PROJECT IDENTIFICATION FORM (PIF)
PROJECT TYPE: FULL SIZED PROJEC T
TYPE OF TRUST FUND: GEF TRUST FUND

PART I: PROJECT INFORMATION

Project Title:	Strengthening Forest Area Planning and Management in Kalimantan		
Country(ies):	Indonesia	GEF Project ID:[1]	6965
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5029
Other Executing Partner(s):	Ministry of Environment and Forestry	Submission Date: Resubmission Date:	August 18, 2014 February 26, 2015
GEF Focal Area(s):	Biodiversity, Land Degradation Sustainable Forest Management	Project Duration (Months)	84
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of parent program:	n/a	Agency Fee ($)	855,000

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in $)	
		GEF Project Financing	Co-financing
BD-4 Programme 9	GEFTF	5,000,000	25,000,000
LD-3 Programme 4	GEFTF	1,000,000	5,000,000
SFM-1	GEFTF	3,000,000	25,000,000
Total Project Cost		**9,000,000**	**55,000,000**

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: Maintaining forest areas including the biodiversity and ecosystem functions of Kalimantan's lowland and montane areas from the development of estate crops.

Project Component	Financing Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Co-financing
1. Forest ecosystem services & biodiversity mainstreamed in national and provincial policies and decision making processes for forest area planning and management	TA	Natural capital values, particularly those of high conservation value (HCV) forests within Kalimantan internalized in the decision making of forest area planning, allocation and management indicated by reduced expansion and related impacts on forest ecosystem services and biodiversity, safeguarding at least 1.9 million hectares[4]	1.1 Improved policy framework and capacity of the Ministry of Forestry to align national forest planning to the Government strategies, and to exercise oversight of remaining tracts of high biodiversity multiple use forest landscape including plantations through: (i) improved forest function classification, based on physical conditions and updated indicators; (ii) improved access to relevant and reliable data set and standard criteria established for decision making with enhanced capacity to apply the new data into the national forest planning and decision making process; (iii) support to revision of concession granting process and land use regulations; (iv) support to revision	GEFTF BD LD SFM	2,000,000	23,000,000

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[1] Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

[2] When completing Table A, refer to the GEF Website, *Focal Area Results Framework* which is an *Excerpt from GEF-6 Programming Directions*.

[3] Financing type can be either investment or technical assistance.

[4] According to Carlson et.al (2013), Kalimantan palm oil expansion will total 9,384,400 hectare (90% forested lands, including 41% intact forests) by 2020 if all existing leases/land banks are utilized. The target figure of minimum 1.92 million represents 50% of the intact forests area – i.e. 9,384,400 x 0.41 x 0.50 =

		of intact natural forests slated for estate crop development. This will be measured by avoiding emission of at least 269 million tC owing to gazettal of new HCV/High Carbon Stock (HCS) forests[5] and significant reduction of HCVF conversion through optimised siting of new plantations, measured with respect to HCVF area and/or location, compared with the reference deforestation level to be determined during the PPG. Improved policy framework through revision of national and provincial concession granting processes; gazetting of national and provincial forest safeguarding plans and maps; and establishment of mechanism to promote use of degraded land and enable land swaps. *Appropriateness of the indicators will be further examined and finalised during the PPG with defined baseline and targets.*	of relevant regulations to enable plantations to conserve forests within concession areas; and (v) strengthened compliance monitoring and enforcement system; 1.2 Systematic forest safeguarding plan developed; (i) supporting priority areas; connectivity between major forest blocks; (ii) determining and agreeing designation of high conservation value (HCV) and high carbon stock (HCS) within Kalimantan based on robust criteria and clearly mapped to support decision making in land allocation; (iii) prioritizing biodiversity values over carbon concerns, which may include strengthened policies on reforestation. 1.3 Mechanism established to accelerate optimized use of forest and non-forest land, to avoid fragmentation and sustain larger-scale ecological functions and resilience; (i) The activity results may include: land swaps between forested priority areas and idle and degraded low forested areas in conjunction with national and local spatial plans; (ii) facilitation of agreement between relevant stakeholders by necessary training and guideline documents on eligible areas ; (iii) policy recommendation based on a multi-stakeholder consultation process, to address institutional and economic barriers, including opportunity costs (lost tax revenues and employment etc.) for local governments and spatial planning/land swaps spanning more than one district or province 1.4 Awareness improved on forest policy and planning system at national and sub-national levels with focus on pilot areas, through development of relevant data, tools and awareness kits, targeted campaigns focusing of parliamentarian, forestry and plantation sectors.			
2. Strengthened and expanded implementation of best practises in the plantation	TA INV	Sustainable and integrated forest landscape management demonstrated in 3	2.1 District level forest safeguarding land use plans developed and operational in the target landscapes, ensuring legal clarity and ownership of the plan and process by local	GEFTF BD LD SFM	4,500,000	10,000,000

1,923,802 hectare. See Nature Climate Change Volume: 3,Pages:283–287 "Carbon emissions from forest conversion by Kalimantan oil palm plantations" at http://www.nature.com/nclimate/journal/v3/n3/fig_tab/nclimate1702_F4.html

[5] Calculated using the conservative estimate of the average above ground forest carbon density of 142 tC/ha based on the 2011 global carbon mapping by Sassan Saatchi of Caltech's Jet Propulsion Lab. http://rainforests.mongabay.com/deforestation/2000/Indonesia.htm

This is an indicative figure and through identification of the exact project landscapes, the figure will be further investigated and refined.

sector in 3 target landscapes in Kalimantan		districts of the target forest and plantation[6] landscapes, covering 100,000 ha in Kalimantan, resulting in improved habitat status and connectivity; indicated by: (i) biodiversity health index (BHI) [7] to be applied for each landscape during the PPG; (ii) increase in use of degraded lands for plantation expansion through land swap and other strategies; (iii) reduced deforestation rate compared with the business as usual scenario (to be determined during the PPG) Enhanced local institutional capacity for integrated forest area management indicated by the UNDP capacity scorecard applied for Forest Management Units (KPH) to be determined during the PPG	government. This will include: (i) a review of HCV forests in the landscape including within plantation concessions and potential interventions to conserve these HCV forests with the agreement of key stakeholders, following on the legal basis prepared in component 1[8]; (ii) identification of degraded lands suitable for productive uses and integration in the land use plans; (iii) facilitation of local communities to legally utilize lands in areas surrounding forest areas, by reflecting community needs into local spatial planning processes 2.2 Improved capacity of stakeholders and communities in the target landscapes to participate in decision making for land allocation, forest plantations, palm oil estate design and management to ensure national/local government decisions and planning are adequately consulted by local communities. Indicative mechanisms in this regard include: (i) establishment of 3 district land use planning platforms (one district for each province); (ii) formation of community groups for sustainable production and for carrying out conservation actions and deriving benefits from these actions. 2.3. Improved biodiversity management in forest planning and strategic plantations/ commodities estates in the target landscapes; through technical support to large and/or small scale producers related to management of forest areas in plantations[9] (management of species, human-wildlife conflict and fire etc.) 2.4 Strengthened capacity of local government's compliance monitoring, human wildlife conflict management support and extension services, to strengthen conservation of remaining forests. Key local government stakeholders include KPH, Office of Natural Resources Conservation (BKSDA), and local government.			
3. Creation of incentives to	TA INV	Financial incentive mechanisms for	3.1 Detailed quantitative analysis developed for economic, environmental	GEFTF BD	2,075,000	19,400,000

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[6] Agricultural production landscapes

[7] Biodiversity health index aims to assess the state of biodiversity in a given landscape. The BHI assessment is expected to have three components: 1) score of habitat suitability for maintaining important biodiversity; 2) status of that biodiversity and 3) the broader environmental context. It will therefore be sensitive to changes in pressure on biodiversity.

8 Current legal systems and prevailing practice result in many HCVs being conserved within concessions handed over to the district government and reallocated to other concessions which will convert the HCVs into plantations.

[9] Plantations here are defined as agricultural plantations, especially estate crops (Perkebunan)

				SFM		
safeguard forests		biodiversity-friendly land allocation and plantation design and management and production practices established indicated by establishment of new mechanisms and the amount of incentive payments *Baseline and targets will be determined during the PPG.*	and social benefits including a spatial assessment of multiple benefits / values (carbon, biodiversity, ecosystem services, etc.) conducted to complement HCVA/HCSA assessment and associated land use planning. 3.2. <u>Financial incentive mechanism from diverse sources designed and established</u>, and tested at target landscapes with technical cooperation support under components 1 and 2, to shift agricultural production to degraded lands, making reduced/no deforestation policies and land swaps economically more attractive. This could include REDD+ and a small grants programme based on RBP (Results Based Payment) principles with necessary upfront payments.	SFM		
Subtotal					8,575,000	52,400,000
Project Management Cost (PMC)[10]				GEFTF	425,000	2,600,000
Total Project Cost					**9,000,000**	**55,000,000**

If Multi-Trust Fund project :PMC in this table should be the total and enter trust fund PMC breakdown here (n/a)

C. INDICATIVE SOURCES OF <u>CO-FINANCING</u> FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Recipient Government	Ministry of Environment and Forestry	Grant	50,000,000
GEF Agency	UNDP	Grant	5,000,000
Total Co-financing			**55,000,000**

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS [a)]

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)[b)]	Total (c)=a+b
UNDP	GEFTF	Indonesia	Biodiversity	n/a	5,000,000	475,000	5,475,000
UNDP	GEFTF	Indonesia	Land Degradation	n/a	1,000,000	95,000	1,095,000
UNDP	GEFTF	Indonesia	Multi-Focal Areas	SFM	3,000,000	285,000	3,285,000
Total GEF Resources					**9,000,000**	**855,000**	**9,855,000**

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

b) Refer to the Fee Policy for GEF Partner Agencies.

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[10] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

E. PROJECT PREPARATION GRANT (PPG)[11]

Is Project Preparation Grant requested? Yes ☐   No ☐ If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	**Agency Fee[12]** (b)	**Total** c = a + b
UNDP	GEFTF	Indonesia	Biodiversity	n/a	100,000	9,500	109,500
UNDP	GEFTF	Indonesia	Land Degradation	n/a	30,000	2,850	32,850
UNDP	GEFTF	Indonesia	Multi-focal Area	SFM	65,000	6,175	71,175
Total PPG Amount					**195,000**	**18,525**	**213,525**

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[13]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	*26 million hectares (Note: directly and indirectly impacted areas - approximate area size of lowland and montane forest landscapes in Kalimantan.) 1.9 million hectares (directly impacted areas)*
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*100,000 hectares*
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	n/a
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	n/a
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	*Avoidance of 269 million tons of CO_2 emission*
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	n/a
	Reduction of 1000 tons of Mercury	n/a
	Phase-out of 303.44 tons of ODP (HCFC)	n/a

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[11] PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to $50k for PF upto $1 mil; $100k for PF up to $3 mil; $150k for PF up to $6 mil; $200k for PF up to $10 mil; and $300k for PF above $10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

[12] PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

[13] Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions,* will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

| 6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks | Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries | 1 |
| | Functional environmental information systems are established to support decision-making in at least 10 countries | 1 |

PART II: PROJECT JUSTIFICATION

Project Overview

A.1. Project Description. Briefly describe: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

Indonesia's archipelago comprises approximately 17,000 islands of which around 990 are permanently inhabited. It is one of the world's 17 megadiverse countries, encompassing 2 of the world's 25 biodiversity hotspots, and 18 of the WWF Global 200 ecoregions. The Island of Borneo, shared between Indonesia, Malaysia and Brunei Darussalam, is the 3rd largest non-continental island in the world (74 million hectares). The Indonesian portion of the island, which accounts for 72.9% of Borneo, is divided into five provinces with an estimated population of approximately 14.6 million[14]. The 130 million-year-old world's oldest forest of Borneo harbours amazing biodiversity. There are about 15,000 species of flowering plants with 3,000 species of trees (267 species are *dipterocarps*), 221 species of terrestrial mammals and 420 species of resident birds in Borneo. There are about 440 freshwater fish species in Borneo (about the same as Sumatra and Java combined). It is the centre of the evolution and radiation of many endemic species of plants and animals. The Borneo rainforest is one of the only remaining natural habitats for the endangered Bornean Orangutan. It is an important refuge for many endemic forest species, including the Asian Elephant, the Sumatran Rhinoceros, the Bornean Clouded Leopard, the Hose's Palm Civet and the Dayak Fruit Bat. The island comprises the WWF 200 Borneo's Lowland and Montane Forests Ecoregions, with 7 distinct sub-ecoregions. More than 600 new species of animals and plants have been discovered on the island since 1995, testifying to the remarkable and still not fully explored biodiversity of this unique region. In particular, the forest complex known as the Heart of Borneo (HoB) covering more than 22 million hectares of tropical rainforest is considered a key high conservation value forest area. It is the largest remaining expanse of trans-boundary tropical forest in Southeast Asia, harbouring the majority of Bornean biodiversity, much of which is endemic. Biodiversity in HoB underpins the food security of forest dependent communities, and the ecosystems that the organisms create provide a wide variety of ecosystems services ranging from provision of genetic resources, food and materials, provision of water, and flood regulation to carbon storage and sequestration. The Indonesian part of the HoB covers 16.8 million[15] ha, and involves three Kalimantan provinces, namely West, Central and East Kalimantan. The forests and biodiversity of HoB are responsible for a vast range of ecosystem services, providing water to 29 river basins across an estimated 54 million hectares (or 70% of Borneo), reaching around 11 million inhabitants, including more than 70% of the population of Kalimantan. Moreover, based on above ground biomass only, across the three countries, the HoB landscape stores an estimated 3.2 billion tons of carbon (11.8 billion tons of CO2 equivalent) of which 2.4 billion carbon tons (8.9 billion tons of CO2 equivalent) are found in the Indonesian portion of HoB.

Plantation Industry in Indonesia and Kalimantan: Kalimantan provinces have an estimated population of 13.7 million. Roughly 6.61% are living under the absolute poverty line[16]. The main economic drivers are mining (oil, gas, coal etc.), timber harvesting, fresh water fisheries and agriculture; rice, sago, tobacco, millet, coconuts, pepper, sugarcane, coffee, rubber, and the increasingly lucrative industry of palm oil production. By far the largest and fastest growing plantation industry in Kalimantan is palm oil. Indonesia and Malaysia account for more than 85% of the global palm oil supply. Indonesia is the world's top palm oil producer and was estimated to have produced 23 million tons of crude palm oil (CPO) in 2011, out of 45 million tons of global output[17]. As much as 5.4 million tons of palm oil production was from Kalimantan in 2011[18]. The growth of palm oil production is fuelled by the significant higher return per hectare of land compared to other cash crops such as coffee, rice, cassava and rubber. Palm oil is

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[14] Bappenas. 2013. Proyek Penduduk 2000-2025. Total population per 28 February 2013 = 4.6 million. Available on running text of the following web: http://www.datastatistik-indonesia.com/proyeksi/index.php?option=com_content&task=view&id=910&Itemid=923

[15] Van Paddenburg, A., Bassi, A., Buter, E., Cosslett C. & Dean, A. 2012. *Heart of Borneo: Investing in Nature for a Green Economy*. WWF Heart of Borneo Global Initiative, Jakarta.

[16] Badan Pusat Statistik Provinsi Kalimantan Tengah. 2011. Available on the following web: http://kalteng.bps.go.id/

[17] Reuters, (2011): Palm Oil Industry Prepares for Rocky 2012: Special Report.

[18] ISPO, 2012. Statistik Minyak Sawit Indonesia 2011.

Indonesia's largest agricultural plantation product followed by rubber, cocoa, coffee, tea and sugar[19]. For the last decade, palm oil has been Indonesia's most significant agricultural export. In 2011, the export revenue for the country from palm oil related products was over $21 billion, surpassing the total earnings of other major export products such as coffee (US$ 1 billion) and rubber (US$ 11.1 billion[20]). In response to growing global and local demand, Indonesia aims to approximately double its current palm oil production to 40 million metric tons per year by 2020. This is estimated to require more than 10 million hectares of additional oil palm plantations. Meanwhile there is between 6 and 40 million ha[21] of degraded land that has the potential to be used to plant oil palm instead of clearing new tropical forests and peatlands. HoB landscape alone has 1.6 million hectares of palm oil concessions, of which 830,000 active and/or newly allocated concessions are in Kalimantan (recent allocations particularly in West Kalimantan). Approximately 360,000 ha of the total areas is in forested landscapes, two thirds of them in West Kalimantan[22].

In 2008, approximately 49% of palm oil plantations were owned privately, 41% by smallholders and the remaining 10% by the Government. Private plantations represent the largest producers of palm oil in Indonesia, accounting for more than half of the country's CPO production. The palm oil industry in Indonesia currently employs over 3 million people, contributing roughly 4.5 percent of GDP[23]. Palm production generates economic, environmental and social impacts for Indonesia - both positive and negative. Although highly lucrative, palm oil is a major source of greenhouse gas emission, accounting for 57 million tons of CO2 equivalent in 2010 in East Kalimantan alone. In fact, in the province, palm oil industry is the largest emitter, with the majority of emissions coming from plantations opened up on peatlands, followed by the deforestation from conversion of forest areas into palm oil plantations. The emission is expected to increase to 67 million tons of CO2 equivalent in 2030 if expansion of plantations continues.

Threats: The main factors affecting terrestrial biodiversity loss and species extinction in Kalimantan's forests are: habitat loss, habitat degradation, overexploitation of biological resources and pollution.

The single largest driver of habitat loss is land conversion for palm oil production, accounting for 26% of deforestation between 2005 and 2010. Presently, the total oil palm planted areas in Indonesia exceeds 9 million hectares – a sharp increase from 3.6 million hectares in 2008. In the last 10 years, the average deforestation rate associated with palm oil production has been 300,000 ha/year.[24] Expansion potential of oil palm plantation is estimated to be 24.5 million hectares of which 10.3 million hectares are to be realized in Kalimantan up from the current planted area of 3.164 million hectares. Palm oil plantations are expanding into forested areas, including high conservation value (HCV) / high carbon stock (HCS) forest areas. Significant carbon losses ensue, particularly where expansion takes place on Peat Swamp Forest (PSF) areas. Palm oil plantations in Kalimantan now cover 3,164,000 hectares of the state, having expanded nearly 300 percent since 2000. The forest loss led to the emission of 0.41 gigatons of carbon, more than Indonesia's total industrial emissions produced in a year. Researchers calculated that 47 percent of oil palm plantation development from 1990 to 2010 in Kalimantan was at the expense of intact forests, 22 percent at secondary or logged forests, and 21 percent at agro-forests, a mix of agricultural land and forests. Only 10 percent of expansion occurred in non-forested areas.[25] It is estimated that by 2020, full lease development of allocated palm oil lease would convert 9,384,400 hectare of which approximately 90% is forested lands with 41% intact forests, leading to massive carbon emissions.[26]

Palm oil land areas have very low biodiversity values[27] and their expansion causes near total loss of habitat value and causes habitat fragmentation and degradation, heavily impacting on biodiversity and ecosystem services on the island. Furthermore, oil palm monoculture contains lower biodiversity value due to the absence of the major components of forest vegetation, including forest trees, lianas and epiphytic orchids. These structurally less complex habitats consistently support less than half as many vertebrate species as natural forest and on average only 23% of the forest species are recorded in the oil palm (Fitzherbert et al. 2008; Danielsen et al. 2009). Mammals appear to react particularly adversely to oil palm monocultures, with research conducted in

[19] Global Business Guide Indonesia, 2012. Agriculture Overview of Indonesia. Available on the following web:
http://www.gbgindonesia.com/en/agriculture/article/2011/agriculture_overview_of_indonesia.php
[20] Winarno Zain. 2011. Indonesian trade prospect 2012. The Jakarta Post. Available at http://www.thejakartapost.com/news/2011/12/23/indonesian-trade-prospects-2012.html
[21] FAQ: Saving Indonesia's Forests by Diverting Palm Oil to Degraded Lands, WRI studies, The surface of degraded land depends on the definition of degraded land. It is between 6 million and 40 million Ha.
[22] WWF (2012), Heart of Borneo – Investing in Nature for a Green Economy, http://www.hobgreeneconomy.org/en/main-report
[23] USDA http://www.pecad.fas.usda.gov/highlights/2010/10/Indonesia/ (retrieved on 11/02/2010)
[24] USDA http://www.pecad.fas.usda.gov/highlights/2010/10/Indonesia/ (retrieved on 11/02/2010)
[25] Jeremy Hance. 2012. 90 percent of oil palm plantations came at expense of forest in Kalimantan.
26 Carlson et. Al. 2013, Nature Climate Change Volume: 3,Pages:283–287, "Carbon emissions from forest conversion by Kalimantan oil palm plantations"
27 There are a number of studies on this. Between 2002 and 2007, ZSL carried out research in Indonesia to determine the impacts of oil palm on biodiversity, particularly the Critically Endangered Sumatran Tiger (ww.zsl.org/tiger report). Unsurprisingly, this showed that oil palm plantations are a poor substitute for the forest they frequently replace, as only around 15% of forest species are able to utilise the oil palm habitat. Most severely affected are those whose future is already bleak. Reduction of the total area of their primary habitat and fragmentation of what remains means coping with oil palm expansion is an intense challenge for these species. But seemingly worthless areas of unplanted and degraded land, which are often found within and around plantations, could provide crucial 'stepping stones' or corridors between larger areas of forest in the surrounding landscape (ZSL Conservation. 2009. Losing Ground to Oil Palm). See also Nathan Gray, 2011. Palm Plantations are endangering biodiversity. Queen Mary university, London. http://www.confectionerynews.com/Markets/Palm-plantations-are-endangering-biodiversity-say-experts?utm_source=copyright&utm_medium=OnSite&utm_campaign=copyright for a study on the catastrophic impact on palm oil demands on bats and forest fragmentation.

Sumatera reporting that only 10% of the medium to large mammal species present in the wider landscape regularly entered the oil palm monoculture and these were species of least conservation concern (Maddox et al. 2007). The most endangered species tended to be the most sensitive, such as the Critically Endangered Sumatran tiger, which almost never entered the oil palm monoculture. Those species that frequent the oil palm monoculture such as sun bears and pangolins, are increasingly susceptible to being captured for food, wildlife trade or persecuted as conflict animals.

Furthermore, palm oil production causes extensive land degradation and soil erosion associated with deforestation, forest fires and peat land drainage. Palm oil production expansion into forests and peatlands leads to habitat loss and increased GHG emissions, while fertilizer application is said to cause water contamination, impacting biodiversity and local community livelihoods derived from fishing and honey making. Palm oil plantations were reported to have caused water supply problems downstream as a result of water use and fertiliser and pesticide application. These threats pose not only a negative impact on biodiversity and ecosystem services, but also have a significant economic cost to the provinces and the nation, from loss of natural capital. Underlying causes include population growth, poverty, unclear land titles and tenure rights and weak natural resource governance.

Long-term Solution: In order to safeguard Kalimantan's globally significant biodiversity, it is critical for Indonesia to pursue a green economic growth path. This means pursuing low carbon and resilient economic growth for the island in a way that values and invests in natural capital while supporting climate change mitigation and adaptation. Improvement in palm oil siting and forest landscape planning and management in Kalimantan is one of the most important components for achieving the green development vision.

Barriers: The achievement of the solution proposed above, however, has to date been impeded by a number of barriers.

Barriers	Description
Biodiversity and ecosystem services, and their values are not integrated in policies and practices for forest area and strategic plantations/commodities production planning and management at the national and island level	Although the government is making efforts to reduce emissions from deforestation and improved forest governance, there are a number of weaknesses in the current policy framework that hinder the government's ability to exercise adequate oversight of remaining tracts of high biodiversity multiple forest landscape. Forest function classification and standards for criteria for decision making is suboptimal. Concession granting process is weak in terms of integrating biodiversity and carbon issues in decision making for granting and siting of concessions. There are also perverse incentives. For example, the National Land Agency's "abandoned land" regulation encourages concession holders to totally clear the areas that are allocated to them. Capacity of the national provincial and local agencies to support FMUs and to monitor compliance and enforcement of sound land uses are suboptimal. Moreover, it is estimated that there are conflicts in 17.6 – 24.4 million ha of forest taking the form of overlapping claims between state forest claims and claims from customary communities (adat), other local communities, village/hamlet developments and the presence of other sectoral permits that are actually located in forest areas. In addition to conflicts over forest area rights, forestry problems have become increasingly complex with the presence of institutional problems, including poor central-local government relations and prioritization of forest protection and rehabilitation over resolving root problems such as overlapping claims. Furthermore, despite the growing recognition of the impact of the plantation industry on biodiversity and ecosystem services as well as greenhouse gas emission, these issues are not properly considered in forest area planning and decision making. Natural capital loss is not accounted for, accelerating undesirable conversion. In May 2010 the President declared a policy to develop oil palm plantations only on 'degraded land' instead of forest or peat land. While the Agriculture Minister announced in mid-2010 that by January 2011 all Indonesian palm oil growers must comply with a new environmental certification system to be known as Indonesian Sustainable Palm Oil (ISPO), in practice, policies and practices do not provide necessary conditions for such improvements. Based on the Ministry of Agriculture's palm oil expansion policy, decisions on palm oil siting are made by district and provincial governments if the location is outside forest areas. If the location is within the state forest areas, the Ministry of Forestry makes the decision to change the forest area status to conversion forests which are designated for release from the national government's domain for agricultural utilization (mostly plantation systems, in particular oil palm). The Ministry of Forestry and subsidiary Provincial Agency for Natural Resource Conservation (BKSDA) lacks clear mandates and sufficient capacity for exercising adequate oversight on the land use planning and oil palm concession allocation processes particularly for location outside of state forest areas, resulting in biodiversity issues being virtually ignored. Spatial planning processes and land use regulations fail to prevent concessions being awarded within forested areas, especially, the HCV areas. This is also because of the fact that there is inadequate data and information regarding location and significance of HCV forest, given the slow and costly nature of such assessments at a finer local level. There is also no systematic landscape level forest-safeguarding plan (conservation needs assessment) that can guide land-use planning. Moreover, the current site-level approaches for determining concession areas neglect aspects emerging from landscape level analysis, particularly those transcending administrative (e.g. district-level) boundaries. This also makes it difficult to have a holistic plan for optimized siting as well as land swap arrangements. Inter-district swap is not attractive

Barriers	Description
	to districts that have to forgo new plantation development and associate incomes from the development. There is a need for an enhanced national and/or provincial level framework and capacity to be able to incentivise and facilitate the use of degraded or abandoned land for new oil palm plantation, as well as enhanced capacity for environmental impact analysis that is required for granting palm oil business licenses. Lack of palm oil specific management guidance under HCV area assessment system, unclear land titles and tenure rights in many areas also accelerate the problem. Prioritizing oil palm development on already degraded land and safeguarding these forests would avoid emission of 134.7 million CO_2 equivalent (36.7 million tons of Carbon). This is however only possible if the identified barriers are removed. 28
Insufficient capacity of provincial and local stakeholders to implement integrated forest landscape management at the landscape level	At the district and landscape level, capacity is also lacking to ensure application of biodiversity mainstreamed integrated forest landscape planning and management, as well as ensuring biodiversity friendly plantation estate design and production practices. District level land use plans are often not compliant with the national and provincial level plans and there is little stakeholder participation in land use planning processes. HCV forests are not well known locally, resulting in reckless decision making for forest conversation. This sometimes results in the situation that HCVs being conserved within plantation concessions are subsequently handed over to the district government and reallocated to other concessions which will convert the HCVs into plantation, nullifying the national efforts. In addition, capacity of producers is very low when it comes to biodiversity conservation, species management and forest fire management, as well as human wildlife conflict mitigation and management. Significant progress has been made to improve the actual production practice of oil palm cultivation, through certification schemes such as the RSPO and ISPO. However, the uptake of the certification schemes is still low. In Kalimantan, only 7 concessions have been RSPO certified29. The primary focus of the ISPO is to ensure legal compliance according to the Indonesian laws and regulations which serve as the baseline of sustainability standards30. The government aims to make the ISPO standards mandatory and have all the palm oil estates certified under ISPO by 201531. However, local government's compliance monitoring and extension capacity is extremely weak to incentivize and monitor good practice. Furthermore, the majority of palm oil small scale producers are poor, with insufficient knowledge and capacity for obtaining certification. Extension and support services from the provincial and district government agencies is insufficient.
Insufficient incentives for safeguarding high value conservation forests	Underlying barriers for the aforementioned issues are the inadequate or sometimes inappropriate incentives for encouraging improvement in concession siting and design, use of degraded areas, and agricultural production practices. Current regulations enable incentives to be linked to both spatial plans and capital investment plans, providing an important opportunity for the project. But there is also risk, since incentives can work both ways, i.e. by encouraging plantation investment. In addition, there is uncertainty regarding 'appropriate' (in environmental economic terms) levels of plantation production/extent within production landscapes. Although there have been a number of attempts to value forest ecosystem services, few payments for the services have been realized, providing little incentive for maintaining natural forests or employing sustainable practices. Resources are not yet flowing to producers to avoid deforestation as a result of REDD-+ or other initiatives. Where there have been attempts to incentivize better siting and sustainable production methods, they have been insufficient, thus far, to eliminate the problem. For example, price premiums for RSPO certified product are low and may not cover the cost of certification. There is no incentive to encourage land swaps to use degraded lands. Uncertain costs and benefits associated with biodiversity and ecosystem service loss make comparison of trade-offs in cases of land swaps, etc. more difficult.

Baseline: The President of Indonesia has committed to reduce GHG emission by 26% unilaterally and 41% with international support by 2020. In order to achieve this, the National Action Plan for Reducing Greenhouse Gas Emissions (RAN-GRK) was developed in 2011. According to the rapid assessment of potential land management interventions as part of the HoB Green Development planning, HoB forests within the HoB Strategic National Area in Indonesia could potentially contribute to Indonesia's action plan to achieve emission reductions RAN-GRK by avoiding emissions of 941.7 million tonne of CO_2 equivalent. At a conservative carbon price of US$ 2/tons, the total value is US$ 513.2 million or US$ 51.3 million per year over 10 years.

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[28] As above.
[29] WWF. 2013. WWF Assessment of RSPO Member Palm Oil Producers 2013. Available at
http://wwf.panda.org/what_we_do/footprint/agriculture/palm_oil/solutions/responsible_purchasing/wwf_assessment_of_rspo_member_palm_oil_producers_2013/
[30] Law No. 18/2004 on Plantation, and Ministry of Agriculture Decree No. 19/Permentan/OT.140/3/2011 on ISPO Guideline.
[31] Dina J.E. Harsono. 2011. Analysis of ISPO: A Qualitative Assessment on the success of factors of ISPO. Graduate school. Bogor Agriculture University.

To ensure the implementation of the RAN-GRK, the Presidential Delivery Unit for Development Monitoring and Oversight **(UKP4) was set up in 2009.** In order to reduce emissions from land use and land use changes and forestry (LULUCF), which accounts for more than 85% of the country's emissions, the Government established the REDD Commission in 2008 under the Ministry of Forestry, to manage the implementation of REDD+. This Commission was later replaced by a Presidential Task Force for the Preparation of REDD+ Institutions connected to UKP4. This Task Force has a strong mandate to address the cross-sectoral and multi-stakeholder problems of deforestation and forest degradation, which contribute the largest share of Indonesia's GHG emissions.

The *Letter of Intent (LOI)* between Government of Indonesia and Norway was signed in May 2010 and provides $US 1 billion for REDD+ finance between 2010 and 2016. In signing the LOI, the Indonesian Government announced that it is placing a two-year moratorium on the granting of new concessions to clear natural forests and peatlands, which has been extended until May 2015. Out of US$ 1 billion support, US$ 200 million is allocated for the first two phases (preparatory and readiness up to 2014). US$ 800 million is provided to reward performance based emission reductions. Central Kalimantan Province has been selected as the main pilot province for REDD+ implementation under the LOI.

The Government also invests in establishment of Forest Management Units (FMUs) as per the Forestry Law (Law No. 41/1999) and the government Regulations No. 6/2007 and No. 3/2008 on Forest System Establishment, and the Preparation of Forest Management Plan and Forest Utilisation.

Recognising the impact of palm oil production on biodiversity and the environment as well as its contribution to greenhouse gas emissions, the Indonesian government and the Indonesian Oil Palm Growers Association is beginning to respond to market demands and international pressure to increase the sustainability of oil palm grown in the country. In May 2010, the President declared a policy to develop oil palm plantations only on 'degraded land' instead of on forest or peat land. The Agriculture Minister announced in mid-2010 that by January 2011 all Indonesian palm oil growers must comply with a new environmental certification system to be known as a sustainability effort for palm oil was started by Roundtable on Sustainable Palm Oil (RSPO) through its sustainable certification initiative. The RSPO aims to divert the palm oil frontier away from primary forests and areas of high conservation value and it proscribes land-grabbing, insisting that all lands must only be acquired with respect for the rights of local communities and indigenous peoples, including respect for their right to give or withhold consent to land purchases or leases. RSPO guidelines recommend that new palm oil plantations do not replace HCVAs or areas required to maintain or enhance them. Indonesia is the second largest producer of certified sustainable palm oil (CSPO). It is estimated that RSPO production reached 3.5 million tons in 2010, and approximately 9% of Indonesia's palm oil output is certified by the RSPO. Borneo recently had 145,000 ha of RSPO certified plantations, which are mainly operated by large international producers, including 12,000 ha that fall within HoB boundaries.

However, several Indonesia palm oil companies complained that RSPO is complicated, hard to implement, and kept on changing (IPOC, 2010). The cost is high, especially for smallholders, auditing process is lengthy, and it will take time for widespread participation in Indonesia (Suharto, 2010). The Government of Indonesia responded to the companies' complaints. One effort set by government to gain and to ensure the sustainability of the Indonesian palm oil industry is through developing a sustainability standardization called the Indonesian Sustainable Palm Oil (ISPO) Scheme. ISPO is different from other voluntary palm oil certification schemes, such as RSPO, in that it is a compilation of existing Indonesian regulations, and is thus mandatory and reflective of the sustainability guidelines and aspirations of the Indonesian Government and other domestic stakeholders. Although ISPO is equipped with a certification mechanism similar to voluntary schemes, the essence of ISPO is to facilitate palm oil producers/mills to comply with the law, which in Indonesia can be challenging due to overlapping legislation or unclear guidelines.

The ISPO Standards consist of Principles, Criteria and Indicators. Guidelines are included to help the user understand the Criteria. ISPO Standard is a dynamic because it has to follow government regulations. If new regulations are approved by the government, they have to be adopted by ISPO. On the other hand, if the regulation is not valid any more, it has to be withdrawn from the ISPO standard. The implementation of ISPO is mandatory. This differs from the RSPO standard implementation which is voluntary. MoA has developed a multi-year plan to implement ISPO. It estimates that approximately 3 million US dollar per year would be necessary from the national budget to support the operation of ISPO. The Indonesia Palm Oil Commission (IPOC or GAPKI) fully supports the government plan on ISPO.

Another encouraging sign is the development of Low Carbon Growth Plans for East and Central Kalimantan, which includes specific plans for emission reductions through palm oil development on degraded areas rather than on forested lands.[32] One of the top 5 initiatives that would significantly reduce East Kalimantan's emissions is the use of degraded

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[32] Dewan Nasional Perubahan Iklim (Indonesia) & East Kalimantan Government (2010), East Kalimantan Environmentally Sustainable Development Strategy

land for palm oil expansion. It is estimated that this initiative can abate emissions of 25 million tons of CO_2 equivalent by 2030. In recognition of this potential, the establishment of an organization to facilitate land transactions involving palm oil on degraded land is under consideration.

The tri-nation Heart of Borneo Initiative spearheaded by the WWF, a transboundary collaboration among Brunei, Indonesia and Malaysia, aims to enable conservation and sustainable development that improves the welfare of those living on the island while minimizing deforestation, forest degradation and the associated loss of biodiversity and ecosystem services. With a budget of US$ 13.2 million from the GEF, the HoB has produced the ground breaking report entitled HoB – Investing in Nature for Green Economy in 2012 clearly outlining the business as usual scenario and the alternative green growth scenario for the future of the HoB region. A priority challenge facing the three governments—one highlighted in a recent three-country publication, Financing the Heart of Borneo: A Partnership Approach to Economic Sustainability—is the need to harmonize HoB plans and current national and sub-national development plans in order to reflect economic, social, climate, biodiversity and poverty reduction objectives. The Government of Indonesia has identified three potential government finance mechanisms. These include Special Purpose Fund (Dana Alokasi Khusus or DAK), a direct grant agreement with selected districts and a Regional Incentive Fund (Dana Insentif Daerah). In the future, these mechanisms could incorporate performance- based reward and incentive schemes to encourage conservation and sustainable practices. Two 'Conservation Districts' within the Heart of Borneo, specifically Kapuas Hulu and Malinau, have been selected as pilots to become areas where development activities rely on the fair and wise utilization of natural biodiversity and natural resources based on incentive schemes

The Project: The incremental approach can be summarised as follows: The government of Indonesia has clearly identified safeguarding of forest biodiversity and ecosystems, and improvement in strategic plantations/commodities siting and management as priorities for meeting its biodiversity conservation and emission reduction goals. However, despite strong commitment and progress made to date, actions are not being taken to concretely remove the systemic and institutional barriers to achieving the required changes quickly, despite the urgency of the issue of deforestation and associated biodiversity and ecosystem service losses. In the baseline situation, the insufficient policy framework and capacity for high value conservation (HVC) forest protection and for pursuing green growth in strategic plantations/commodities sector will mean that threats from this sector to the biodiversity and ecosystem services in Kalimantan will continue to grow, and will lead to further habitat fragmentation and destruction, as well as loss of emission abatement and associated revenue opportunities. In the alternative scenario enabled by the GEF, systemic and institutional barriers to improved strategic plantations/commodities siting and plantation management will be removed at the national, provincial and landscape levels, backed by creation of incentives for making the plantation expansion policy compatible with green development. Biodiversity and ecosystem services will be mainstreamed in policies and practices for forest are planning and management, land allocation for strategic plantations/commodities development, through improved forest classification system, land-use planning processes and an increased mandate and capacity of the forestry sector for ensuring the shift from biodiversity destructive strategic plantations/commodities siting to optimal siting with much improved management practice. This is expected to result in significant reduction of HCVF conversion as well as associated greenhouse gas emissions. At the 3 target landscapes, targeted stakeholder capacity development support and local level integrated land use planning will demonstrate improvement in land allocation, increased use of degraded lands for new plantations and result in a sharp decrease in natural forest conversion, demonstrating improvement in biodiversity conditions. Piloting of incentive packages will further strengthen the aforementioned action and increase the potential for sustainability and scale-up.

Component 1: Forest ecosystem services and biodiversity mainstreamed in national and provincial policies and decision making processes for forest area planning and management

This component will focus on the policy framework and decision making process of forest area planning, allocation and management at the national and provincial levels. PPG will conduct in-depth analysis on the forest area classification and planning, concession granting and land use planning processes, which will inform project's actions to improve the system so that the plantation expansion strategy will be implemented with minimal destruction of remaining forest cover, in particular HCV and HCS forests in Kalimantan, conserving biodiversity and avoiding a significant amount of emissions. The main strategy of the component is to mainstream forest ecosystem services and biodiversity in national and provincial policies and decision making processes. With the project, the Ministry and other key stakeholders including the Ministry of Agriculture, Ministry of Home Affairs and National Land Agency and the Ministry of Environment, will have improved capacity for internalizing the natural capital values of HCV forests in decision making of planning, allocation and management, resulting in significant reduction in expansion of plantation areas in natural forest areas and associated impacts on forest ecosystem services and biodiversity, simultaneously avoiding GHG emission. Conversion of HCV forests

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will be avoided through optimized siting of new plantations and design and management of already leased areas, which will be measured with respect to HCV forest area and/or location, compared with the reference deforestation level to be determined during the PPG.

The project will support enhancing the policy framework and capacity of the Ministry of Forestry and the above mentioned key agencies as applicable for integrated decision making for forest area planning and capacity and improved oversight of remaining tracts of high biodiversity multiple use forest landscapes including plantation and already leased but undeveloped areas. This will enable the Ministry to better align national forest planning with the government priorities such as biodiversity conservation, emission reduction and sustainable oil palm expansion through use of degraded areas. The project will support improvement in forest function classification, based on physical conditions, ecosystem functionand other natural capital valuations, and access to relevant and reliable data sets and standard criteria for decision making. The project will also strengthen existing data management systems by upgrading relevant databases, standardizing data provision methodologies and training data managers at different levels (national and sub-national), in the context of the recently launched Indonesian 'one map' policy for natural resources. It will further integrate the above results into the national forest planning document which guides land-use planning, and create a monitoring mechanism to ensure compliance with the national 5 year development plan targets. The project will also support a revision of concession granting processes and land use regulations to ensure that biodiversity and carbon considerations are fully integrated. Necessary policy revisions to ensure concessions are awarded according to national and local spatial plans and the above conservation plan. The project will further facilitate revision of relevant regulations to enable plantations to conserve forests within concession areas. Capacity to apply the new data into the national forest planning and decision making process will be supported, as well as strengthening of compliance monitoring and enforcement system.

The component will support development of a systematic forest-safeguarding plan (forest conservation plan), ensuring connectivity between major forest blocks and determining HCV areas and HCS areas within Kalimantan. The project will support actual use of the assessments in mainstreaming actions including appropriate landscape design and management within plantation estates (component 2). The forest-safeguarding planning and mapping will further provide clear basis for land swaps from priority areas to idle and degraded low conservation value areas. The exercise will involve BAPPENAS and the Ministry of Forestry, Ministry of Public Work, National Agency for Geospatial Information, Provincial Governments & District Governments, resulting in an inter-ministerial plan. Plans for compliance monitoring and enforcement will also be developed and implementation will be supported. In addition, the component will support establishment of a mechanism to promote use of "degraded land" and allocation to avoid fragmentation and sustain larger scale ecological functions and resilience. The mechanism includes a land swap system to shift plantation development within already licenced areas and new areas for concessions from conservation priority areas to idle and degraded low conservation value (LCV) areas, adjusting national and local spatial plans accordingly. It also includes facilitation of agreement between relevant stakeholders including licence holders on eligible areas, and clarification of processes with necessary training and guideline documents. The component will address institutional and economic barriers, including opportunity costs (lost tax revenues and employment etc.) for local governments and spatial planning/land swaps spanning more than one district or province. It will further address the issue of agricultural smallholder encroachment into state forest lands including national parks, in close collaboration with the Ministry of Agriculture and local governments. Project will support targeted awareness creation activities targeting parliamentarians who need to approve conversion of any state forests, and other decision makers. Information management system on concession award management will be improved, and grievance mechanisms will be established to increase transparency.

Component 2: Strengthened and expanded implementation of best practises in the plantation sector in 3 target landscapes in Kalimantan

This component will focus on demonstrating the sustainable and integrated management of forest landscape in three target forest and plantation landscapes in Kalimantan. The component will apply the systemic improvements at the national and provincial levels enabled in component 1 and its philosophy and principles behind the improvement at the landscape level. The component will demonstrate sustainable and integrated forest landscape management in at least 100,000 ha of the target forest and plantation landscapes including already leased but not yet developed areas, resulting in improved habitat status and connectivity. Achievements of the outcome will be indicated by (i) Biodiversity Health Index method to be applied for each landscape; (ii) increase in the areas of certified production areas; (iii) increased use of degraded lands for plantation expansion, and (iv) reduced deforestation rate compared with the business as usual scenario to be established during the PPG. Institutional capacity development will be also gauged using the UNDP Capacity Development Scorecard applied for relevant provincial and/or local agencies. Actual target landscapes will be selected using robust criteria including biodiversity importance (e.g. corridor areas between intact forest blocks and/or conservation areas), opportunity

for starting the estate design from the beginning (e.g. areas that are already allocated as concessions but not yet developed), and willing stakeholders on the ground.

The project will support development and application of the district level forest-safeguarding land use plans for the target landscapes. This is to ensure legal clarity and ownership of the biodiversity mainstreamed land use planning process by local governments. This will include a review of HCVs in the landscapes including within the plantation concession areas, and development of a plan for conserving these HCVs with the agreement of key stakeholders, following on the legal basis prepared in component 1. The plan will identify degraded lands suitable for productive uses and integrate them in the land use plans. The project will further facilitate local communities to legally utilize lands in areas surrounding forest areas, by reflecting community needs into local spatial planning processes.

The project will support improved capacity of stakeholders and communities in the target landscapes to participate in decision making for land allocation, forest plantations and palm oil estate design and management to ensure that the national and local government decisions and planning are adequately consulted and owned by local communities. The project will establish 3 provincial plantation platforms to create fora for stakeholder coordination and joint actions for greening of production practices and commodity supply chain. Environmental and social safeguard mechanisms including FPIC with regards to plantation development will be supported. Formation and facilitation of community groups for sustainable production and effective conservation action, and creation of benefits from conservation actions and benefit sharing mechanisms will also be supported.

Technical support will be provided to improve biodiversity management in forest planning and strategic plantation/commodity estates in the target landscapes. Technical support will be provided for both large and small scale producers, related to management of forest areas in plantations such as management of species, human-wildlife conflict and fire etc. At the same time, local government's capacity for compliance monitoring, human wildlife conflict management support and extension services for biodiversity friendly strategic plantations/commodities estate management practices will be strengthened. Key agencies include KPH, local governments and local branch of the national government agencies (BKSDA, BPN, BAPPEDA, KLH). The project will furthermore facilitate development process of relevant local regulations.

Component 3: Creation of incentives to safeguard forests

This component will support incentive-based approaches to encouraging the improvements that are to be engendered under the first two components. This will include the careful design of approaches – e.g. performance-based regional incentive mechanisms, fiscal incentives to encourage certification, REDD+ style benefits sharing, etc. – and the actual realisation of sustainable incentive payments. Achievement of the outcome will be gauged with the establishment of new mechanisms and amount of actual incentive payments flowing from diverse sources channelled to provincial and local governments and producers, resulting in integrated forest land use planning and management practices. The component will likely have national level as well as provincial and district level aspects, as it ties in with the on-going work of the government. The component will support establishment of a detailed quantitative case for the economic, environmental and social benefits of a package of strategic plantation/commodity related incentives, including landscape-level scenarios estimating benefits / costs of various levels of strategic plantation/commodity expansion. Pilot incentive packages will be developed and tested at the target landscapes including the already leased but undeveloped lands, tapping various funding sources including REDD+ funds, blended with technical co-operation support under components 1 and 2. Spatial assessment of multiple benefits / values (carbon, biodiversity, ecosystem services, etc.) will be conducted to complement HCVA/HCSA assessment and associated land use planning decision making as to underpin regulatory enhancement (component 1). Support and application of the aforementioned Special Purpose Fund, a direct grant agreement with selected districts and a Regional Incentive Fund will also be explored. New incentives will also be designed and established with specific objectives to reduce/halt deforestation and incentivize land swaps, making them economically viable and attractive. This could include a small grants programme based on PBP (Performance Based Payment) principles and the establishment of a cross sector forum to address the issues at different levels. Institutionalisation of such a programme will be supported.

Global environmental benefits: Global environmental benefits are improved forest area planning and decision making mechanisms for land allocation and improved land management in the lowland and montane forest landscapes in Kalimantan, covering approximately 26 million ha, safeguarding the habitat of an array of aforementioned globally significant biodiversity including a large number of endemic species including pygmy elephant, Borneo orangutan, and clouded leopard. Through improvement of systemic and institutional capacity as well as landscape level demonstration, the

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project will significantly reduce threats from strategic plantations/commodities mainly from palm oil production sector by making land allocation decision making process and plantation estate design and management compatible with biodiversity conservation and maintenance of multiple ecosystem services. In addition, by developing a range of financial incentives for better land use planning and management, the project is directly contributing to arresting and reversing the global trends in land degradation, in particular deforestation. Using the SFM incentive of the GEF will achieve what would not be possible with biodiversity and land degradation funding alone, and would help create simultaneous biodiversity and carbon benefits, such as: (1) avoiding an estimated 269 million tons of carbon emission by prioritising plantation development on already degraded lands in Kalimantan and would (2) safeguard forest areas currently subject to concessions in the area[33].

Innovativeness, Sustainability and Potential for Scale-up: The proposed project addresses the drivers of biodiversity loss associated with deforestation in particular from strategic plantations/commodities sector in a holistic manner, which has never been done in Indonesia to date. The project aims to improve the decision making process for forest area planning and management, as well as siting and granting of plantation concessions so that it will better align with the government's policy for utilizing degraded and/or abandoned lands as opposed to natural forest areas. It will also demonstrate the best practice landscape planning and management in the forest and plantation landscapes, creating connectivity between forest blocks and improving species and ecosystem management at the landscape level. The fact that the project will directly contribute to the country's emission reduction action plan as well as sustainable forest management and sustainable palm oil initiatives of the government will ensure that the outputs and outcomes of the project will be sustained beyond the project lifespan. The improved concession granting process and the demonstration, coupled with capacity development of related entities, will together build a foundation for sustainability and scaling up of the landscape management models. Additionally, by creating policy and financial incentives for biodiversity friendly palm oil production, the project will further increase its sustainability quality and scale-up potential.

A.2. Stakeholders. Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes X/no☐) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:

The table below summarizes the key stakeholders and their roles in project preparation and implementation, as well as its formulation. The list is non-exhaustive and will be completed during the formulation of the fully-fledged Project Document.

STAKEHOLDER	MANDATE AND RELEVANT ROLES IN THE PROJECT
Ministry of Forestry	MoFor is responsible for, *inter alia*, protection of forests and wildlife resources, planning and management of conservation area and species conservation. It will be the lead government agency for the project. The Directorate General for Forestry Planning is responsible for classification and mapping of forest areas as well as decision making for forest class changes including release of conversion forest for other usage such as palm oil production.
BAPPENAS	National government agency responsible for national economic and development planning, as well as development of strategies and policies in determining financial allocations for the various sectors of the national economy. Long- and medium-term plan and annual implementation plan are central in the spatial planning process and will therefore have a critical role in implementation of the project.
REDD+ Agency	This is a newly legal entity enacted for REDDD+ through a Presidential decree No 62/2013 with the objective to achieve emissions reduction from deforestation and forest degradation and peatland and to ensure that this efforts are managed in an effective, efficient, equitable and sustainable manner. This agency will not only deliver REDD+ commitments as agreed in the partnership with Norway, but will also create confidence within the international community to invest in Indonesia's unique forest ecosystems and globally important climate services.
Ministry of Environment (MoE)	The Ministry is the CBD focal agency and houses the national GEF Secretariat headed by the GEF OFP. It has the overall responsibility for biodiversity conservation and for implementing the environment impact assessments (AMDAL in Indonesian). The MoE role in the project will include strengthening of the AMDAL process and oversight and model implementation at the project demonstration sites.
Ministry of Agriculture. (MoAg)	The MoAg responsible for agricultural development including the palm oil sector. It is also responsible for developing and implementing the ISPO (Indonesian Sustainable Palm Oil) standards which is expected to be a mandatory system for all the plantation estates in Indonesia. In this project, the MoAg will have a key role in mainstreaming biodiversity in concession allocation, development and management, facilitating good practice of the large and small holders as well as ensuring compliance with the ISPO guideline in the field.
Ministry of Home	This Ministry is responsible for national spatial planning and is coordinating agency the provincial and district governments. The MOHA will play a key role within the project in mainstreaming the biodiversity in the spatial

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[33] WWF, HoB Green Economy, p36

STAKEHOLDER	MANDATE AND RELEVANT ROLES IN THE PROJECT
Affairs (MOHA)	planning process and facilitating effective involvement of sub-national government.
National Land Affairs Agency (BPN)	The Agency is responsible for registration of all land property matters including palm oil estate registration but excluding those pertaining to the mining and forestry sectors. The BPN will be a key player in strengthening the palm oil license issuing process.
Ministry of Public Works	The Directorate General of Spatial Planning of the Ministry of Public Works has been involved in the implementation of the activities under the National Spatial Planning Coordination Board. The Ministry will have an important role to play in any spatial plan revision process.
Sustainable Palm Oil National Platform	The platform was established in 2012 as a coordination forum on sustainable palm oil issues at the policy level, providing inputs and recommendations to policy makers. The membership includes all levels of government, private sector and CSOs/local stakeholders. The platform could act as a steering or advisory mechanism for the project. Establishment of provincial level platforms are also planned.
Provincial Governments (West, Central and East Kalimantan)	The provincial governments have the oversight function for determining land uses within the province, as well as the day-to-day management of the production and protection forests in the province via the Provincial Forestry Agency. Three Kalimantan provinces are preliminarily considered for the project's target provinces.
Provincial Agency for Natural Resource Conservation (BKSDA)	A subsidiary of Directorate General of Forest Protection and Nature Conservation (PHKA) with authority to manage conservation areas other than national parks. It is also responsible for conservation of flora and fauna, wildlife trade control etc. The BKSDA will have a key role in the project in the components related to biodiversity planning and conservation actions at the landscape and site levels. .
BAPEDAL	It is a provincial subsidiary agency of the Ministry of Environment and provides the provincial governors and district heads with advice pertaining to issuance of palm oil license based on environment assessment. BAPPEDAL's role in the project will relate with the process of AMDAL at the pilot province.
AMAN (National alliance of indigenous peoples)	AMAN will have a critical role in ensuring indigenous peoples' concerns are incorporated into spatial planning and project activities. It will be a key institution in ensuring social safeguards for the project and supporting resolution of conflicts at site levels.
Indonesia Sawit Watch	This NGO specialising in palm oil issues is knowledgeable on all socio-environmental aspects of palm oil. Its role in the project will be as one of key resource person/agency from non-government organization.
International NGOs (WWF, WRI, ZSL etc.)	FFI has been working in Indonesia in the field on various forest conservation and traditional agriculture development etc, including palm oil related projects. These projects support sustainable production through private-public partnerships for landscape-based HCVF assessments in West Kalimantan, and develop carbon-finance mechanisms for HCVF and peatlands in oil palm dominated landscapes in Kalimantan. Therefore the FFI will be able provide both direct and indirect technical support to the project and possibly play a role as co-implementer on the ground. WWF has been leading the tri-nation HoB initiative, which has done substantial amount of work in the landscape approach to conservation and generated a significant amount of information that is relevant to this project. Through the HoB, WWF has set in motion the process for green development within HoB. WWF will therefore be a very important collaborator for this proposed project and a potential co-implementer on the ground. WRI has also had some projects related to sustainable palm oil production, and ZSL, a UK based NGO, has been working on some palm oil initiatives in Sumatra and Kalimantan. These NGOs could be important resource organisations for the project.
GAPKI - The Indonesian palm oil industry association	GAPKI brings together public and private estates and co-operatives, collectively responsible for half the total oil palm estate and smallholding area under the Plasma Scheme. GAPKI represents the national and international interests of members, promotes palm oil in support of the government policies. GAPKI will play a key role in implementation of the project in particular under component 2.
Certification Bodies	Certification bodies such as the TUV, PT Mutu Agung Lestari, PT Sucofindo will have a role in the project for issues of palm oil estate certification.
ISPO Commission	The institution is responsible for the implementation of the ISPO standards, thus has a critical role in component 2 of the project.
Pusdiklat Perkebunan	An institution to provide training for ISPO standards. The Pusdiklat's role in the project will be one of resource person/agency and potential candidate for implementing of particular activity of the proposed project.
UNDP	At the request of the Government, UNDP will serve as the GEF Implementing Agency (IA) for the project. In this role, UNDP will ensure project execution on time, on scope and within budget and provide technical quality assurance. The project assurance and support functions will be provided by the UNDP Indonesia Country Office as well as UNDP Asia-Pacific Regional Centre which houses technical advisors for these projects.

A.3. Gender Considerations. Are gender considerations taken into account? (yes X /no☐). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

UNDP systematically integrates gender equality and a social inclusion perspective in programme/project planning and implementation. This is to ensure equal participation of both women and men and people from different economic and social backgrounds in project planning and decision making, in order to make certain that neither of the groups is disadvantaged by the proejct activities and will derive equal benefits from the proejct activities. In order to achieve gender mainstreaming in this project, PPG will ensure equal participation of men and women so as to fully take into account the different perspectives, priorities and socio-economic realities that women and men face. The project preparation will ensure equal participation of women for planning and decision making, among the key stakeholders, including the national, provincial and local government agencies and local communities. Project design pertaining to institutional strengthening and capcity building will ensure target trainees will include both sexes and instituional development will mainstream gender in the instituitonal system and decision making mechanisms. At the landscape level, the project will carefully examine local conditions pertaining to local livlihoods, resource use and land tenure and management systems, and factors affecting the livelihoods of women and men in relevant communities. Consultation sessions will be held to obtain views and inputs of a wide range of local stakeholders in selected landscapes to develop the project plan at the landscape and to develop a robust stakeholder involvement plan with full gender considerations. Gender disaggretated target and baseline will also be established as part of the project monitoring plan.

A.4 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

The following risks have been identified. They will be closely examined during the PPG phase and will be updated with concrete mitigation measures. The following risks have been identified. They will be closely examined during the PPG phase and will be updated with concrete mitigation measures.

Risk	Level	Mitigation Measures
Influential stakeholders who benefit from forest conversion and overexploitation of resources undermine the biodiversity mainstreaming efforts	Medium to High	It is recognized that some stakeholders will hold negative views towards biodiversity mainstreaming actions, fearing losing their benefits from plantation development processes such as clearance of the forests in preparation for palm oil plantation development with the benefits from sales of the timber. If these stakeholders exert political pressure to hinder the mainstreaming actions, project's outputs and outcomes could be compromised. During the PPG phase, a thorough institutional context analysis will be conducted as part of the stakeholder involvement planning, to make sure that interventions are designed based on the existing complex political and economic conditions, with sound strategy for engaging with potentially negatively-minded stakeholders. The project interventions in creating more transparent mechanisms for decision making and targeted awareness creation for the parliamentarians and key decision makers are also expected to contribute to reducing this risk.
Recent change of the government as well as future turnover of high level decision makers at the national and sub-national levels, leading to change in the government's commitments for emission reduction and sustainable palm oil sector growth	Medium	The project will mitigate this risk that is inherent to any project of this nature, by totally aligning the project objectives and outcomes with the mainstream and internationally recognized government policies and strategies, including the official emission reduction targets, national REDD plus strategy and actions that are expected under the LoI. In addition, by addressing the systemic and institutional dimensions related to plantation concession allocation decision making, as well as associated capacity development, the project will ensure that any improvements in the system will be fully institutionalised within the government process in order to avoid sudden change of practices because of changes in key decision makers.
Long standing issues related to site level social conflict and land tenure hinders implementation of the landscape level components of the project	Medium	Failure to tackle the issue will likely to negatively affect project progress and impact. During the PPG phase, the issues will be carefully looked at through the institutional context analysis through discussion with appropriate agencies and local community institutions to find the right approach to minimise the risks. In the process of selecting the target landscape during the PPG, this risk will be fully taken into consideration to mitigate the risk in project implementation.

Government agencies at different levels do not fully cooperate and coordinate activities effectively for pursuing improvement in the palm oil concession granting process and landscape planning and management	Low	Coordination and joint actions between the key agencies especially the Ministry of Forestry (and its divisions), the Ministry of Agriculture, Ministry of Home Affairs and National Land Agency and the Ministry of Environment will be critical in addressing the bottleneck in the long chain of the process that changes status of land from forest to oil palm plantation. Project steering mechanisms will be carefully designed in order to nurture the necessary sense of ownership for the projects by key agencies, ensuring the perception that it is a national project rather than a Ministry of Forestry's project. Existing multi-agency sustainable palm oil programme planning committee (future programme steering committee) will be consulted to see how it can support project implementation and oversight.
Climate change may undermine the conservation objectives of the Project	Low	The Project will work to address the anticipated negative impacts of climate change by increasing resilience of the forest landscape, through promoting sustainable management of large-scale landscape in the HoB. Maintenance of large-scale resilience is critical in securing flow of ecosystem services and avoiding irreversible ecosystem regime shifts, which may be caused by climate induced factors.

A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:

The project is fully aligned with the Commodities IAP. More importantly, the project addresses issues that are **requisite** for the IAP to succeed in a country with the world's largest palm oil production and high deforestation rate that is directly connected to the agricultural plantation expansion. Coordination between this project and IAP, in particular the Indonesia pilot component, will need to be assured throughout the PPG and implementation process. Where appropriate, same landscapes will be selected for producing concerted impact. Coordination will be ensured through the SPO Initiative supported by the UNDP Country Office in Indonesia.

The proposed project is an integral part of the UNDP's Sustainable Palm Oil (SPO) Initiative under the Green Commodities Programme. The SPO Initiative supports a multi-stakeholders approach to address key SPO themes such as low smallholder capacity and productivity and deforestation due to palm oil plantation expansion. The Indonesia pilot component of the IAP supports one part of the SPO Initiative, directly working with the palm oil sector with strong focus on facilitation of public and private dialogues including support for the national and local level commodity platforms and support for smallholder productivity and livelihood improvements. It aims to create the structural changes within the palm oil sector that are required for eliminating negative environmental and social impacts of the palm oil sector.

The SPO Initiative has already established the necessary steering committee and working groups to ensure coordination of various related initiatives. Exact operational modality of coordination will be determined during the PPG phase, including sharing a joint project steering mechanism.

In addition, the proposed project will directly complement the GEF/ADB Sustainable Forest and Biodiversity Management in Borneo, that aims to strengthen sustainable forest and biodiversity management in HoB, through strengthening policies and institutions for sustainable forest and biodiversity management (PA strengthening, enforcement, conservation villages development), and development of PES mechanisms including REDD+. The proposed project's work to improve the forest area planning and management system at the national and provincial level and transform the plantation sector is an essential component for strengthening the safeguarding of biodiversity and ecosystem management in HoB. Focusing on the plantation sector and the forest landscape with existing and earmarked plantation concessions, the proposed project will provide essential models for plantation/forest landscape planning and management. During the PPG, concrete strategies for ensuring the maximum synergies and coordination mechanisms between the projects will be developed. As mentioned above, this project will also directly contribute to achievements of the goals set under the HoB Green Economy initiative. In addition, the project will build on, and collaborate with, the baseline projects described above, in particular the various programmes and projects under the NBSAP and the RAN-GRK under the BAPPENAS, the Norwegian funded LOI initiative and its main pilot in Central Kalimantan for forest degradation incentives mechanism, the Indonesian Climate Change Initiative, the MoFor programmes on HoB. The project will further complement the recent and on-going initiatives related to sustainable palm oil production and forest landscape management, which are managed by various project partners as described in the stakeholder table above. Under the UNDP Country Programme, UNDP has a number of projects and programmes that are directly complementary to this project. This includes the Sustainable Palm Oil Programme, with the Ministry of Agriculture, UKP4 and Ministry of Forestry, which is technically supported by the UNDP Green Commodity Facility. The project will also ensure coordination with the United Nations Office for REDD+ Coordination in Indonesia (UNORCID) and the UN-REDD Programme.

DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes X /no☐). If yes, which ones and how: NAPAs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:

As a signatory of the CBD and other related multilateral environmental conventions, the Government of Indonesia is committed to biodiversity conservation. The project will directly support the Indonesian Biodiversity Strategy and Action Plan (2003-2020). More specifically, it directly supports achievements of the following targets under the IBSAP. Target 3.1: Reduction in the degradation and loss of biodiversity; Target 3.2: Reduction in the deforestation rate of natural forest to zero level in 2020 for lowland forests in Java, Sumatra and Kalimantan; and Target 3.3: Stopping conversion of natural forest. The project will directly contribute to achievement of the national and local mitigation action plan (RAN/RAD-GRK) towards the national target to reduce GHG emissions by 26% formulated by the National Planning Agency BAPPENAS. Over 80% of the emission reduction is supposed to come from the LULUCF sector, requiring actions from the MoF and MoA to reduce emissions from forestry and peatland conversion. Furthering this mandate, MoA issued a decree No. 19/2011 on the development of ISPO, and required the Indonesian palm oil industry to reduce GHG emission from land use change, avoid new plantation on peatland and establish methane capture facilities in palm oil mills, POME (Palm Oil Mill Effluent). This project will contribute towards the President's commitment by strengthening GHG reduction efforts within the ISPO framework. Furthermore, the project will directly contribute to achievement of the targets under the Five Year Strategic Plan of the Directorate General of Forest Protection and Nature Conservation of the Ministry of Forestry covering the 2010-2014 period, including: increase in population of priority species compared to 2008 baseline estimates; 20% reduction in threats to biodiversity on the islands of Borneo, Sumatra and Sulawesi. The project will also directly contribute to achievements of the targets under the Five Year Strategic Plan of the Directorate General of Forestry Planning of the Ministry of Forestry covering the 2010-2014 period, including: (i) forestry macro planning on protection and natural resource conservation, sustainable use, forest and land rehabilitation, and land use/spatial planning; (ii) development of geospatial data and information at national level for forest resource inventory and monitoring; (iii) policy on spatial planning, control of forest resource use and development of forestry strategic data. In addition, the project will contributes to achievement of the Aichi Targets, in particular under the strategic goal B: Reduce the direct pressures on biodiversity and promote sustainable use, Target 5: the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced; Target 7: areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity; and Target 15: ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced.

Indonesia ratified the United Nations Convention to Combat Desertification (UNCCD) on 28 August 1998. In December 2002, the Government adopted the National Action Program (NAP) for combating land degradation. NAP addresses the underlying causes of land degradation and drought and identifies measures to prevent and rehabilitate it. One of the key strategies under the NAP is synergy between CBD, UNCCD and UNFCCC for multiple impacts for sustainable land management. It outlines action programmes that bring together stakeholders both government and NGOs at all levels (district, provincial, national and regional). This project primarily contributes to action programme 11: Establishment of Sustainable Land Management, through instituting a system for forest land area planning integrating natural capital values in the decision making process for forest land classification change, and bringing in 100,000 ha of multiple use forest land under sustainable land management regime. The project will also significantly contribute to action programme 5: Prevention of Land Degradation, by addressing the biggest driver of deforestation in the country – i.e. plantation sector. In addition, the project will contribute to the UNCCD 10-Year Strategic Plan and Framework to enhance the implementation of the convention (2008-2018). In particular, it will support attainment of the Strategic Objective 3: To generate global benefits through effective implementation of the UNCCD, providing support to establish policy and decision making mechanisms for sustainable forest land management, while addressing the key driver for biodiversity loss and degradation of ecosystem services, including safeguarding of carbon stocks. Corresponding indicators are embedded in the project outcome statement in Table B, and clear target and baseline will be developed during the PPG.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. **Record of Endorsement[34] of GEF Operational Focal Point (S) on Behalf of the Government(s):** (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Ir. Tuti Hendrawati Mintarsih, MPPM	Special Assistant to the Minister for Environmental Law and Institutional Affairs	Ministry of Environment	08/ 18 / 2014

B. **GEF Agency(ies) Certification**

This request has been prepared in accordance with GEF policies[35] and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date *(MM/dd/yyyy)*	Project Contact Person	Telephone	Email
Adriana Dinu GEF Executive Coordinator UNDP		08/18/2014	Midori Paxton Regional Technical Advisor – EBD UNDP	+66 98 824 7330	midori.paxton@ undp.org

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[34] For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

[35] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF