PER/III/1992 concerning Health Requirements for Managing Pesticide, Ministry of Agriculture Regulation 107/Permentan/SR.140/9/2014 concerning Supervision of Pesticide Use.</p> <p>The gaps are generated due to insufficient identification, description and evaluation of potential environmental impact and its mitigation measures related to indirect impact from project that would increase pesticide use.</p> <p>Furthermore, infrastructure regulations do not clearly regulate and specify this aspect of pesticide use.</p>	<p>Capacity:</p> <p>Insufficient capacity for enforcing the compliance to the regulations.</p> <p>Risk: Moderate</p>
OP 4.11 Physical Cultural Resources	<p>Law No. 11/2010 on Cultural Heritage states that cultural heritage needs to be preserved and protected. These sites are recognized by the government through issuance of a decree. However, this may consequently limit the scope of the law to only registered sites and objects and hence, a range of PCRs that may exist under the ER Program jurisdictions remain uncovered. If the sites are claimed by certain Adat Communities, prior recognition from the regional governments is required, which may further limit the scope of the law.</p>	<p><u>Capacity:</u> regional capacities for preservation, consultations with “owning” communities and benefit sharing for commercialization of PCRs for instance under eco-tourism purposes will likely vary. For unregistered sites, protection and preservation will likely be an ad-hoc arrangement, potentially mediated by village governments and hence, capacities may be limited.</p> <p><u>Risk:</u> Moderate</p>

**D Proposed GOI and Bank Approaches and Roles in Supervision and Risk Management**

17. Consistent with the OESRC memo⁹⁵ and its subsequent supplemental briefing note⁹⁶, “*the focus of the supervision responsibilities of the World Bank, as Trustee of the FCPF, should be on the performance of agreed safeguards systems, and not on supervising the safeguards aspects of all individual activities of an ER Program*”.

18. As guided by the Carbon Funds Methodological Framework and Interim Guidelines for Safeguard Processing of FCPF REDD+ Trust Funds Administered by the World Bank⁹⁷, essential elements of the readiness activities include the strategic environmental and social assessment (SESA) and preparation of Environmental and Social Management Framework (ESMF)⁹⁸ for the ER Programs. These frameworks have been tailored to the contexts and needs of the East Kalimantan-JERP and has been reviewed and cleared by the Regional Safeguards Advisor (RSA) on November 16, 2019 and disclosed by Gol on December 12, 2019. The appraisal stage Project Information Document-Integrated Safeguards Data Sheet (PID-ISDS) was disclosed on May 17, 2020 and received approval from the Country Management Unit on May 18, 2020. In addition, the GOI has also invested substantial efforts in the development of the Safeguards Information System (SIS) REDD+ in conjunction with the Cancun Safeguards. The SIS-REDD+ serves as an electronic database platform for safeguards monitoring.

19. In terms of system strengthening, relevant program entities as defined in the EK-JERP’s institutional arrangements (section C) will be required to ensure that the Program’s safeguards system is adequately resourced and that clear procedures for screening, due-diligence, supervision and technical support for safeguards implementation are clearly defined in the ESMF. Institutional strengthening includes recruitment of dedicated safeguards personnel, capacity building for safeguards at relevant levels of implementation, FGRM strengthening as well as multi-stakeholder coordination/consultative body as overseen by the Program’s Steering Committee.

20. Together with this proposed safeguard institutional arrangement and the GOI’s awaited proposal for safeguards resourcing for the operation, all of the above will form the Program’s safeguards “system”. This proposal is orientated towards system strengthening for safeguards management for the Program.

21. Since the activities under the EK-JERP will mostly fall under Type B activities⁹⁹ (i.e. financed and implemented by/under the supervision of other entities, including government agencies, bilateral donors and private sectors), the World Bank, as Trustee, will be responsible for:

- a) Prior to implementation, ensuring the Program Entity has the capacity and resources sufficient to implement the ESMF.¹⁰⁰ A safeguards action plan will be proposed as a result of the World Bank’s due diligence and form part of the ESMF to address capacity gaps; and

⁹⁵ OESRC Memo on Forest Carbon Partnership Facility (FCPF): Managing Safeguards in the FCPF Emission Reduction Phase issued on November 14, 2017.

⁹⁶ Supplemental Briefing Note to the OESRC: Managing Environmental and Social Risks for the FCPF Emission Reductions Programs issued on April 22, 2019.

⁹⁷ Dated January 2016.

⁹⁸ The term “ESMF” refers to safeguard framework documents prepared for the ER Programs by the Gol, which include ESMF, Resettlement Policy Framework (RPF), Indigenous People Policy Framework (IPPF) and Process Framework (PF) and Feedback and Grievance Redress Mechanism (FGRM).

⁹⁹ As guided by the supplemental briefing note to the OESRC (dated April 22, 2019), “*Type B include ER Program activities that are financed and implemented by/under the supervision of other MDBs, bilateral donors, private sector, or the governments themselves*”.

¹⁰⁰ As guided by the supplemental briefing note to the OESRC (dated April 22, 2019), “*capacity to implement the ESMF would*



b) During the EK-JERP implementation, the World Bank's role is to take steps to demonstrate that the Safeguards Plans continue to function effectively at the system level. This includes confirming aspects such as, adequacy of budgets and staffing to support the implementation of the Safeguards Plans; that the Program Entity can demonstrate credibly that environmental and social assessments and management plans are prepared in accordance with the safeguard frameworks; mechanisms for self-reporting and Third Party monitoring are in place and functional; grievance redress and dispute resolution mechanisms are established and functional; the implementing entities have demonstrated ability to solve issues of non-compliance and so on. Consistent with the OESRC memo, the World Bank, as Trustee, is not responsible for ensuring the compliance of individual activities with the ESMF.

22. Consistent with the supplemental briefing note to the OESRC (dated 22 April 2019), EK-JERP will be required to have independent third-party monitoring to be financed by the Facility Management Team (FMT). The third-party monitoring would be separate from verification of ERs generated from the ER Program, and the World Bank, acting as Trustee, will review the information from third-party monitoring, along with the self-reporting and verification report (verifying the volume of ERs generated) to determine whether or not to make the ER payments under the ERPA in whole or in part to the Program Entity.

E Safeguards Approach with regards to the Benefit Sharing Plan

23. BSP implementation will be subject to the applicable safeguards' requirements under the program. Any projects financed through the BSP would undergo screening and application of mitigation measures considered by the safeguard instruments. Such activities are mostly in the form of small and medium-scale Community Driven Development (CDD) type activities. This will be carried out by the Provincial Forestry Service, with oversight from MoEF. A negative list of activities has also been integrated into the BSP design and included in the safeguard management frameworks. Consultations will be required prior to BSP implementation and in the case of Indigenous Peoples and/or *Masyarakat Adat*, such consultations will follow a process of free-prior informed consultations leading to broad community support. Mechanisms for such consultations are included in the IPPF.

24. Legal covenants will be incorporated into the contracts signed between the BLU and recipients based on approved proposals. Monitoring and evaluation of safeguards performance have been incorporated into the Project design. Grievance redress for the BSP implementation has been considered in the FGRM prepared under the EK-JERP. Oversight for the program, including safeguards supervision, monitoring, and reporting is the responsibility of the MoEF and Provincial Forestry Service through support from the national and sub-national level government agencies participating in the Program.

25. With regards to the World Bank's supervision of the BSP and in line the supplemental briefing note to the OESRC (dated 22 April 2019), the World Bank will ensure that:

a) Prior to ERPA signature or at the latest prior to any ERPA payment, there are sufficient safeguards measures as part of the overall safeguards system to screen, assess, mitigate, manage and monitor environmental and social aspects of the BSP implementation. The Bank is responsible for confirming that the BSP has been developed in a participatory manner and that there is sufficient transparency in the type of Monetary and non-Monetary Benefits being shared; and

include the capacity to monitor and report on the preparation of any requisite safeguard instruments at the ER Program activity level (i.e., site-specific), pursuant to the requirements of the ESMF. Any capacity building needs of the Program Entity in this regard should be identified in the "Safeguards Action Plan". The Safeguards Action Plan is conceptually similar to the Environmental and Social Commitment Plan (ESCP) proposed under the Bank's new ESF".



b) During BSP implementation, the World Bank, as Trustee, will review implementation reports from MoEF as the Program Entity (self-reporting) and third-party monitoring and any other available information to assess safeguards implementation (i.e. through FGRM records). The World Bank, as Trustee, will not be responsible for ensuring the implementation of the BSP on the ground. The World Bank's responsibilities to review BSP will end when the final ERPA payment is made to the Program Entity or the ERPA termination, whichever occurs earlier.

**ANNEX 8: Emission Reduction Crediting Aspects of the EK-PERR**

1. The instrument for the EK-PERR operation is an ERPA. Specifically, the World Bank as the Trustee and implementing agency of the FCPF Carbon Fund pays for ERs that meet a set of standard technical requirements defined in the Carbon Fund Methodological Framework that are consistent with international good practice. As per the international framework for REDD+ agreed as part of the Paris Climate Agreement, Indonesia has proposed an emissions baseline based on estimates of observed change in forest cover and quality and intends to use national systems (national forest inventory and satellite-based forest mapping) to measure and report future emissions during Program implementation. Payments under the ERPA will be made upon the independent verification of ERs and confirmation that safeguard instruments and the BSP are implemented as planned.
2. For this operation, the geographic area of East Kalimantan is the Accounting Area over which the change in the rate of emissions will be estimated during the ERPA term. Accordingly, Indonesia has estimated a Reference Level (RL) that corresponds to this jurisdiction. The RL is the historical average of net emissions from deforestation and forest degradation observed during the 2006-2016 reference period, equaling 68.4 MtCO₂e/year (with an average statistical uncertainty of 27percent when accounting for relevant sources of errors in underlying data). The approach used for the RL in the EK-JERP is generally consistent with Indonesia's national Forest Reference Emission Level submitted to the UNFCCC but includes additional categories of emissions that are expected to be included in future updates to the national RL.
3. The ERPA is a legal document in which Indonesia and the Bank (as Trustee of FCPF Carbon Fund) agree on the commercial terms of the payment for ERs, including volume, price, conditions of effectiveness and reporting periods. ERPA General Conditions were approved by the FCPF Participants Committee on November 1, 2014.
4. The MoEF is proposed by the GOI to serve as the Program Entity to sign the ERPA. As per the ERPA General Conditions, the Program Entity needs to be authorized by the Government (MoF) to implement the Program and enter into an ERPA with the World Bank, and the ability to transfer the title to ERs to the Carbon Fund. From a statutory legal perspective, a robust legal basis for carbon rights (including title to ERs) in Indonesia, which governs clear relationships/implication between the generation of such right with the land tenure holdings (including customary land tenure holdings) and natural resources licensing, along with the authority of Program Entity to own and transfer such right, does not exist yet. The legal basis provided under Indonesian law is merely on statutory basis for MoEF to sign the ERPA as mandated by the Environmental and Forestry Ministerial Regulation No. P.18/MenLHK-II/2015 about Organization and Work Procedures of the Ministry of Environment and Forestry and as confirmed by Presidential Regulation No. 16 Year 2015 on the Ministry of Environment and Forestry to sign the ERPA on behalf of the GOI.
5. The Program Entity submitted a draft joint government letter on September 16, 2020 that reflects the authority of MoEF to sign the ERPA, the ability to transfer title to ERs generated from the ER Program, and the confirmation of Program Entity to use the FCPF Reversals Management Mechanism and ER Transaction Registry. The draft joint letter was reviewed and cleared by LEGEN (World Bank legal department) during the negotiations. A legal opinion (May 8, 2020) Harvard, Marieta & Mauren (independent law firm) supporting the draft joint letter on ER title transfer and ERPA signing authority was also provided to the Trustee. The Program Entity also sent to the Trustee the Memorandum of Understanding between MoEF and the Provincial Government of East Kalimantan on the Greenhouse Gas Emission Reduction Program through the Implementation of Jurisdictional Basis of REDD+ in East



Kalimantan on 11 March 2020 ("MoU") (Number: PKS.3/SETJEN/ROKLN/KLN.0/3/2020; 197/2439/B.Humas-III), which was cited in the legal opinion and serves as one of the legal instruments for the Program Entity to demonstrate its ability to transfer title to ERs.

**ANNEX 9: Supporting Documents**

#	Indonesia webpage on the FCPF website: https://www.forestcarbonpartnership.org/country/indonesia
1	Emission Reductions Program Document (ER-PD)
2	FCPF Technical Advisory Panel Assessment of ER-PD
3	REDD+ Readiness Package under the FCPF
4	FCPF Technical Advisory Panel Assessment of Readiness Package
5	Indonesia National REDD+ Strategy
6	Provincial REDD+ Strategy and Action Plan (<i>Strategi Rencana Aksi Provinsi</i>)
7	The National Forest Reference Emission Level (FREL) submitted to the UNFCCC
8	National Forest Monitoring System
9	National REDD+ Registry
10	Safeguards instruments and documents
11	Safeguards Information System for REDD+

**ANNEX 10: Detailed Economic Analysis**

1. This annex presents an analysis of the economic (welfare) benefits generated by the proposed investments in the ER-JERP. By estimating the (partial) values of changes of carbon sequestration and livelihoods, and comparing them against the cost of the proposed investment, the overall economic welfare is assessed. Given wide range of investment, the anticipated economic benefits cut across many sectors and aspects. The enhanced delivery of environmental goods and services, improved livelihoods and poverty alleviation are the two broad benefit categories. Given time and data constraints, the consideration of benefits for the quantitative simulation will be limited to a few aspects and complemented by a qualitative discussion of other benefits. The section discusses anticipated economic benefits and the presentation of results of a numerical simulation, including a brief assessment of economic feasibility.

2. The proposed investment is generating a diverse portfolio of economic benefits ranging from direct, tangible benefits to indirect, intangible benefits. A direct, tangible benefit is, for example, the reduction of GHG emissions. On the other side of the scale, indirect and intangible economic benefits, for example the improvement of the public administration and associated delivery of public services triggered by the capacity building for land rights supported by the EK-JERP. Table A10.1 provides a limited overview of selected examples of the four categories of benefits associated with the ER-JERP.

Table A10.1: Selected economic benefits generated by the EK-JERP

	Tangible	Intangible
Direct	<ul style="list-style-type: none">• Reduction in GHG emissions• Increase in income	<ul style="list-style-type: none">• Reduction in soil erosion• Increase in soil conservation• Reduction in deforestation• Afforestation / reforestation• Biodiversity conservation• Improved socio-cultural benefits• Poverty reduction
Indirect	<ul style="list-style-type: none">• Reduced pressure on protected areas• Increased resilience to external shocks• Reduced malnutrition• Better access to credit	<ul style="list-style-type: none">• Strengthened self-governed capacity of communities and community groups• Lowering marketing costs• Improved schooling and education

3. Given the lack of data and time and resource constraints for an ex-ante economic analysis, only a few selected benefits are used for a quantitative economic feasibility assessment. These are (i) reduction in GHG emissions; (ii) increased biodiversity habitat conservation; (iii) economic value from the socio-cultural benefits; and (iv) livelihood benefits from reduction in deforestation and reforestation. Other economic benefits as listed in Table A10.1 are additional and need to be considered in the qualitative discussion.

4. Cost-Benefit-Analysis was applied to conduct the economic efficiency assessment. Sensitivity analysis is applied for the main simulation parameters notably discount rate and performance. For the



discount rate, alternative rates of 5percent, 10percent, and 20percent are applied. To test the robustness of initial results a simulation is run for the case that only 10percent of the expected ERs are achieved. All sensitivity analyses are run for all discount rates scenarios. The results of the quantitative results will be complemented with qualitative benefits to conclude overall feasibility.

5. The distribution of costs and benefits over time doesn't follow the actual disbursement. The benefits start to arise in 2021 but after 2025 it is assumed that there are no further benefits and no further improvements are achieved even though it is likely that the investment will trigger future improvements without substantial additional costs.

6. The amount of ERs expected to be generated under the program is estimated at 97.1 MtCO₂e of which 22 MtCO₂e will be paid for through the ERPA and count towards the carbon benefits. ERs are reported over several reporting periods. In the case that the government's EK-JERP does not perform as expected, fewer ERs will be available for purchase. If only 10percent performance is achieved, the purchased ERs will be limited to a total of 2.2 million.

7. The valuation of carbon benefits requires the assignment of a dollar value per ton of carbon. The market price of carbon does not reflect the social value of carbon storage of forests. Instead the social cost of carbon is used which attempts to capture the marginal (global) damage cost of an additional unit of emitted carbon. Using the official guidance for the social value of carbon as provided by the World Bank (2017) a baseline shadow value of carbon starting at US\$41 in 2021 and increasing to US\$156 in real terms by 2050. Furthermore, benefits for improvement in biodiversity and tourism opportunities are valued at US\$27/ha.¹⁰¹ As for economic value of social and cultural values, it is set at US\$1.1/ha annually, while that of forestry is established at US\$5.6/ha/year.¹⁰² There are 4 million ha of forested areas within concession areas that are considered as priorities for the ER Program and hence is assumed to be the primary benefit of the activities.

8. The anticipated livelihood benefits are outweighed by carbon benefits, even if low carbon prices are assumed. Project livelihood benefits are included in terms of direct payments. However, the incremental livelihood increase does not consider any secondary, spill-over or long-term effects triggered by increased incomes, such as better access to health services, improved education, or overall positive impacts on the economy as a whole.

9. A net present value analysis is applied to compare net benefits and net costs at the time of the first payment (year 2021). In addition to applying conservative values for the quantitative assessment, sensitivity analysis is applied in various ways for the key simulation parameters, notably discount rate, assessment of performance variation and lower social cost of carbon values. Alternative discount rates of 5percent, 10percent, and 20percent are chosen. Quantitative results will be contrasted with qualitative benefits to arrive at overall Project feasibility. Additionally, Benefit-Cost Ratio (B/C-Ratio) is used as criteria to assess the economic feasibility of the Project.

10. Results show positive simulation outcome, thus confirming economic feasibility. Simulation results are summarized in Table A10.2. The benefits are much larger than the costs in most scenarios and create a net present value of US\$1.6 billion in the baseline scenario and a B/C Ratio of 14.9. Given the relatively large expected carbon benefits, the economic robustness was tested for a low carbon price and under low ER Program performance. Even with a low carbon price and performance at 10percent, the

¹⁰¹ Heart of Borneo: Investing in Nature for a Green Economy (WWF, 2012).

¹⁰² Ministry of Forestry Decree 14/2012.



Project yields positive results at all discount rates.

Table A10.2: Summary of economic simulation results

	All Benefits with Average Carbon Price			All Benefits with Conservative Cost of Carbon (US\$40)			Without Carbon Benefits		
	5%	10%	20%	5%	10%	20%	5%	10%	20%
NPV [in US\$ billion]	1.6	1.4	1.1	1.2	1.0	0.8	0.5	0.4	0.3
B/C – Ratio	14.9	13.5	11.3	11.2	10.2	8.5	4.6	4.1	3.3
Sensitivity analysis	10% performance			10% performance					
NPV [in US\$ billion]	0.6	0.5	0.4	0.5	0.5	0.4			
B/C – Ratio	5.6	5.0	4.1	5.2	4.7	3.8			

11. Given that carbon benefits dominate the economic analysis, a simulation is run to assess feasibility under the assumption of no carbon benefits being generated. The results show that the Project is still feasible. If other benefits, as depicted in Table A10.1, such as benefits from incentives for local communities or in education and health resulting from the income increase and biodiversity benefits were included in the simulations, higher positive results are expected.

**ANNEX 11: Gender Analysis**

1. **Indonesia is a largely patriarchal society, even among matrilineal groups and, in particular, land tenure and forest management processes in the country tend to be male dominated.** While regulatory frameworks (such as those for community participation, marital property and inheritance) in Indonesia are not discriminatory towards women, challenges remain for the implementation of these frameworks and ultimately the local realities for women.
2. **Land administration and customs in Indonesia in particular do not provide equal protection and opportunities for women.** Tenure uncertainty and unequal recognition of land rights is particularly acute for women. Discriminatory customs on women's land rights increase the negative impact on women. Female heads of households (except those not legally identified as such) have legal protection in securing land tenure and inheritance for their children. Nevertheless, land and asset distributions remain unequal in practice. Even in matrilineal societies, where property rights and land titles remain with women, brothers and husbands tend to make the land-use decisions. While married (Marriage Law) and unmarried (Civil Code) women have equal rights and by law equal inheritance and division of property (in the event of a divorce) are a women's right, practice is likely to differ. Islamic laws on family and inheritance (which apply to the Islamic marriages in Indonesia) regulate a specific portion of inherited estates for the wife/wives, which differs from the portion for other heirs. Book Two on Inheritance Law from the Islamic Law Compilation prescribes the division of assets between male and female beneficiaries at a 2:1 ratio, and Article 183 allows the inherited parties (men and women) to agree on the distribution of property. Certain customary laws, including *adat* laws, however, may treat legal rights of women differently as compared to men.
3. **Women tend to be more dependent on forests and play a critical role in collecting and using forest products than men to meet their family's daily needs, though they are disproportionately represented in forest management institutions and decision-making processes.** Participation in decision-making and access to and control over land and natural resources can be sub-optimal because of gender issues, stigmatization, and the under-representation of women in consultations. Projects which consult women and succeed in creating "safe spaces" for them to voice their opinions and assume positions of leadership have better outcomes and sustainability of results. Women use their detailed knowledge of landscapes to selectively nurture important species or build assets, collect NTFPs, and protect HCV areas or resources. These areas are part of traditional usufruct patterns that may be lost if women are not consulted.
4. **There are several identified constraints to the meaningful participation of women in decision-making,** including: the lack of self-confidence and representation of women; limited knowledge about legal rights and a shortage of dispute resolution institutions or knowledge of grievance redress mechanism; conditions of poverty and scarcity that result in short-term thinking and environmental degradation; and, stereotyping of women's roles and contributions to domestic domains. These have implications for participatory processes, conflict and dispute resolution, resource management, and the access to and participation in consultative processes by women.
5. **At the local level, women and other marginalized groups' participation in village development planning consultative meetings (*Musyawarah Perencanaan Pembangunan Desa/Musrenbangdes*) is a challenge.** *Musrenbangdes* are often dominated by village elites and men, ultimately excluding and/or limiting the participation of marginalized and vulnerable groups, including *adat* communities and women.



Addressing this issue is vital, considering the current implementation of Village Law 42—particularly on Village Funds—presents an important opportunity for mainstreaming low-carbon initiatives, conservation efforts and sustainable livelihoods at the village level. Village governments are responsible for administering Village Funds (*Dana Desa* and *Alokasi Dana Desa*) and accommodating community needs through democratic processes (hamlet and village deliberations). Under the framework of the Village Law, villages now have the autonomy to determine development based on their own understanding and needs through participatory process from the hamlet to the village level. *Musrenbangdus* (hamlet deliberation) was often perceived by villagers, especially women, to be more participatory and receptive to proposals from various community groups. This is, however, not the case of *Musrenbangdes* (village deliberation) where men and village elites usually dominate the meeting. Through this deliberation process, a long list of proposed activities will be produced by each hamlet and subsequently short-listed and consolidated against other hamlets' short-lists through a competitive process during *Musrenbangdes* (village deliberation). During these deliberations, women's interests and needs are often at risk of being disregarded due to lack of participation and voice.

6. Considering the broader context for gender issues in Indonesia, the Project conducted a gender analysis to understand the implications for the implementation and outcomes of the EK-PERR. The following key issues have been identified:

- a) Lack of women's participation in forest policy decision-making processes as well as potential limited access for women to benefit from the Project, including under the BSP (both monetary and non-monetary benefits);
- b) Lack of equal access to forest-related information and skills enhancement for women, youth and other vulnerable groups. This includes access to technical and market related information and advice;
- c) Lack of equal access to credit for women for forest-related enterprises; and
- d) Lack of active participation by women in community forest management bodies for a variety of reasons, despite the fact that both men and women recognize multiple benefits from improved community forest management. These reasons include cultural constraints and traditional gender norms limiting women's more active participation in forest and natural resource management groups due to low literacy rates, lack of skills (e.g. financial) and lack of confidence to speak up in group settings.

7. In addressing gender and inclusive development issues particularly for the vulnerable groups and *adat* communities, the GOI acknowledges that mainstreaming gender and social inclusion are key to ensuring the sustainability of its EK-JERP and the EK-PERR transaction. Indonesia has adopted a twin-track policy approach for gender mainstreaming and women's empowerment. Gender-specific activities incorporated in relevant policies and legal frameworks, includes gender budgeting, gender-disaggregated data collection, and an empowerment program for women. This approach aims to ensure that gender equality concerns are well integrated and addressed in the country's development frameworks. Such political commitments have been specifically translated into legal and budget commitments with the issuance of relevant regulatory frameworks and the adoption of gender-responsive planning and budgeting, as stipulated in the joint decree of the Ministry of Home Affairs (MoHA), MoF, Ministry of Women's Empowerment and Child Protection (MoWE-CP), and Bappenas on the National Strategy on Gender Responsive Planning and Budgeting (NOMOR: 270/M.PPN/11/2012 NOMOR: SE-33/MK.02/2012 NOMOR: 050/4379A/SJ NOMOR: SE 46/MPP-PA/11/2012); and MoF's regulation on the guidance for the



development and review of annual workplans and budgets of line ministries (No 94/PMK.02/2017) that requires a gender budget statement.

8. **The GOI's National REDD+ Strategy recognizes these gaps and includes principles for ensuring gender sensitivity and considerations in the implementation of REDD+, including as a key consideration for changing paradigms and culture in forest management.** More specifically, the REDD+ Strategy notes that transparent information will be provided on REDD+, including to marginalized groups and women, and capacity building will be implemented with communities, especially for women, to improve both their understanding of available information and participation in decision-making processes. Furthermore, the REDD+ Strategy specifies that reporting on the distribution of benefits under BSPs will be disaggregated by gender. If these measures are implemented effectively, they will directly respond to some of the key issues identified for women's participation in forest management.

9. **The government's EK-JERP forms a part of and is intended to be consistent with the National REDD+ Strategy. Given this, several approaches have and will be utilized to enhance women's access to participation and benefits specifically under the EK-JERP and EK-PERR transaction.** For example, the development of the SIS-REDD+ will be consulted with relevant stakeholders, including women and other marginalized groups. In addition, the REDD+ Social and Environmental Standards (SES-REDD+) for East Kalimantan has been developed to ensure that key issues in land and natural resource governance in the Province are captured in the safeguards monitoring systems, including gender equality and inclusive participation, particularly for marginalized and vulnerable groups.

10. **The EK-JERP and EK-PERR seek to mainstream gender-sensitive and inclusive development approaches to address gender and exclusion issues in natural resource management.** These approaches include: (a) ascertaining the equal participation and active engagement of women as well as vulnerable and marginalized groups in the process of consultations and Project implementation (including for women's only *Musrenbangdes* at the village level); (b) ensuring that the design and implementation of the Project seek to promote better conditions for women as well as vulnerable and marginalized groups; (c) ensuring gender equality and social inclusion concerns are well addressed in the IPPF to address Indigenous Peoples concerns as well as RPF and PF to address resettlement and access restriction risks. A minimum standard for gender mainstreaming and social inclusion will be developed in consultation with all relevant stakeholders prior to implementation of the government's EK-JERP.

11. **The GOI has also committed to promoting gender equity and social inclusion in benefit sharing, including through the National REDD+ Strategy and the EK-JERP's ER-PD, however this needs to be reflected adequately in the final BSP.** Currently, the advanced draft BSP does not adequately incorporate gender or social inclusion considerations. This is particularly relevant to the benefits identified and whether they address or further enforce gender inequities. The FCPF requires that benefits should be culturally appropriate and gender and inter-generationally inclusive, which will strengthen the implementation of the EK-JERP's benefit sharing arrangements. As agreed with the GOI, gender and social inclusion aspects will be reflected in the BSP before it is finalized.



ANNEX 12: Map of East Kalimantan

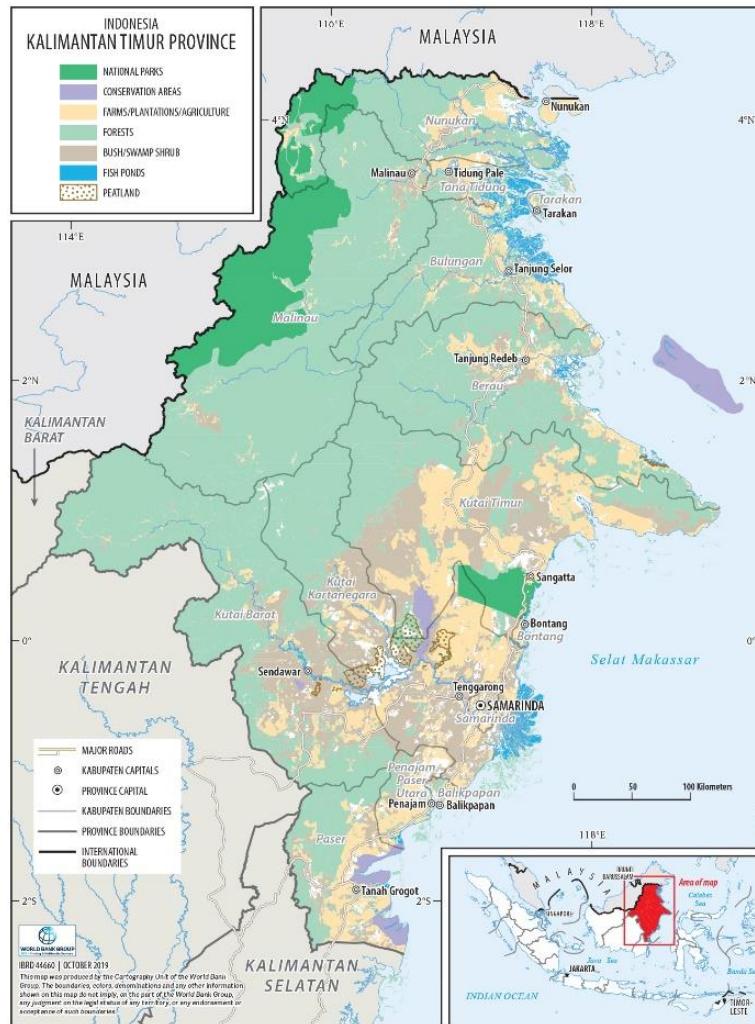


Figure A12.1 Land type based on its function in East Kalimantan