



PROJECT DOCUMENT

Project Title: Scaling-up Commercial investment in Deforestation-Free Central African Commodity Supply Chains	Implementing Organization(s): Stichting andgreen.fund
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Countries: Democratic Republic of the Congo (DRC), Republic of Congo, Gabon, Cameroon, Equatorial Guinea, Central African Republic (CAR)	Project location (provinces or priority areas) : N/A
Project Description: This project is focused on scaling-up commercial investment in tropical agricultural supply chains while transforming them to deforestation-free and socially inclusive practices at a landscape level. Investments target forest and peat conservation and restoration embedded in landscapes through sustainable and regenerative agriculture. Target sectors are the major supply chains driving deforestation, including livestock, palm oil, soy, rubber, cocoa and forestry.	Total Project Cost (including estimated unfunded budget) \$ 61,772,348.00 USD (minimum) Total amount funded by CAFI: \$51.106.348 USD First tranche amount and duration: \$ 43.821.269 USD for 1 year Followed by yearly disbursements of \$ 1.821.270 USD. Other funding sources: <ul style="list-style-type: none"> - Other donors: Green Climate Fund, FMO, NICFI
	Start date¹ : 01/07/2024 End date: 31/06/2028 Total duration (in months): 60 months

¹ Indicative dates: The official start date of any CAFI-funded project is the date of transfer of funds by the MPTF Office.



The approval under this project for activities to be undertaken in country is subject to **Stichting andgreen.fund** (the NUNO) obtaining and providing to the Multi Partner Trust Fund Office (CAFI Administrative Agent) the non- objection of the respective Programme Country Governments, prior to undertaking any in-country activity.

Date and number of approval decision: EB.2024.20 Adopted on 20.06.2024

Signatures of Participating Organizations:

<p>Representative Name : Nanno Kleiterp</p> <p>Position : Chairman of the Board of Directors</p> <p>Name of Organization : Stichting andgreen.fund</p>	<p>Date and signature</p> <p>DocuSigned by:</p> <p>[Redacted Signature]</p> <p>71CD1B42F6CE4D4...</p>
<p>Representative Name : Berta Pesti</p> <p>Function: Head of the Secretariat of Central African Forest Initiative (CAFI)</p> <p>CAFI Secretariat</p>	<p>Date and signature</p> <p>DocuSigned by:</p> <p>[Redacted Signature]</p> <p>DAFEBA0CC65A412...</p>



CAFI OUTCOME to which the project contributes	TOTAL CAFI (USD)	TOTAL PROJET (USD)
1. Sustainable agricultural practices lead to less land conversion and increased food security;	\$51.106.345	\$ 61,772,348
2. Sustainable alternatives to current wood energy practices are adopted;		
3. Forestry sector and protected areas institutions and stakeholders have the capacity and the legal framework to promote, monitor and enforce sustainable management of forests;		
4. Future infrastructure and mining projects minimize their overall footprint;		
5. Land use planning decisions ensure a balanced representation of sectoral interests and keep forests standing, and better tenure security does not incentivize conversion by individuals, communities and companies;		
6. Population growth and migration to forests and forest fronts are slowed down;		
7. Better inter-ministerial coordination and governance resulting in a permitting, enforcement and fiscal regime of economic activities that do not push economic actors to forest conversion and illegal activities and a business climate favorable to forest-friendly investments.		
Total	\$ 51.106.345	\$ 61,772,348

PROGRAMME DOCUMENT

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I. Executive Summary

Scaling-up Commercial Investment in Certified Deforestation-free Tropical Agricultural Supply Chains

The CAFI implementing organization for this project is the Stichting andgreen.fund, a Dutch foundation (or *Stichting*) with its registered seat in the municipality of Amsterdam, the Netherlands (the “&Green Stichting”). The &Green Stichting will use CAFI support to transform major tropical commodity supply chains in Central Africa to be deforestation-free and socially inclusive in a way that is commercially viable and replicable at scale. The CAFI MPTF has selected the &Green expression of interest as part of a public call for expressions of interest published from May to August 2022. The &Green expression of interest has been reviewed by CAFI Secretariat experts and the CAFI Board has subsequently approved the development of the below full submission.

Critical Global Social and Environmental Issue

Tropical forests are biodiversity hotspots that moderate water supply and quality, sustain millions of livelihoods, and are massive stores and potential sinks of carbon that are key to slowing climate change. Tropical forests play a vital role in the global carbon cycle: the 1.2 billion ha of tropical forests constitute the largest above ground terrestrial component of the global carbon budget².

Deforestation, including below-ground biomass and drainage of peat forests, is a major driver of climate change: it is the second largest anthropogenic source of carbon dioxide emissions³. Deforestation creates the compounded challenges of massive GHG emissions while also undoing forests’ role as a sink and store of carbon. A quarter of global CO₂ emissions are associated with agriculture, forestry and other land uses (AFOLU)⁴.

The loss of trees and other vegetation leads to desertification; soil erosion; reduced water retention and flooding; decreased soil productivity and progressive deterioration of agro-ecosystems. These effects are compounded when higher atmospheric CO₂ concentrations lead to contraction of plant stomata and reduced evapotranspiration from tropical forests and disruption to the local hydrological cycle.

Specific Context & Needs

The primary drivers for deforestation and forest degradation in Central Africa are subsistence agriculture, logging and road and urban infrastructure. Shifting agriculture is by far the largest driver of tree loss: in 2019, 1.21 million hectares were lost and agriculture accounted for 1.2 million (~99%) in DRC. While deforestation is mainly driven by subsistence agriculture practiced by smallholders, commercial agriculture is playing an increasingly large role. This expansion of agroindustry in the region aims to meet rising local and global demand for food and commodities. This is in turn driven by rising local and global populations and increasing incomes.

Most of the environmental benefits of intact forest are unpriced externalities, and it is much more

² Ordway, E. M., & Asner, G. P. (2020). Carbon declines along tropical forest edges correspond to heterogeneous effects on canopy structure and function. *Proceedings of the National Academy of Sciences*, 117(14), 7863-7870

³ U.S. Energy Information Administration. 2018. U.S. energy-related CO₂ emissions expected to rise slightly in 2018, remain flat in 2019

⁴ Smith, P., Bustamante, M., Ahammad, H., Clark, H., Dong, H., Elsiddig, E. A. & Masera, O. (2014). Agriculture, forestry and other land use (AFOLU). *Climate change 2014: mitigation of climate change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Chapter, 11, 811-922.

attractive for landowners to convert forest into agricultural land to produce tradable commodities, particularly where strong demand is increasing market prices. The result is **a market mispricing of natural forest assets and a disincentive to sustainable production**. This problem is expected to worsen without a paradigm shift changing how land is managed and how agricultural commodities are produced.

Project Main Objective

The &Green Fund reduces emissions and increases resilience by financing the transformation of tropical agricultural commodity supply chains from extractive to truly sustainable. It achieves this by providing technical assistance and by offering finance to producers with conditions that require both the adoption of sustainable agricultural practices and the commitment to protect existing high value forest, restore forest where appropriate, and be socially inclusive. &Green transactions create blueprints for sustainable land use and management that other market players can adopt, replicate and scale significantly; thereby making &Green Fund's approach market transformational.

&Green aims to invest in countries globally with significant tropical forests under threat from agricultural expansion and where the largest opportunities for transformational change exist. The investments made by CAFI in the context of this project are earmarked to **Cameroon, Democratic Republic of the Congo, Central Africa Republic, Congo, Equatorial Guinea and Gabon**⁵. However, &Green Fund advances its credit only in jurisdictions that have a progressive forest protection agenda and therefore reviews every potential jurisdiction on five (5) Jurisdictional Eligibility Criteria (JECs)⁶. This Jurisdictional Eligibility Criteria Assessment (JECA)⁷ process is mandatory prior to investment and assures investors that the policy context of the investment is amenable and supportive of the transformational changes sought. Typically, such assessments take 2 months prior to their presentation in the &Green Advisory Board for approval. Gabon and DRC's JECAs have already been completed. Note that the JECA process is paid for via the Fund's operating expenses (not financed by CAFI).

&Green tests all jurisdiction in its potential investment environment, including all CAFI jurisdictions, twice a year for eligibility and progress against &Green JECs. Where performance towards &Green JECs is unsatisfactory, &Green will coordinate with CAFI to potentially influence jurisdictions to take measures to achieve "investability" status.

&Green will scale up commercial investment in tropical agricultural supply chains while transforming them to no deforestation and socially inclusive at a landscape level. Investments target forest and peat conservation and restoration embedded in landscapes of sustainable and regenerative agriculture. Target sectors are the major supply chains driving deforestation, including livestock, palm oil, soy, rubber, coffee, maize, cocoa and forestry amongst others.

Strategy and Expected Impact

&Green promotes sustainable intensification and higher productivity on existing agricultural land to meet growing demand for food. Producing more food on existing land reduces the demand and

⁵ Gabon JECA: https://www.andgreen.fund/wp-content/uploads/2022/02/Green-JECA-Gabon-Full-report_compressed.pdf

⁶ See all JECAs at: <https://www.andgreen.fund/downloads/>

⁷ <https://www.andgreen.fund/#jurisdictional-eligibility-approach>

incentives for deforestation for agricultural production. **This is essential for stopping deforestation AND meeting food security, as well as building out underdeveloped agri-industrial complexes in targeted jurisdictions.** That is, sustainable intensification rather than destructive extensification.

Mitigation impact: Based on results from investments over the past four years, expected investment lifetime impact over the programme is approximately 350,000 tCO₂e of GHG reductions and removals per USD 1 million invested. This is primarily from regeneration and sequestration in protected forests, with quantification⁸ based on IPCC guidance using Tier 2 or 3 data; conservative assumptions related to degree of protection and forest degradation; and accounting for any reversals. For a projected CAFI investment of USD 32 million the fund would thus directly contribute 11.2 MtCO₂e over the investment lifetime (15 years). Including 3X &Green finance (USD 96 million) leveraged by the CAFI investment, this combined USD 128 million investment would contribute 44.8 MtCO₂e over the investment lifetime.

Based on &Green's existing portfolio, the programme is expected to yield the following metrics⁹:

Approximately 16,000 ha/USD 1 million invested (2.05 million hectares for a USD 128 million investment in Central Africa)

At minimum 2,000 people with enhanced resilience/USD 1 million invested (256,000 people for a USD 128 million investment).

Budget Summary for CAFI Co-financed Activities

The Total programme cost is USD 51,106,345 over 5 years distributed as follows:

- USD 3,906,345 **grant** used for dedicated **origination support** to build up the capability for investing in the region.
- USD \$4,435,500 **grant** used for pre- and post-investment **TA activities** to companies; as well as interaction with CAFI to promote jurisdictionally supporting processes (land tenure, land use planning); handle additional CAFI reporting.
- USD 10 million Development Capital Facility ("DCF") **grant** aligned with the UK's Mobilizing Finance for Forests (MFF) fund's global contribution to the DCF, but specific for CAFI countries. The DCF is capital &Green invests at nominally 0% in promising prospective companies allowing to influence potential clients for &Green through a loan structure, **creating bankability**. Where unused after the DCF Investment Period (5 years), DCF capital plus bank interest earned thereon will be returned to the CAFI Fund.
- USD 32 million Investment Capital on CAFI account in &Green, (**redeemable grant**). This is a dedicated junior tranche of USD 32 million to invest in CAFI countries meeting &Green's Jurisdictional Eligibility Criteria (JECs) – **De-risking investments**, compensating for the higher (perceived) risk of the CAFI countries. Where unused after the Investment Period (5 years), the investment capital plus bank interest earned thereon will be returned to the CAFI Fund.

⁸ The calculation methodologies and model are available for evaluation by CAFI as and when needed

⁹ The initial estimates for people with enhanced resilience were conservatively taken due to limited data, extrapolating from the existing portfolio and considering the pipeline of investments. Results during implementation are expected to be higher than these estimates.

The proposed split between the different tranches is envisaged to address the difficult investment environment in CAFI countries and create ample resources to create bankability for investment projects into which private sector investors of &Green will be included. Bankability requires incentives and DCF investments into prospective &Green investees, but also dedicated resources to, in interaction with existing efforts of relevant stakeholders and potential investees, create investable proposals in CAFI countries. As such, the three tranches are conditional on each other and represent the current best estimate of &Green to dedicate ample resources to CAFI countries without detracting its baseline efforts from its global mission. Any efforts under the critical, enabling DCF are not compensated for under the existing &Green fee structure paying for the operational management of the fund's ecosystem, and therefore are included under the tranche for origination support. Over time, this will be covered by the &Green portfolio fee from investments made in the CAFI countries. The origination support amount is set to create the right enabling environment, but at the same time incentivises the operational entity of the &Green Fund (i.e. the Investment Advisor SAIL Investments) to deploy capital rapidly and into quality projects. The resulting fee from Assets-under-management (AUM) is higher than the origination support provided and creates risk alignment.

II. Description of Overall Program

1. Situational Analysis

The 200 million hectares of forests in the Congo Basin represent the last significant land-based tropical carbon sink in the world, making the forests critically important in the global fight against climate change. It is one of the last few regions on the planet that absorbs more carbon than emitted. Aside from its critical role in mitigating the climate crisis, these forests harbour 10,000 species of plants, trees and wildlife- underscoring the richness of biodiversity and importance for conservation. These forests further are an essential source food, shelter, energy and spirituality for the 40 million people comprising forest dependent communities.

The Congo Basin has great carbon sink capabilities and carbon market potential. It contains 8.1 billion metric tons of irrecoverable carbon – equivalent to more than 20 times Africa's annual emissions – and has some of the highest concentrations of irrecoverable carbon worldwide. The Congo Basin also contains 30% of the world's tropical peatland carbon, now known to be among Earth's most irreplaceable ecosystems for global climate security. The carbon sink in live aboveground biomass in intact African tropical forests has been stable for the three decades, in contrast to the long-term decline in Amazonian forests. Annually, these forests absorb 1.5 billion tons of CO₂eq from the atmosphere representing 4% of the world's emissions.

The different programmes and studies supported by CAFI confirm that deforestation and degradation, estimated at half a million hectares per years in DRC between 2014-2018 (CAFI programmatic note) are currently mainly due to slash-and-burn agriculture, wood energy production for cooking, artisanal logging and the development of infrastructures which open access for forest and land exploitation (Four main drivers Agriculture, Wood energy, Forestry, Infrastructure development). Industrial agriculture, which was previously identified as a major concern in Cameroon and Gabon but very limited in the DRC, is now observed to be an increasing direct driver of deforestation across the Central Africa region. Smallholders are also increasingly involved in commercial agriculture and increasingly

involved in bigger players’ supply chains through outgrower schemes. This expansion of agroindustry aims to meet rising local and global demand for food and commodities. This is in turn driven by rising local and global populations and increasing incomes. The reasons for tree cover loss vary between countries in the region (see individual country deforestation profiles in Table #1 below).

Most of the environmental benefits of intact forest are unpriced externalities, and it is much more attractive for landowners to convert forest into agricultural land to produce tradable commodities, particularly where strong demand is increasing market prices. The result is a **market mispricing of natural forest assets and a disincentive to sustainable production**. This problem is expected to worsen without a paradigm shift changing how land is managed and how agricultural commodities are produced.

Many agri-commodity businesses are vulnerable to climate hazards, for example, increased temperature and increased rainfall variability (See ANNEX 4: The &Green rationale by Sector for a description of specific climate hazards facing different commodity sectors). The resultant production losses lead to a vicious cycle, where growers are incentivized to clear more forest land to make up for falling or unreliable yields.

Table 1: Deforestation profiles in target countries

Country	Country Profile	Impacts
Cameroon	Cameroon has 20 million ha of natural forest, covering approximately 43% of the country’s area. ¹⁰	<p>Current deforestation: Since 1990 more than three million hectares of Cameroon’s forest have been cleared – an area approximately the size of Belgium¹¹. From 2001 to 2021, Cameroon lost 1.70Mha of tree cover, a 5.4% decrease¹².</p> <p>Key driver(s) of deforestation: Cameroon’s forests are under pressure from foreign investment in mining, agriculture and associated infrastructure development. Shifting agriculture is the dominant driver (at around 98%), but this includes cocoa and coffee, which are commodity driven agriculture.</p>

¹⁰ World Bank database. Cameroon – forest area. Available at <https://data.worldbank.org/indicator/AG.LND.FRST.ZS?locations=CM>

¹¹<https://www.rainforestfoundationuk.org/cameroon#:~:text=Forest%20cover&text=Approximately%2040%20per%20cent%20of,approximately%20the%20size%20of%20Belgium.>

¹² Global Forest Watch dashboard for Cameroon: <https://www.globalforestwatch.org/dashboards/country/CMR>

Democratic Republic of Congo. (DRC)	<p>The Democratic Republic of the Congo (DRC) is the 2nd largest country in Africa (spanning 2.3 million square km) and home to large swaths of arable land, vast quantities of natural resources and minerals, and critical habitats supporting rich biodiversity. In 2010, DRC had 198 million hectares of natural forest, making up a significant portion of the forests within the Congo Basin. Forests are a valuable natural resource for DRC for both the products extracted and for the services provided.</p>	<p>Current deforestation: Deforestation within the Congo Basin has been linked to a potential drying over the basin as well as changes in precipitation over the Sahel, Ethiopian highlands and Guinean coast.¹³ In 2020, the DRC's deforestation rate was second only to Brazil.¹⁴</p> <p>The release of greenhouse gases due to deforestation and forest degradation are the country's principal emissions source.</p> <p>Key driver(s) of deforestation: The primary drivers for deforestation and forest degradation in the country are subsistence agriculture, logging and road and urban infrastructure. Shifting agriculture is by far the largest driver of tree loss: in 2019 1.21 million hectares were lost and agriculture accounted for 1.2 million (~99%).¹⁵</p>
Gabon	<p>The vast majority of Gabon's land area is forest – approximately 20 million of the country's 22.68 million hectares.¹⁶ After petroleum and mining, agriculture and forestry sectors are the two largest in the country, with agriculture alone employing 20% of the population. Forestry is a major source of national revenue and the exploitation of timber is viewed as central to economic development, with logging increasing significantly.</p>	<p>Current deforestation: Deforestation rates have remained steadily around 25,000-30,000 hectares of loss annually over the last 5 years.¹⁷</p> <p>Key driver(s) of deforestation: The vast majority (> 99%) of deforestation is caused by shifting agriculture. In 2019, of 26,700 hectares of forest loss, 26,600 hectares were caused by shifting agriculture.¹⁸</p>

¹³ USAID (2018). Climate Risk Profile - DRC. URL: <https://www.climatelinks.org/resources/climate-risk-profile-democratic-republic-congo>

¹⁴ Weisse, M. and Goldman, L. (2021). Primary Rainforest Destruction Increased 12% from 2019 to 2020. Global Forest Watch. URL: <https://blog.globalforestwatch.org/data-and-research/global-tree-cover-loss-data-2020/>

¹⁵ Global Forest Watch. 2020. Democratic Republic of Congo – Annual tree cover loss by dominant driver. Available at: <https://gfw.global/3lnF1HX>

¹⁶ The Rainforest Foundation. 2020. Gabon Profile. Available at: <https://www.rainforestfoundationuk.org/gabon>

¹⁷ Global Forest Watch. 2020. Gabon – Tree cover loss. Available at: <https://gfw.global/32MKr92>

¹⁸ Ibid

Central African Republic	Central African Republic has 5.2 million hectares of dense tropical forest, and over 90% of the population relies on fuelwood for energy. ¹⁹ Forest covers 223,030 square kilometres in Central African Republic, accounting for approximately 36% of land area. ²⁰	<p>Current deforestation: Over the last two decades, Central African Republic has lost 189,000 hectares of humid primary forest, accounting for 22% of total tree cover loss.²¹ In 2021, the country lost 67,200 hectares of tree cover, equivalent to 35.7 Mt of CO₂ emissions.²²</p> <p>Key driver(s) of deforestation: More than 99% of the deforestation results from shifting agriculture.²³</p>
Equatorial Guinea	Equatorial Guinea is one of the few countries where forest covers the vast majority of land. Approximately 87% of the land area, 24,484 square kilometres, is forest. ²⁴ The country has become one of the most important African exporters of timber to China.	<p>Current deforestation: In 2000, forests accounted for 93% of land area.²⁵ Total area of humid primary forest in Equatorial Guinea decreased by 2.9% in the period 2002–2020. In 2021, the country lost 8.91kha of tree cover, equivalent to 6.17Mt of CO₂ emissions.²⁶ Recent years have experienced a significant increase in deforestation and forest degradation, from around 0.2% annually between 2004–2014 to 1.2% annually between 2014–2018.²⁷</p> <p>Key driver(s) of deforestation: Deforestation in Equatorial Guinea is primarily a result of shifting agriculture.²⁸</p>

¹⁹ CAFI. 2022. <https://www.cafi.org/countries/central-african-republic#:~:text=The%20Central%20African%20Republic's%20dense,some%20are%20endangered%20or%20vulnerable.>

²⁰ World Bank database. 2022. Forest area (% of land area) – Central African Republic. Available at <https://data.worldbank.org/indicator/AG.LND.FRST.ZS?locations=CF>

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ World Bank database. 2022. Forest area (% of land area) – Equatorial Guinea.

²⁵ Ibid.

²⁶ Global Forest Watch. 2022. Equatorial Guinea. Available at <https://gfw.global/3TqZ2fm>

²⁷ CAFI. 2021. Countries: Equatorial Guinea. Available at <https://www.cafi.org/countries/equatorial-guinea>

²⁸ Global Forest Watch. 2022. Equatorial Guinea. Available at <https://gfw.global/3TqZ2fm>

Republic of Congo	<p>The Congo Basin is one of the most important wilderness areas in the world, with the Congo Forest the second largest tropical rainforest behind the Amazon.</p> <p>In Republic of Congo, forest covers about 64 percent of the country's area²⁹ and plays a major ecological and socio-economic role. 74% of the country's forest area is allocated to logging concessions, which is a major driver of forest degradation.</p>	<p>Current deforestation: Over 900kha of tree cover has been lost since 2001.³⁰</p> <p>Key driver(s) of deforestation: The vast majority of tree cover loss throughout the country is caused by shifting agriculture. In 2021, of the 57.4 kha lost, shifting agriculture accounted for 56.8 kha, with commodity driven deforestation responsible for an additional 447ha.³¹</p>
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Economic Growth Acceleration - A New Threat for High Value Forests

In the coming decade, the growing local, regional and international demand for food supply will become a major driver and will **increase the role of agro-business and commercial agriculture** on deforestation and forest degradation in all central Africa countries. This **economic growth** will be driven by private local, regional and international investment, to be sustainable it will need to be regulated and nature positive solutions demonstrated, promoted and financed at scale.

During the first phase of investments 2016-2021, CAFI has anticipated the negative impact that large scale agro-development projects in the pipeline might generate if sustainable commodity supply chain initiatives are not developed and certain areas are not barred from (large-scale) agricultural development, including through support to land-use planning from the local to national levels.

However, past CAFI Investments did not sufficiently promote the role that the private sector can have in low emission investments combined with lack of inter-ministerial coordination and governance. Incentivized fiscal regime for economic activities that do not push economic actors to forest conversion and illegal activities were missing as well as promoting access to green finance capital market. Efforts are now made to embrace a zero-deforestation ambition, a low emission economic growth pathway is now fully reflected in the respective Government vision and in the respective CAFI letters of Intent high-level principles and milestones.

2. Program rationale

The need for large scale financing through public-private investments leading toward a sustainable zero-deforestation economy that promotes the valuation of the Congo Basin unique nature assets potential.

The World Economic Forum estimates that more than half of the world's total GDP is moderately or highly dependent on nature and its services and is therefore highly exposed to biodiversity loss.

²⁹ World Bank data. 2022. Forest area (% of land area) – Republic of Congo. Available at <https://data.worldbank.org/indicator/AG.LND.FRST.ZS?locations=CG>

³⁰ Global Forest Watch. 2022. Republic of Congo. Available at: <https://www.globalforestwatch.org/dashboards/country/COG>

³¹ Ibid.

However, the existing global financial system is fundamentally tilted against nature, with the financial flows devoted to enhancing ecosystem services dwarfed by investments that exploit nature assets.

The path to close the green financing divide and significantly scale up international support in the region can only be by moving away from piece meal traditional development projects to leverage and transform the potential of green capital markets. The financial gap is so important and the barriers so complex that only a comprehensive multi partners approach through a blended finance demonstration initiative can succeed and open the path for the Region.

A key principle of the CAFI LOIs is the inclusion of the private sector in implementation approaches with a view to ensuring the sustainability over time of REDD+ interventions and their results. As well as a payment for ecosystem services modality based on progress made towards attaining the agreed objectives, which provide strong ground for the design of innovative public private partnerships.

At the essence of this green economy transformation should be a strategic shift from viewing nature as a resource to treating nature as an asset. According to the OECD, “natural assets” are assets of the natural environment, consisting of biological assets (produced or wild), forest, land and water areas with their ecosystems, subsoil assets and air. This represents a very different view to natural resource investing wherein nature is commoditized for short term gain, while its long run economic and nature-based value is not taken into consideration. By building financing instruments and solutions anchored to nature assets, market participants are incentivized to fund interventions reducing drivers of forest degradation of more prosperous biodiversity with associated gains in value.

The &Green Fund promotes sustainable intensification and higher productivity on existing agricultural land to meet growing demand for food. Producing more food on existing land reduces the demand and incentives for deforestation for agricultural production. This is essential for stopping deforestation AND meeting food security. That is, sustainable intensification rather than destructive extensification.

Overcoming Investment Barriers

In a low-carbon, climate-resilient scenario, agri-commodity producers, smallholder farmers, government agencies and other stakeholders would identify these climate challenges and invest the time and resources required to shift to more sustainable production systems that are less vulnerable to climate impacts. Unfortunately, there are multiple interconnected barriers that prevent a spontaneous response:

Limited capital flows due to high-risk perception by impact investors

There is insufficient investment in sustainable commodity production and forest protection. Investment in commodity production such as palm oil, soy and beef is estimated globally at USD 1.4 trillion and the annual value of trade in these commodities is USD 135 billion – several orders of magnitude higher than (predominantly public and private philanthropic) investment in forest protection (around USD 6 billion).

&Green Fund started in 2017 expecting it to “grease- the-wheels” for existing direct foreign investors, commercial impact funds and local banks to finance land-use in a sustainable way. However, very few investors consider investing in the sustainable, long-term transformation of these sectors especially in Central Africa and &Green Fund has been required to act as the lead investor in the transactions it has worked on. The lack of co-investors is due to mainstream investors’ risk perception of financing

the transformational pathways that these sectors and jurisdictions require. These are challenging sectors for international investors who are concerned about reputational risk, and who do not have the internal knowledge to properly assess credit risk for land-use investments in emerging markets.

&Green Fund's business model serves as a "first-mover" in this space, managing risks of perceived barriers and creating a blueprint for commercially viable and financially attractive no-deforestation investments that commercial investors can initially participate in, then replicate and scale to transformative levels.

Market distortions undervalue standing forests and induce deforestation

Many of the benefits of standing forests, while critical to ecosystem health and local livelihoods, are difficult to capture and monetize. Producers expect and achieve far greater financial return from a hectare of soybeans than products harvested from standing forests. Payment-for-ecosystem-services mechanisms are incipient or non-existent in most jurisdictions, making it difficult to earn money for carbon storage or biodiversity. Similarly, a forest reserve in many cases cannot be used as collateral for an agricultural loan. As a result, relatively little value is attached to standing forests.

Most of the environmental benefits of intact forests are unpriced externalities, and it is much more attractive for landowners to convert forest into agricultural land to produce tradable commodities, particularly where strong demand is increasing market prices. The result is a market mispricing natural forest assets and a disincentive to sustainable production, meaning that deforestation remains economically rational. This problem is expected to worsen without a paradigm shift changing how land is managed and how agricultural commodities are produced.

In farm areas where forests are largely already cleared, the costs associated with preserving the remaining forest and reforesting cleared areas are high. Existing laws aimed to prevent deforestation are often either weak or rarely enforced, so forest protection and restoration are uncommon. Meanwhile, there are significant financial benefits from clearing forests. Extensive production (i.e., expanding the production frontier into new lands) requires less capital investment than agricultural intensification (i.e., growing more on the same hectare of land), despite the greater environmental impacts of forest clearing. Tighter credit conditions, such as those that occurred with the onset of the COVID-19 pandemic and the current ensuing environment of increasing borrowing rates globally, further increase the relative attractiveness of forest-clearing activities.

Limited local access to knowledge and technology for no-deforestation production

No-deforestation production methods often require producers to modify their systems and processes, to switch to new crops and varieties, and/or to adopt new production techniques (e.g. agroforestry), often as part of multi-year transformations. Unfamiliar approaches translate to higher perceived risk and less willingness to embrace change. As noted above, market distortions and capital and lender constraints can render this a financially unattractive proposition not offered by commercial lenders. Producers face an equally daunting challenge obtaining locally appropriate information, knowledge and technology to implement these changes. In many cases, the information and technology has not been employed widely in the country or region, while in others it has not been packaged in a way that is accessible to local agribusiness owners, farm workers and the smaller farms that supply agribusinesses.

Supply chains often lack traceability and there are porous boundaries to farms that make ensuring production is from the farm stated difficult. Reliable and sophisticated supplier tracking and tracing systems are necessary in the market alongside outreach and cooperation with intermediaries.

Inaccessible or poorly presented information on climate hazards and adaptive measures

Reducing climate-related losses can go hand-in-hand with sustainably intensifying agricultural production. Relevant climate and weather data is often produced by government agencies, along with case studies on climate resilient production techniques. However, this information is often not shared directly with agri-commodity businesses and the communities that supply or depend upon them. In other cases, the information is available only in a highly technical, undigested form that cannot be absorbed by producers, converted into knowledge and put into action. Also, there are few examples available to producers that demonstrate feasibility and viability of these new models at scale / with mainstream agri-commodity companies.

Insufficient regulatory or policy conditions that support sustainable practices and environmental impact

In regions with significant forest resources, it is necessary for local authorities to be committed to the prevention of deforestation and the protection of valuable ecosystems, and to actively work with the private sector, communities and civil society to achieve this. However, only a minority of local governments in key regions have developed (or have the resources to develop / enforce) regulations that promote protection of forest resources, together with increased production and inclusive management at a landscape level. Sustainable land use is not yet incentivized by the policy and stakeholder environment.

Existing regulations in most cases do not incentivise or support shifting towards sustainable development of the agricultural sector, nor do they recognize the potential tax benefits and job creation opportunities from such a move. Insufficiently developed or unclear regulatory environments creates the potential for land use conflicts in situations where land use practices, land rights and future plans are not transparent or agreed upon.

&Green Fund and CAFI

This proposal seeks to overcome these barriers in the context of Central Africa, making deforestation free commercial agriculture and forestry a profitable and viable alternative and setting the stage to drive sustainable land use investment at scale. Table 2 below summarizes the barriers and the programme elements that will overcome these barriers.

Table 2. Barrier analysis

Barrier	Interventions to overcome the barrier
<i>Limited capital flows due to high-risk perception by impact investors</i>	&Green Fund's business model serves as a "first-mover" in this space, managing risks of perceived barriers and creating a blueprint for commercially viable and financially attractive no-deforestation investments that commercial investors can replicate and scale.
<i>Market distortions undervalue standing forests and induce deforestation</i>	The Fund will incorporate robust environmental and social covenants into lending agreements, with breaches of these constituting events of default with related financial consequences and risks for clients. This provides a financial incentive to preserve forests and intensify production on existing acreage. By providing this money at the outset of the transformative activity preserving forests but with a clear timetable and scope to meet them, &Green Fund directly links the financial incentive to the paradigm shift needed in the targeted supply chain and company.
<i>Limited local access to knowledge and technology for no-deforestation production</i>	Technical cooperation service contracts in eligible jurisdictions for capacity building of companies and business model development, landscape-level impact design and local community/smallholder inclusion; assessment against commercial viability and environmental and social impact criteria.
<i>Inaccessible or poorly presented information on climate hazards and adaptive measures</i>	Technical cooperation service contracts in eligible jurisdictions for capacity building of companies and business model development, landscape-level impact design and local community/smallholder inclusion; assessment against commercial viability and environmental and social impact criteria.
<i>Insufficient regulatory or policy conditions that support sustainable practices and environmental impact</i>	CAFI investment will support policy dialogue, both through the JECAProcess, and via awareness raising and capacity building in each jurisdiction to maximise country ownership, blueprint communication and replication.
<i>Subsidies to key commodities driving deforestation</i>	The Fund's investments will support sustainable agricultural practices in key sectors that have previously received or may still be receiving subsidies that – even if unintentionally by policy makers but as a consequence of the prevalent business models – drive deforestation (e.g., beef in Brazil and palm oil in Indonesia). Investees commit to no deforestation practices and must complete LPPs before receiving loans. The TA Facility engages policy makers and other stakeholders to improve the enabling environment for lower-emission agricultural practices. The Fund therefore incentivizes producers, allowing them to contribute to food security and promote their livelihoods (the main reasons for subsidies) without driving deforestation.

&Green Fund has to date focused its investment pipeline development efforts on Brazil and Indonesia, so that the fund could fine tune and prove its investment model prior to expansion. Central Africa's forests are a clear priority for &Green fund expansion and replication due to their size and the many threats to the forest due to agricultural expansion. However, the challenges of doing business in Congo Basin countries increases the risk profile of investments in agri-commodity suppliers in this region compared to others where &Green might mobilize commercial capital. CAFI has detailed contextual knowledge of the region, as well as the resources and know-how (including capital which will take a subordinated junior exposure to the remaining &Green Fund capital at the level of all borrowers in

the Congo Basin) to help to de-risk &Green's investments in deforestation-free and peat destruction free commodity supply chains. Given these attributes of CAFI's investment, the Green Fund expects to mobilize additional investment into CAFI countries on, initially, a target 75:25 ratio to be reviewed in discussion with CAFI from time to time. In other words, USD 32 million of CAFI investment capital (implemented by the &Green Stichting) will be provided to borrowers in the CAFI region as loans which are subordinated to, and therefore de-risk, USD 10.66 million of further capital provided to those borrowers via the &Green structure (see section below on implementation arrangements for more details about the relationship between the different components of the &Green structure). This initial risk sharing helps to rapidly deploy CAFI capital and derisk investments for &Green to establish blueprints for CAFI countries. It can be reviewed at any time at the request of either CAFI or the &Green Stichting in order to drive maximum investment into CAFI countries rapidly and at scale. The 2030 target for &Green, as presented to GCF, is an indicative 9% allocation of USD 1 billion, equalling USD 90 million to CAFI countries until 2030. This is not considering CAFI's investment. A reasonable target investment volume in CAFI countries would therefore amount to USD 128 million until 2030, reversing the starting point of 75/25 to 25/75 percent.

3. Program Goal and Expected Impact

The &Green Fund's financial and technical support levels the playing field for sustainable, climate resilient and deforestation-free agriculture. &Green Fund provides capital to new commodity production systems; incentivises the intensification of agricultural production without deforestation; helps commodity producers price the externalities provided by natural forests; reinforces public policy signals and encourages improved regulation; and motivates mainstream private sector investors to provide increased capital inflows at scale for responsible producers.

The Theory of Change (ToC) statement, as presented in the ToC diagram below is: If &Green Fund works across tropical forest landscapes to support agri-commodity businesses with capital, expertise and partnerships, then large-scale tropical agricultural commodity production will be transformed to a climate-resilient, deforestation-free and socially inclusive model because private sector investors will have a commercially profitable investment blueprint that aligns with local and global sustainability objectives.

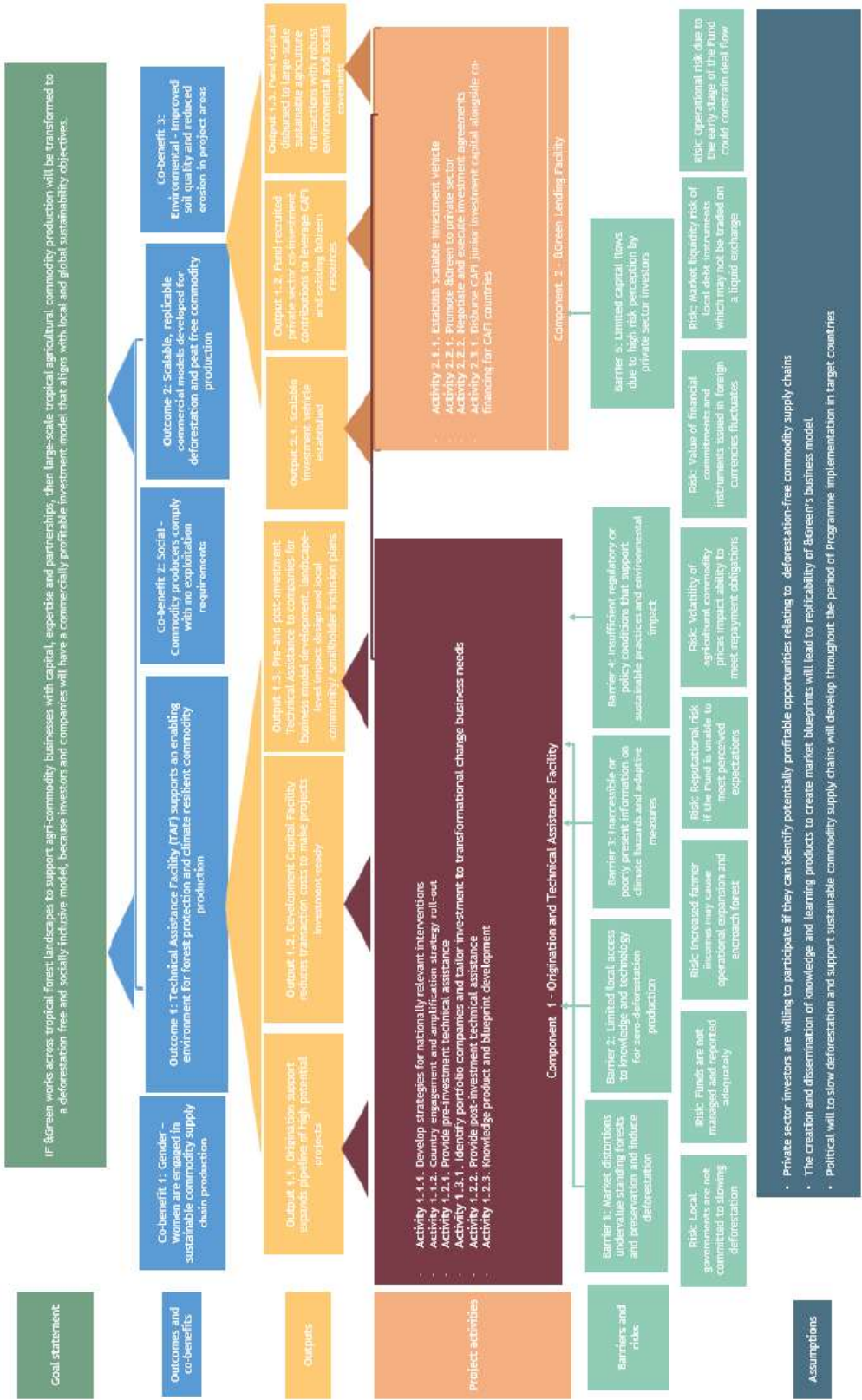
Climate resilience is enhanced by the investments both in terms of increased resilience of individuals, as well as ecosystem resilience. Companies will receive support to incorporate both mitigation and resilience into their operations and those of their smallholder supplier base on a case by case, downscaled basis. &Green Fund's approach to transformational change / paradigm shift focuses on forest and climate-friendly and resilient interventions, and guidance is given for establishing the investment rationales (See Annex 7) how to maximise transformational change when defining a transaction.

The Theory of Change operates on several assumptions. They are explained in more detail in the Logical Framework, but the core assumptions are:

- Private sector investors are willing to participate if they can identify potentially profitable opportunities relating to NDPE (no deforestation, no peatland expansion, no exploitation) commodity supply chains

- The creation and dissemination of knowledge and learning products to create market blueprints will lead to replicability of &Green Fund's business model
- Political will to slow deforestation and support sustainable supply chains will develop throughout the period of programme implementation in target countries.

Figure 1: The &Green Fund Theory of Change



4. Program Description, Implementation arrangements, Outputs and Activities

The CAFI Project finance will be made available to Stichting andgreen.fund, a Dutch foundation (or *Stichting*) with its registered seat in the municipality of Amsterdam, the Netherlands (the “**&Green Stichting**”). The &Green Stichting is a not-for-profit organisation and is the CAFI implementing organization for this project. The &Green Stichting has managed assets of approximately USD 170 million, with key investors including Norway (NICFI), FMO, Unilever, the United Kingdom (through the FMO-managed Mobilising Finance for Forests programme), the Global Environment Facility (GEF) and reinsurer Hannover Re.

&Green Stichting brings to the mainstream a model for financing socially inclusive, sustainable and deforestation-free commodity production that is commercially viable and replicable, strengthening the case for a rural development paradigm that protects valuable forests and peatlands and supports high-productivity agriculture. It achieves this by providing technical assistance and by offering finance to producers with conditions that require both the adoption of sustainable agricultural practices and the commitment to protect existing forest, restore forest where appropriate, and be socially inclusive in approach. &Green Stichting transactions create blueprints for sustainable land use and management that other market players can adopt, replicate and scale significantly; thereby making &Green Stichting’s and CAFI’s initial investment in the market transformational. CAFI co-financing will substantially de-risk &Green investments in Congo Basin countries, helping the fund operate at both scale and speed in the region.

The initial USD 192 million which has been invested by the &Green Stichting demonstrates the &Green Stichting concept, using largely non-commercial funding. To match the size and urgency of the deforestation challenge, larger amounts of private sector contributions are needed. However, private sector investors requiring commercial returns were less comfortable to invest in the &Green Stichting vehicle, which was used to date to provide the proof of concept for the pilot portfolio.³²

This is why &Green has set up a structure which combines the existing Stichting and a scalable investment vehicle suitable for commercial investors:

- **&Green Stichting** is the existing legal entity through which investments have been made since inception in 2017. All of CAFI’s funding will be channelled through the &Green Stichting, which will remain responsible for the governance thereof.
- **&Green B.V.** refers to a Dutch private company established in 2024 as a scalable investment vehicle by the &Green Stichting to attract commercial investors. &Green B.V. is controlled by the &Green Stichting and allows private sector investors to invest commercially at scale.

In this project document, the term “**&Green Fund**” refers to this combination of the &Green Stichting and the scalable investment vehicle to attract private investors.

The &Green Fund (&Green Stichting and &Green B.V. together) provides senior and subordinate long-term loans to finance commercial sustainable commodity supply chain projects. They include

³² The Stichting was used because it was the most appropriate vehicle for government donors and specifically for the anchor investor (NICFI) to invest in the Fund’s launch.

quantitative, output-based, environmental and social inclusion criteria and targets to measure transformational change progress, loan suitability and impact performance³³.

The CAFI investment in the &Green Stichting will provide the Fund with the patient capital that will provide the private sector de-risking required to achieve transformational change, creating a portfolio, structure and scalable investment vehicle that attracts private sector investors. For each investment into a company in the CAFI region, CAFI's funding (managed by the &Green Stichting) and the private sector funding (managed by the &Green B.V) will be invested following a 75:25 ratio (USD 32 million of subordinated CAFI investment capital will de-risk USD 10.66 million of further capital for the borrowers in the CAFI region), over the investment programme for the CAFI funds.

&Green Fund catalyses investment into jurisdictions where local and host government authorities are also committed to reducing deforestation and are actively taking steps to work with the private sector, communities and civil society to protect forest and peatlands. This Jurisdictional Eligibility Criteria Assessment (JECA)³⁴ process is mandatory prior to investment and assures investors that the policy context of the investment is amenable and supportive of the transformational changes sought. The Fund triggers a JECA once prospective investments are identified. In an initial assessment, the JECA evaluates the following criteria:

- Scope: the amount and quality of forest / peatland potential is significant and highly relevant from a global perspective; and
- Ambition & Strategy: There is a clear strategy with targets tracking the reduction of deforestation against historic trends in the jurisdiction.

The JECAs for DRC and Gabon have been completed.

The &Green Stichting has a dedicated Origination Support and Technical Assistance Facility (TAF), launched in 2020. With support from CAFI, the &Green Stichting will continue to work to deliver targeted origination support and technical assistance (TA) in Central Africa.

The &Green TAF aims to reduce risk and maximise the impact of the potential investment projects, by supporting investment-readiness, monitoring, post-investment client support and sharing of lessons and knowledge from the Fund and its investment projects with third party stakeholders. Under the TAF, project implementation and other work such as knowledge product development may be contracted to and with other partners.

To prove the viability of the business model, the &Green Stichting has already began building its investment portfolio.³⁵ To date, the &Green Stichting has made nine portfolio investments accounting for USD 192.75 million.³⁶ These investments are:

³³ https://www.andgreen.fund/wp-content/uploads/2022/09/FINAL-GCF-FP_FMO-Green_ESMS-Disclosure.pdf

³⁴ <https://www.andgreen.fund/#jurisdictional-eligibility-approach>

³⁵ Two of the seven portfolio companies – Mafrig Global Food (BVMF:MRFG3) and PT Dharma Satya (IDX: DSNG) are publicly listed in their countries. Their financial information can be found at <https://ri.marfrig.com.br/en/informacoes-financeiras/relatorios-anuais> and <https://dsn.co.id/investor/annual-report>. See the accompanying document titled '&Green Portfolio' for further information for the remaining portfolio investments.

³⁶ For more information on &Green's existing portfolio, see <https://www.andgreen.fund/portfolio/>

- USD 30 million loan to FS Agrisolutions in Brazil for the grain supply chain (corn and soy).
- USD 10 million loan to Agropecuária Roncador Ltda (Roncador) in Brazil for its integrated cattle-and-soy project at scale. *(subsequently redeemed in full in 2Q24)*
- USD 30 million loan to Marfrig Global Foods S.A. in Brazil within the cattle production supply chain.
- USD 7 million loan to Agropecuaria Bambusa S.A.S. (Hacienda San Jose (HSJ)) to enhance cattle production in Colombia.
- USD 12 million loan to PT Hilton Duta to reduce deforestation in their palm oil operations in West Kalimantan, Indonesia.
- USD 30 million loan to PT Dharma Satya for their upstream palm oil supply chain in Indonesia.
- USD 23.75 million purchase of notes for PT Royal Lestari Utama for the development of three sustainable rubber concessions in Indonesia *(subsequently redeemed in full in 3Q22)*.
- USD 20 million loan to Mercon BV to develop its sustainable, climate resilient, deforestation-free coffee supply chains in its Vietnamese operations.
- USD 30 million loan to ETC Group to achieve a deforestation-free cocoa supply chain in Ivory Coast.

CAFI financing to the &Green Stichting will be ringfenced in a separate bank account on the &Green Stichting balance sheet for use exclusively in the six CAFI target countries and will remain under the management of the &Green Stichting.

&Green Fund's approach is to finance delinking deforestation from major commodity supply chains by changing the economic incentives available to commercial agricultural players, and through supply chains to smallholder farmers and local communities, and by deploying investments in tropical regions (specifically, areas with significant forest resources and progressive forest and/or peat protection agendas, as identified by the Fund's Jurisdictional Assessment approach). Through its existing &Green TA Facility, &Green Stichting enables such investments, via 'Produce-Protect-Include' compacts in agro-commodity producing landscapes where forests are at risk, as well as by convening supply chain action, co-funding business model innovation and investment readiness initiatives and enabling impact tracking and sharing of lessons.

The project builds a virtuous cycle between reducing deforestation and climate resilience, because reducing agri-commodity businesses' vulnerability to climate impacts will reduce per-hectare losses and remove an incentive to advance the agricultural frontier through deforestation.

The &Green Fund is sector and supply chain agnostic. However, it prioritizes key sectors associated with most commodity-driven deforestation and highest transformational potential: palm oil, soy, livestock, rubber and plantation forestry.

From private sector investors' perspective, the short track record of &Green, the limited diversification of its portfolio and the focus on a narrow sector (emerging markets agri-business) with high-risk perception, will require risk protection to be attractive. While this initial risk protection needs to be substantial, its extent will decrease as the fund matures and grows in size.

Proposed Programme Structure

The proposed programme is comprised of two main components implemented by the &Green Stichting. **Component One** will further establish and implement the origination support and technical assistance services that overcome the capacity and information barriers facing commodity producers and neighbouring communities, while building a community of practice for replication and scale-up for producers in target countries. **Component Two** focuses on the CAFI earmarked investment in the selected Central Africa countries, the establishment and operation of the &Green Fund structure, which combines the CAFI resources managed by the Stichting and the new BV investment vehicle which will secure private sector co-financing to invest directly in commodity supply chain businesses that embrace no-deforestation production and forest protection. More details on these components and outputs are provided in this section.

NB: These components are not necessarily implemented in sequence. Indeed, investment opportunities under Component Two are not predictable and whilst they could arise very quickly as mature projects are found, this is not anticipated and they are likely to be identified and investable in the long term and require significant technical assistance.

- **Component 1: &Green Fund Origination Support and Technical Assistance Facility**

Output 1: Origination Support and technical assistance services to support an enabling environment for forest protection and climate resilient commodity production

Output 1 activities will be implemented by &Green Stichting with certain tasks sub-contracted to specialist service providers, following &Green's procurement policies and TA Guidelines.

Output 1 is a grant which contributes to the implementation of the &Green Stichting Origination Support and Technical Assistance. This helps to overcome the many information, coordination, technical and policy/regulatory barriers that prevent effective climate action in the tropical agri-commodity sector.

Accessing the &Green Technical Assistance

The &Green Stichting has dedicated TA Guidelines to decide on the provision of pre- and post-investment technical assistance. &Green Fund's Investment Advisor is responsible for identifying and designing TA projects. The &Green Stichting Board of Directors provides oversight of the functioning of the TA. Over time the &Green Fund will generate sufficient fees to support the relevant ongoing activities of Component 1 as part of its operating expenses and with the rationale to secure sustainable TA activities.

&Green's landscape approach focuses on the establishment of local coalitions covering all land-users and actors influencing the land-use change in each landscape. This work will be coordinated with CAFI on-going policy and investment work to help establish medium and long-term targets to direct the land-use transformation to more sustainable occupation, and is implemented through a landscape governance model, transparency systems, development of a bankable investment pipeline and market connection for sustainable produced commodities. This approach enables the establishment of a tailor-made set of interventions to create the enabling conditions for private investments and

scalable models through market connection.

The CAFI TA Grant will be managed by the &Green Stichting with services provided by &Green partners under subcontract. The Stichting &Green Board of Directors will assume the governance responsibilities for the management of the TA Grant.

Activity 1.1: Implementation of Origination Support.

Activity 1.1 includes stakeholder engagement in target countries, convening and socialising the approach of &Green Fund and more generically the business cases and investment models for deforestation free commodity production. Identifying and sourcing projects which meet the investment criteria for &Green, for deforestation-free agri-commodity production in the Central Africa context, will require significant engagement with key governmental, private and civil society stakeholders:

- Explaining and/or co-designing the business case for a deforestation free and climate resilient commodity sector;
- Business development, mobilising ambition and landscape collaboration;
- Linking with host government policies on mitigation and adaptation and gender priorities in agriculture relevant to the Fund's focus; and
- Communicating and advocating the success of blueprints to stimulate replication;
- Working with potential investees to develop investable business models for forest protection, food security and agro-industrial complex development.

This will include enabling cross learning per country, which promotes and advances knowledge generation and dissemination and helps create the blueprints that will ultimately ensure programme sustainability and replicability in the long term.

The vast demand for agricultural commodities worldwide creates an increasing pressure to convert natural vegetation into productive land. A thought-through and monitored transition of land use is critical if we wish to reduce the impacts of agriculture and livestock on the climate, prevent ecosystem degradation, soil erosion and the loss of valuable land to desertification. Land use must therefore be managed intelligently to halt land and forest degradation.

To start with, in year one, the &Green Stichting will work to develop engagement strategies per country in the CAFI region, including specific actions per key country and priority sector. These Engagement and Amplification strategies are based on technical data, (including that from the relevant &Green Fund commodity sectors, plans such as the NDCs and NAPs, country/sector specific climate hazard reports and the &Green Fund JEC assessments that must be completed to confirm eligibility of the investment jurisdiction as well as analysis and assessment of political and market dynamics.

The strategy will focus on the need to identify potentially transformative investments that allow the Fund to reach the overall objectives and understand their needs to be developed into bankable opportunities, as well as to understand and engage the full network of stakeholders and government

actors to maximise alignment with national policy objectives and inform CAFI to create positive feedback loops with their policy engagement.

Key elements of the regional strategies will include:

- (a) Analysis of potential enabling environment drivers and limiting factors in the region, and in priority countries and sectors, based on NDCs and NAPs and country/sector specific climate hazards, mapping of existing platforms for engagement and political and market dynamics;
- (b) Analysis of the offering of &Green Fund in terms of investment instruments, business and investment models, special attention for gender, and stakeholder engagement models (JEC, LPP, convening, PPI approach);
- (c) Mapping key stakeholders and institutions to engage;
- (d) Action plan detailing out key stakeholder engagement plan, partnerships to be developed/enhanced with existing platforms and institutions, tools and knowledge projects to be developed, and detailed responsibilities and budget;
- (e) Investment plan for DCF engagement and/or bankable opportunities for &Green.

This will require providing a budget for new resources specifically contracted by the &Green Stichting for this purpose and/or an allocation of part of the time of the current &Green resources.

Activity 1.2: Development Capital Facility (DCF)

The DCF will help &Green Stichting accelerate the development of business opportunities and support the heavy transaction costs of originating in the CAFI countries. &Green will be able to focus attention on the region without jeopardizing its funding model. The DCF provides **support for a transaction specific proportion** of the fees, costs and expenses related to the evaluation, research, due diligence, acquisition, holding, financing and valuing of any Potentially Eligible High Impact Project, up to a maximum of USD 1 million per Potentially Eligible High Impact Project

Potentially Eligible High Impact Projects means potentially High Impact projects that are reasonably deemed by the &Green Fund not yet to be investable in accordance with &Green's Investment Code but which have a high likelihood of developing into a project that is investible.

High Impact means an investment activity that reduces deforestation and promotes forest protection and has at least one of the following characteristics:

- a) supporting smallholder financing with direct farmer or farmer organisation credit risk borne by the Borrower;
- b) jurisdiction is CAFI Country;
- c) supporting early stage businesses defined as having less than three years of audited financial statements;
- d) investment activities mainly supporting women or disadvantaged people such as indigenous people, minorities, refugees;
- e) first time borrowers; or

- f) investment activities in nascent or low global volume supply chains (e.g. sago palm, açai berries, pine resin and other non-timber forest products inter alia).

Activity 1.3 : Pre- and post-investment Technical Assistance.

This output contributes to the establishment of a viable investment pipeline for the &Green Fund and longer-term project development to bankability. Technical assistance services will support identification of capable potential investees and development of transaction opportunities that build on existing early-stage capacity building efforts in the agri-sectors in target countries, including supply chain influences on landscapes and producers. This project element will prepare companies for the high standards and commitments required for fund participation (operationalising and piloting business models driving paradigm shift, E&S risk management), and help &Green target clients to develop and implement landscape protection plans and drive smallholder and local community inclusion. Technical assistance services will include support to help agri-commodity businesses develop and implement strategies that build resilience to climate hazards. Projects may also be supported in the early phase of transactions in implementing innovative and first-of-kind activities.

All &Green Fund investments require the Client's commitment for a deforestation-free, inclusive supply chain. An immediate action upon investment is the publication of an organization-wide No Deforestation, No development on Peat and No Exploitation (NDPE) Policy³⁷, holding the companies accountable for the environmental and social management of their upstream suppliers. In addition, the Fund works with investees to prepare roadmaps for the implementation of the NDPE throughout the Clients' supply chains, together with external experts and in close consultation with the Client, prior to investment. These roadmaps result in milestones and targets that are tracked throughout the loan tenor, and become concrete and auditable outcome-oriented deliverables, thereby enhancing clients' accountability for progress.

A company-wide commitment to an NDPE that is based on international standards (Accountability Framework) is a key element of investee commitments to &Green Fund. By aligning their commitment to stop deforestation in Tier 1 immediately (investee) and end it in Tier 2 (Supplier to investee directly) upon discovery of the supply chain through traceability (with a time-bound end date) provides the tools and evidence to underpin deforestation-free claims. The NDPE approach expects commitments to be inclusive, that is, by providing ways to include small suppliers in the upstream supply chain through TA, financing and other support. In turn, this ensures access to consumer markets and that beneficiaries can align their new models with market regulations, including new regulations in key geographies such as the EU regulation on deforestation-free products (EUDR), and similar regulations taking shape in the UK and US.

³⁷ Under &Green's NDPE policy, drafted in reference to the Accountability Framework as a global standard for best practice, clients commit to eliminating deforestation, both legal and illegal, unconditionally and time-bound. The Fund constantly monitors the commitments along with milestones necessary for the transition to deforestation-free production and supply chains. Thus, the NDPE Policy is aligned with the regulations being drafted in the US (Forest Act), EU (EUDR) and UK (Environment Act).

Sub-Activity 1.3.1. Provide pre-investment technical assistance

TA services will be provided at pre- and post-investment stages. Prior to investing, the &Green Fund will engage in outreach and dialogue with prospective investees and scope their investment needs and opportunities for sustainable business models. &Green Fund will begin the early stages of due diligence to identify potential investment opportunities in the target sectors within the approved jurisdictions. Such companies will be those that advance through the rigorous due diligence process.

Pre-investment technical assistance will operate at the following levels:

- Co-funding sustainability innovations with investment potential to create appetite for change within companies before &Green Fund can engage;
- Supporting Landscape Protection Plan development and stakeholder engagement
- Other activities necessary to create successful &Green investment blueprints in CAFI countries

Sub-Activity 1.3.2. Post-investment technical assistance

Post-investment TA services will support companies to achieve scalability and ‘durability’ of impact and enhance connection with stakeholders in the wider production landscape. Post-investment technical assistance activities will include:

- Capacity building for companies
- Business model development
- Landscape-level impact design
- Assessment against commercial viability and environmental and social impact criteria
- Technical cooperation services to support/ engage smallholders/ households
- Other activities necessary to make &Green investments in CAFI countries successful

Component 2: &Green Financing Facility

Component 2 focuses on investing CAFI’s capital in those investments in the &Green Fund portfolio with exposure to CAFI countries to derisk private investment in those countries.

Output 2: Scalable, replicable commercial models developed for deforestation free commodity production.

Output 2 drives sustainable investment via three activities that are presented in sequence, though practically they are implemented in parallel, building on the &Green Fund’s existing portfolio and experience. SAIL Investments, an independent Dutch asset management firm, will continue to serve as investment manager for &Green Fund, tasked with the operational management of the fund. Please note that the investment mandate of the &Green Fund will always be wholly determined by the &Green Stichting including the authority to dismiss the investment manager if the investment mandate is not maintained. As such, SAIL Investments and &Green B.V. are not considered to be executing entities.

Activity 2.1: &Green Fund will recruit private sector co-investment to leverage CAFI and existing &Green Fund resources including GCF

CAFI does not fund Activity 2.1 and associated sub-activities. These are fully financed by the &Green Fund. Nonetheless they are included in this project document to ensure transparency and the coherent presentation of the approach.

Inflows from the private sector in to the &Green Fund will be tracked and published in &Green Fund's consolidated audited annual financial accounts. The &Green Fund is already engaged in discussions with commercial investors and has a plan to progress this and ensure commitment. The &Green Fund intends to follow a targeted marketing approach to find anchor investors. This approach includes reaching out to commercial investors through connections, attending commercial conferences and relevant networking events and, currently, the &Green Fund is exploring the use of an introductory agent to introduce the Fund to prospective investors. So far, the Fund has had discussions with DNB Markets, Santander, Nordlink, Rabobank, Intervalor and Jyske Bank. The &Green Fund is exploring the possibility of creating Investor Seminars (in multiple locations) to educate investors on the climate transition and on the &Green Fund.

Sub-Activity 2.1.1. Promote &Green Fund to private sector investors

&Green Fund will implement an outreach and promotional campaign to attract private sector investors. &Green Fund will promote the investment opportunity to large private and public investors via its website, roadshows and other outreach activities, partly supported by its donor investors NICFI and United Kingdom. &Green Fund will engage in discussions with investors to ensure private sector actors are aware of the &Green Fund and understand its objectives. The focus of this activity is to signal to private sector investors that the &Green Fund is a viable investment opportunity that provides exposure to emerging markets and commodity supply chains that are otherwise challenging to access, has a positive environmental impact and provides opportunity for strong financial returns over the medium term. Investment from CAFI builds credibility, lowers risk perceptions for Central Africa, acts as a catalyst to unlock additional co-investment and derisks this during the time of investment.

Sub-Activity 2.1.2. Negotiate and execute investment agreements

For each private sector investor in to the &Green Fund (through the &Green BV), &Green Fund will engage in thorough due diligence and adhere to the Fund's investor requirements, including those regarding AML/CFT. Once investors are successfully identified and progress through the due diligence process, &Green Fund will negotiate a term sheet and execute the relevant investment agreement. The executed investment documents/contracts provide the evidence for the completion of this activity and set the stage for project-level disbursement.

Activity 2.2. Fund capital disbursed to large scale sustainable agriculture projects with robust

environmental and social covenants incorporated into lending agreements as events of default.

&Green Fund catalyses investment into jurisdictions where local and host government authorities are also committed to reducing deforestation and are actively taking steps to work with the private sector, communities and civil society to protect forest and peatlands. This Jurisdictional Eligibility Criteria Assessment (JECA)³⁸ process is mandatory prior to investment and assures investors that the policy context of the investment is amenable and supportive of the transformational changes sought. In an initial assessment, the JECA evaluates the following criteria:

- Scope: the amount and quality of forest / peatland potential is significant and highly relevant from a global perspective; and
- Ambition & Strategy: There is a clear strategy with targets tracking the reduction of deforestation against historic trends in the jurisdiction.

Once established, continued jurisdictional eligibility is dependent on subsequent biennial positive assessment of progress on the following criteria:

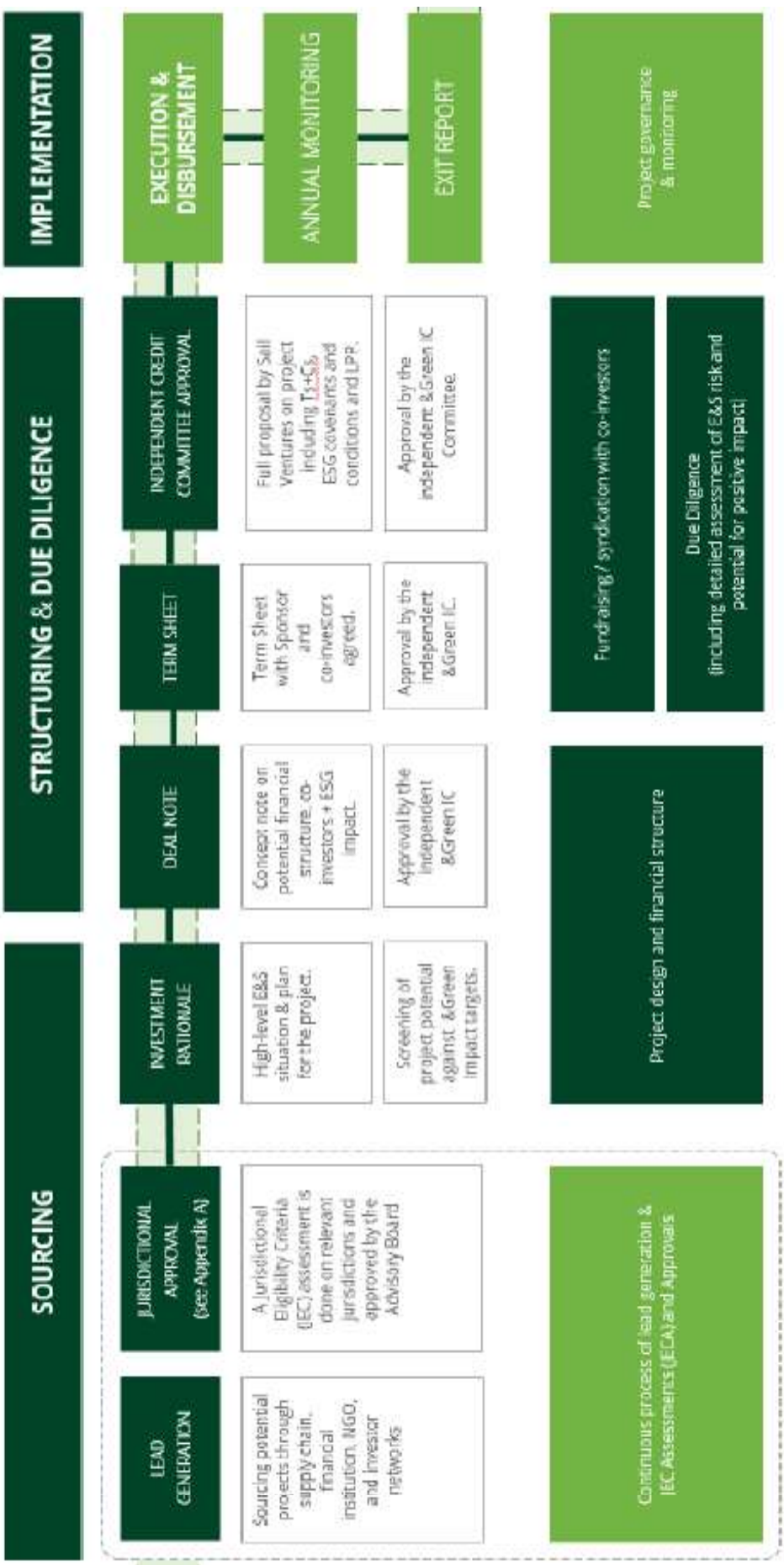
- Timely progress towards milestones indicated in the strategy of the jurisdiction, on a trajectory towards the targets for reducing deforestation;
- A transparent MRV system is operational to monitor, report and verify reductions in deforestation, and where relevant, forest and peat degradation, in the jurisdiction;
- Social & Environmental Safeguards: Progress shown towards implementation of the Cancun Agreement.

The Fund will continue to develop its investment pipeline and disburse Fund capital to transformational agricultural projects with robust environmental and social covenants incorporated into lending agreements. These covenants align producer incentives for more efficient and intensified production with reduced expansion into forested areas and increased social protections for workers and communities. &Green Fund's current investment portfolio is USD 142.75 million. The Fund is targeting USD 400 million by 2027 and USD 960 million by 2030.

&Green Fund's typical investment cycle is summarized in Figure 2 below:

³⁸ <https://www.andgreen.fund/#jurisdictional-eligibility-approach>

Figure 2: &Green typical investment cycle



Sub-Activity 2.2.1. Identify portfolio companies and tailor investment to business needs

The &Green Fund will continue to develop its investment pipeline of transformational agricultural projects to add to the existing 7 portfolio investments. For each potential investment, &Green Fund will follow the sourcing process summarized in Figure 2, including checks for jurisdictional approval including published JEC assessments; due diligence that includes environmental and social risks and the potential for positive impacts; and ensuring the investment rationale aligns with the goals of the Fund.

Sub-Activity 2.2.2 Disburse capital to large scale sustainable agriculture projects with robust environmental and social covenants

The &Green Fund will negotiate commercial lending agreements (directly with the &Green Stichting for the CAFI funding portion and with the &Green BV for the remainder of the loan) and disburse funds to target companies that pass the rigorous due diligence and agree to robust environmental and social covenants incorporated into lending agreements. Key deliverables include executed investment documents / contracts (confidential) and periodic financial disbursement summaries.

Sub-Activity 2.2.3. Monitor and manage financial and environmental performance

&Green Fund will monitor investee companies' performance and enforce the financial and other terms of the investment agreements. The financial performance of the Fund's portfolio companies will be published in semi-annual / annual financial statements.

III. Implementation Approach and Partnerships

1. Investment Arrangements with the &Green Stichting

CAFI commits USD 51,106,345 to the &Green Stichting for the funding of the Funded Activity. &Green's governance structure means that it is the Stichting's Advisory Board that is authorized to sign off on investment principles and jurisdictions for investment.

CAFI will make a USD 19,106,345 capital commitment in the form of a grant directly to the &Green Stichting for implementing all of Output 1's activities.

The USD 32 million investment capital to implement Activity 2.3 will be provided as a redeemable grant that will finance loans to borrowers in CAFI countries that are junior to loans made by the other &Green contributors in order to derisk their exposure to &Green investments in CAFI countries.

Table 3: The &Green Fund programme implementation arrangements for key activities

Outputs	Financing/Co-Financing (million (USD))	Co-Financing source	Activities
Activity 1.1 Origination Support.	Total: \$3,906,345 CAFI Grant: \$3,906,345 Co-finance: \$Tbd	TBD	Sub-Activity 1.1.1.
Activity 1.2 Development Capital Facility.	Total: \$10,000,000 CAFI Grant: \$10,000,000	N/A	Sub-Activity 1.2.1
Activity 1.3. Technical cooperation service contracts in in eligible jurisdictions for capacity building of companies and business model development, landscape-level impact design and local community/smallholder inclusion plan; assessment against commercial viability and environmental and social impact criteria	Total: \$ 4,435,500 CAFI: \$ 4,435,500	N/A	Sub-Activities 1.3.1 1.3.2
Activity 2.1 Promote &Green to private sector investors	Total: \$N/A CAFI: \$N/A Co-finance: \$Tbd ³⁹	Stichting AndGreen.Fund	Sub-Activities 2.1.1 2.1.2
Activity 2.2 Fund capital disbursed to large scale sustainable agriculture projects in the CAFI countries with robust environmental and social covenants incorporated into lending agreements as events of default	Total: min.⁴⁰ \$42,666,000 CAFI redeemable grant: 32,000,000 Co-finance: min \$10,666,000	Stichting AndGreen.Fund / GCF / Commercial Investors	Sub-Activities 2.2.1 2.2.2 2.2.3

³⁹ No costs for CAFI as all commercial investors enlisted would get (derisked) exposure to CAFI countries

⁴⁰ This is based on an initial 75/25 sharing ratio CAFI/&Green for &Green investments in CAFI countries to address the excessive country risk associated with CAFI countries.

Governance & Financial Arrangements

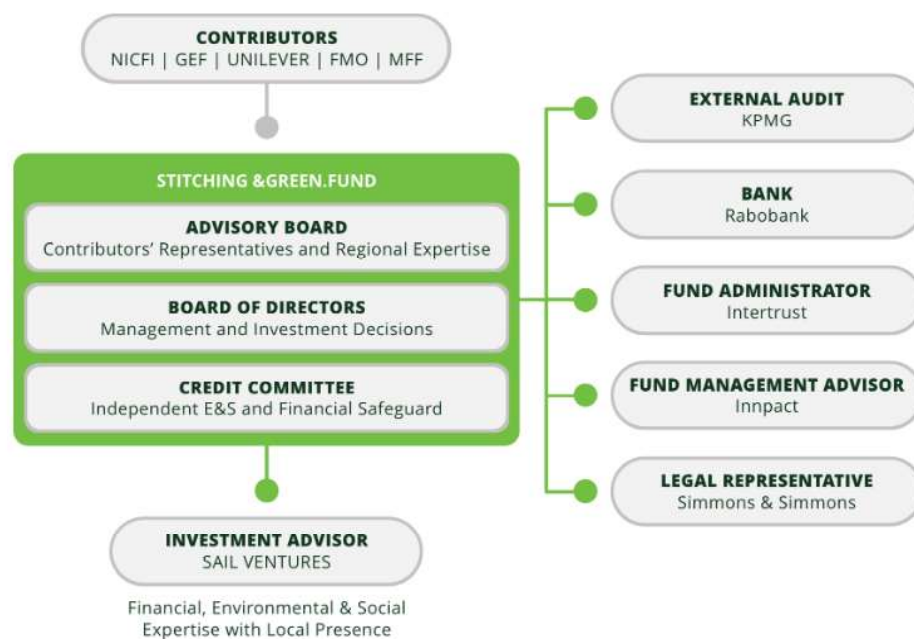
The &Green Stichting Governance Structure is presented in figure 5 below and comprises the following structures:

Contributors. The Stichting is already funded with grants from Norway’s International Climate and Forestry Initiative (NICFI), the Unilever Group and the Global Environment Facility (via the UN Environment Program); and with concessional loans from FMO, the Mobilising Finance for Forests (MFF) fund, GCF and Hannover Re (a private sector reinsurance corporate).

Advisory Board. Contributors to the &Green Stichting, as well as regional political and business experts, are represented on the Advisory Board. The Advisory Board defines the investment principles and approves all Jurisdictions in which the Fund is able to invest. The Advisory Board of the &Green Stichting has the sole authority to change the Investment Principles and the ESMS of &Green Fund.

Board of Directors. The Board of Directors of the &Green Stichting is appointed by the Advisory Board and is the main decision-making body, responsible for the management and investment decision making of the &Green Stichting. The Board outsources most activities of the &Green Stichting to expert service providers, particularly the Investment Manager. It has to be independent from investors, meaning investors in the &Green Stichting are not represented at the Board of Directors.

Figure 5. Stichting &Green Governance Structure



Investment Manager. The Board of Directors has delegated the oversight of the day-to-day business and operations of the &Green Stichting to SAIL to manage in accordance with the &Green Stichting articles and policies (in particular the Investment Principles, including the Environmental and Social Management System, or ESMS), and the resolutions of the Board. The expert Investment Manager is

a contractor to &Green Stitching (currently SAIL Investments) and it executes the following activities:

- Overseeing the day-to-day business and operations related to the management of the &Green Stichting.
- Fundraising for the &Green Fund and implementing the investment strategy with the capital raised – the decision making with respect to the investments made by the &Green Stichting, which includes those made with the CAFI funding, is the responsibility of the Board of Directors and not SAIL Investments. SAIL Investments supports the Board in all relationships with the &Green Fund’s current and potential clients, current and potential contributors, civil society, co-investors and other key stakeholders.
- Sourcing transactions which meet the investment strategy, conducting due diligence, proposing viable transactions to the Board, executing transactions and managing the portfolio of investments.

For Output 1 – the Origination Support, Technical Assistance and the DCF, &Green Stichting will be responsible for overseeing the design, implementation and reporting.

The &Green Stichting Board provides oversight over the functioning of this component. For the CAFI proceeds, the &Green Stichting Board will assume the governance responsibilities for the management of the Component 1 Grant.

CAFI, alongside the current providers of concessional capital, will enable &Green Fund to attract commercial investors at scale to the &Green Fund because the concessional capital can provide first loss risk coverage for the private sector. CAFI is key for the Fund’s deployment and scale up in Central Africa as it is the sole player in the market that can provide catalytic capital at scale. Without CAFI funding providing first loss protection to the &Green Fund on investments in the CAFI Countries, &Green Fund is unlikely to be able to access to the desired USD 1 billion fund until 2030 (and beyond, after 2030) with a corresponding allocation to CAFI countries, and its impact on the transformation of tropical commodity supply chains in these countries will remain limited, with correspondingly lower climate mitigation and adaptation benefits.

Waterfall Structure

CAFI will disburse its reimbursable grant to the Stichting.

With respect to exposure to the CAFI country investments by the &Green Fund, CAFI provides further catalysation to the &Green B.V. by financing direct exposure to the borrowers in those countries which is subordinated to the loans from the &Green B.V. to those borrowers. In the exposure to CAFI country borrowers, at the level of the transaction structure the catalytical investors will therefore rank as follows (from junior to senior): i) CAFI (junior debt financed from a ringfenced bank account for investment in CAFI countries only); ii) NICFI (permanent capital in form of a grant), iii) GEF and Unilever (redeemable grants), iv) GCF, BEIS MFF, FMO and Hannover Re (concessional loans).⁴¹ It is relevant to note that, where all of the coupons and capital are repaid by a borrower in a CAFI country to the Stichting (directly in the case of the subordinated loan financed by the CAFI investment facility; and

⁴¹ All of FMO's financing is loans.

via the &Green B.V. in the case of the other catalytical investors), then the redeemable grant from CAFI ranks the same as the redeemable grants from GEF and Unilever in the waterfall within the Stichting.

Any excess cash in the &Green Stichting (“upside) after the repayment of interest and principal for MFF, will be shared between permanent capital and redeemable grants contributors such as CAFI.

The &Green B.V. intends to raise ca. USD 600 million from Commercial investors to reach a portfolio size of at least USD 1 billion by 2030. It will provide senior or subordinated debt to projects in Latin America, SE Asia and Africa (Tropical Forest zones).

The &Green Fund is evergreen, given the permanent capital from the Norwegian government. Having received feedback from commercial investors, private sector capital is being raised with a 10-year lockup at the moment but that might decrease over time (as the Fund’s portfolio grows and thus, has more liquidity). Longer tenor provided by catalytic capital is more attractive to commercial investors. Hence, &Green Fund seeks a 15-year tenor from CAFI (aligned with the tenor of the GCF) to provide commercial investors sufficient comfort.

2. Sail Investment’s Capacity and Experience

Sail Investments was appointed as the specialist investment advisor to the &Green Stichting at its inception. Sail is a boutique investment firm headquartered in the Netherlands and investing only in assets that generate measurable sustainable returns. Sail Investments is 100% management-owned, Sail Investments has a small team of 15 highly experienced professionals working on the &Green Fund, with over 150 years of collective experience in the Agri-finance sector across its offices in The Netherlands, Singapore, and São Paulo. The team combines financial acumen with extensive environmental and social expertise. Environmental, social and governance aspects are fully integrated into its investment process.

The &Green Stichting Board of Directors has delegated the oversight of the day-to-day business and operations of the &Green Stichting to Sail Investments to manage in accordance with the &Green Stichting’s articles and policies (in particular the Investment Principles, including the Environmental and Social Management System, or ESMS), and the resolutions of the Board. The Investment Advisor is specifically responsible for fundraising and implementing the investment strategy and process. Sail Investments supports the Board in all relationships with the Fund’s current and potential clients and contributors, civil society organisations, co-investors and other key stakeholders.

The initial investments of the USD 192.75 million portfolio of Stichting demonstrate the &Green Fund concept, using largely non-commercial funding. To match the size and urgency of the deforestation challenge, larger amounts of private sector contributions are needed. These are difficult to secure until the Fund reaches sufficient scale, especially in Central Africa which is perceived as high risk.

Currently, the &Green Fund has made nine portfolio investments accounting for USD 192.75 million. These investments are presented in the table 4 below:

Name	Short description	commodities targeted	Budget
FS Agrisolutions	USD 30 million loan to FS Agrisolutions in Brazil for the grain supply chain (corn and soy).	Maize and Soy	30 million
Roncador (subsequently redeemed in full in 2Q24)	USD 10 million loan to Agropecuária Roncador Ltda (Roncador) in Brazil for its integrated cattle-and-soy project at scale.	Bee and soy	10 million
Marfrig Global Foods	USD 30 million loan to Marfrig Global Foods S.A. in Brazil within the cattle production supply chain.	Beef	30 millions
HSJ	USD 7 million loan to Agropecuaria Bambusa S.A.S. (Hacienda San Jose (HSJ)) to enhance cattle production.	Beef	7 millions
PT Hilton Duta	USD 12 million loan to PT Hilton Duta to reduce deforestation in their palm oil operations in West Kalimantan, Indonesia.	Oil Palm	12 millions
PT Dharma Satia	USD 30 million loan to PT Dharma Satya for their upstream palm oil supply chain in Indonesia.	Oil palm	30 millions
PT Royal Lestari Utama (subsequently redeemed in full in 3Q22)	USD 23.75 million purchase of notes for PT Royal Lestari Utama for the development of three sustainable rubber concessions.	Hévéa	23,75 millions
Mercon BV	USD 20 million loan to to develop its sustainable, climate resilient, deforestation-free coffee supply chains in its Vietnamese operations	Coffee	20 millions
ETC Group	USD 30 million loan to achieve a deforestation-free cocoa supply chain in Ivory Coast	Cocoa	30 millions

Please see Annex 12 for selected case studies describing &Green's investments.

IV. Coherence with Existing Programs

Product / activity	Source of funding (government/development partner)	Key projects	Duration of projects	Budget in dollars	Description of major programmatic or financial gaps
Nature+ Accelerator Fund	CAFI Trust Fund: \$7,500,000 GEF: \$ 8,992,500 Non Profit \$1,088,000	Loans and equity) through three financing windows – early venture, venture and growth.	5 years	Total Cost of the Program (including estimated Unfunded Budget): \$56,301,845.8	1. Only targeting early and growth stage investments 3. Not yet invited or channeled large scale private sector capital but intend too
CAFI - Farm Africa	CAFI (development partner) provided funding to Farm Africa	Integrated project on landscape restoration and value chains in eastern DRC, in collaboration with KBNP and coffee cooperatives.	6 months of prep grant funding from CAFI	Total funding from CAFI is \$431,000	1. Limited in scope to landscape restoration 2. The project is grants based with no long run approach to developing investment interest
XSML – African Rivers Fund	Funding from development partners and government agencies including BIO, CDC, DGGF, FMO, IFC, AHL Venture Partners, Proparco	Grow small businesses into medium and large enterprises. Three funds : the CASF, the African Rivers Fund (ARF) and ARF III. Investment size in the range of \$100K to \$7.5 million	CASF – 2011 – 2015 ARF - first close in February 2016 ARF III - first close in August 2020	CASF – \$19 million ARF – \$50 million ARF III - \$85 million.	1. The Fund is focused on business models mostly not related to agriculture and forestry unlike the Nature jurisdictional approach 2. The Fund relies primarily on grants from Government agencies and IFIs and does not yet channel large scale private investment

Deutsche Bank project in Cameroon	DB provided a sustainability-linked loan facility to Corrie MacColl, to finance the company's capex investments for its rubber plantations.	its Outgrower Programme aims to provide additional food security and boost the income of 13,000 local smallholder farmers.	3 year loan tenor	\$25 million sustainability-linked loan facility with an accordion feature to upsize the facility to \$75 million	1. The project is limited in scope to a single loan facility to Halycon for sustainable rubber plantations
GCF – Global Guarantee Company with MUFG Bank	Funding from GCF with MUFG bank serving as the GCF Accredited Entity to support the issuance of green bonds through <i>a new Green Guarantee Company (GGC)</i> .	GGC expects to initially guarantee climate bonds to other exchanges in the world's major global debt capital markets.	NA	NA	1. GGC is focused on guarantees as an instrument for climate intervention and providing climate bond issuance support. 2. The fund is not targeting the Congo Basin Forest region countries yet.

- V. Program's Results Matrix

The monitoring and reporting of &Green's impacts covers seven (7) groups and includes Key Performance Indicators and Operational Performance Indicators. A detailed description of these indicators and the means of verification can be found in the annex 14 'Green KPI Framework'. A detailed protocol to be used in the context of this CAFI funded project will be provided by &Green during the first 6 months following approval of this project.

The project results presented below are based on USD 32M CAFI investment in outcome 2 as well as the anticipated USD 96M leveraged finance.

For ease of reference, the contribution to Corresponding CAFI Outcome and Milestone in LOIs are presented below instead of in the matrix. Relationship with the outcomes in individual country NIFs is not presented given that this is a regional programme.

Corresponding CAFI Outcome: Outcome 1 -Agriculture encroaches less on forest lands

Table 5. Relevant Milestones in CAFI member country LOIs and Programme Contribution

CAFI member country	Relevant milestones in LOI	Programme Contribution
Democratic Republic of Congo	<p><u>Agriculture</u></p> <ul style="list-style-type: none"> In high-value forests and peatlands no agro-industrial concession that is incompatible with the preservation of forests and peatlands is granted: these are oriented primarily towards savannah areas and, by default, degraded forests . Objectives 2031 To steer agricultural development as a priority towards and savannah areas , including by facilitating land tenure security and access to energy to support sustainable agricultural investments and improvement of the agricultural value chain. Objectives 2031 A map of potential sustainable agricultural production, integrating the preservation of forests and peatlands, is prepared for key cash crops [for example coffee, cocoa, palm oil, rubber, etc] by the [end of 2023], and based on the study made of the agricultural potential in the framework of the Land Use Planning Pillar. Political milestones by 2023 <p><u>Governance and mobilisation of resources</u></p>	<p><u>Agriculture</u></p> <p>Prospective clients for projects under this programme are those who are willing and able to map out and then commit to a No Deforestation, No Peat and No Exploitation (NDPE) Policy; An Environmental and Social Action Plan (ESAP); and A Landscape Protection Plan. This ensures that &Green will not make investments in concessions that are incompatible with the preservation of forests and will make a significant contribution to steer agricultural development as a priority towards and savannah areas.</p>

CAFI member country	Relevant milestones in LOI	Programme Contribution
	<ul style="list-style-type: none"> Improving the business climate so as to attract sustainable private and public investments - Objective 2031 Strengthening the mobilisation of private and public financial resources, domestic and foreign, to finance development and boost resources, especially of the state budget, and contribute to the implementation of the Nationally Determined Contribution and this Letter of Intent, in a logic of sustainable management and preservation of national resources, including the forest. Objective 2031 To experiment with a special economic zone model seeking to base itself on agricultural, energy and other investment, as well as the development of their value chains at reduced impact on the forest and ecosystems, and in favor of local communities and indigenous peoples, linked to a set of rules and measures facilitating these investments by the end of 2025. Objective 2026 A mobilisation of private investment plan is defined and adopted by [the end of 2022], to contribute to the implementation of this Letter of Intent. Political milestones by the end of 2023 	<p><u>Governance and mobilisation of resources</u></p> <p>&Green Fund's Jurisdictional Eligibility Criteria Assessments (JECAs) will be carried out to assess whether jurisdictions have suitable policies in place for &Green Fund investments to make an impact. Stakeholder groups include government ministries, civil society organisations, industry associations and the private sector.</p> <p>National-level engagement involves direct engagement with governments to provide inputs for Improving the business climate for sustainable agriculture investments.</p> <p>&Green can provide inputs to the private investment plan.</p> <p>&Green is a first mover in the space of private investment in "deforestation-free" agriculture and reduced impact logging in DRC and can be a source of investment for the businesses that set up in the special economic zone(s) helping companies develop their value</p>

CAFI member country	Relevant milestones in LOI	Programme Contribution
Republic of Congo	<p><u>Agriculture</u></p> <p>Support the sustainable development of the agricultural sector by directing agro-industrial plantations, including palm oil, to savannah areas in compliance with environmental requirements, and by promoting zero-deforestation agroforestry for small-scale farming practices in forest areas.</p> <p>Support soils research to identify savannah areas suitable for palm oil development.</p> <p>The development of the agricultural sector will take the following principles into account:</p> <ul style="list-style-type: none"> • non-conversion of HCS/HCV forests; • protection and sustainable development of peatlands to prevent them from being drained or dried out; • limited and carbon-neutral conversion of non-HCS/HCV forests; • compensation for biodiversity and carbon losses; • compliance with customary land title rights; and, • transparency in terms of agricultural land planning and allocation for agro-industrial plantations. 	<p>chains at reduced impact on the forest and ecosystems.</p> <p><u>Agriculture</u></p> <p>Prospective clients for projects under this programme are those who are willing and able to map out and then commit to a No Deforestation, No Peat and No Exploitation (NDPE) Policy; An Environmental and Social Action Plan (ESAP); and A Landscape Protection Plan. This ensures that &Green will make investments that meet the principles for the development of the sector stated in the RoC LOI.</p>
Gabon	<p><u>LAND USE PLANNING</u></p> <p>All relevant information resulting from the land use planning process, including maps, will be regularly updated on the website www.pnatgabon.ga to be available to the public.</p> <p><u>December 2021 Milestone</u></p>	<p>All project in Gabon will ensure full compliance with the guidelines, definitions and policies adopted by Gabon and referred to in the LOI.</p>

CAFI member country	Relevant milestones in LOI	Programme Contribution
	<p>Land use plan adopted and being implemented in accordance with the principles of ARTICLES I and II (including laws, regulatory decrees, budgetary allocations, definition of the competence of authorities and law enforcement arrangements etc.)</p> <p>Intermediate</p> <p><u>Milestones December 2017</u></p> <p>Signature of the TFA 2020 Marrakech Declaration for the Sustainable Development of the Oil Palm Sector in Africa, under the African Palm Oil Initiative, APOI.</p> <p><u>Intermediate Milestones June 2018</u></p> <p>b. Finalisation and adoption of the National Action Plan of the TFA 2020 Marrakech Declaration for the Sustainable Oil Palm Sector in Africa.</p> <p>c. Development and adoption of national guidelines and definitions to ensure that forests with High Carbon Stocks (HCS) and High Conservation Value (HCV) will not be converted to other land uses, in accordance with emerging international consensus and best practice</p> <p>d. A policy on a carbon-neutral approach to the conversion of non-HCS/HCV forest to other land uses is developed, adopted and implemented according to the following principles:</p> <p>i. Reductions in the carbon stock resulting from forest conversion are compensated through equivalent increases in the carbon stock of remaining forest and on other land through active carbon stock enhancement, restoration and maintenance measures that are new and additional;</p> <p>ii. The costs of protection and restoration needed to ensure carbon-neutral conversion will, in full or – in particular circumstances – in large part, be imposed on private operators in charge of the conversion to incentivise operators to target the conversion of degraded lands or forest with lowest carbon stocks;</p> <p>iii. Protection and restoration efforts are implemented, in accordance with the Gabonese law on environmental protection, ahead of the conversion to avoid a negative annual carbon balance throughout the conversion process; and</p> <p>iv. Promoting social and environmental benefits and minimizing and mitigating potential social and environmental risks (through safeguards).</p>	

CAFI member country	Relevant milestones in LOI	Programme Contribution
	<p>e. Establishment of a methodology and roadmap to ensure participation and free prior and informed consent in land use planning decisions that involve forest-dwelling people and traditional communities.</p> <p>Intermediate Milestones June 2019</p> <p>f. Preliminary setting of a long-term cap on carbon-neutral conversion of non-HCS/HCV forests (and on an exceptional basis HCS/HCV forests as outlined in ARTICLE I (a)(i)) to other land uses, subject to the national guidelines above and based on an initial estimated need of 400 000 ha 4 of long term accumulated conversion, with no more than 10 000 ha converted on an annual basis. Remaining forest cover and carbon stock will be preserved on a permanent basis through the commitment on a permanent, quantified national forest cover. The long-term cap will be confirmed by June 2020.</p> <p>g. Report on compliance with commitment of non-conversion of HCS/HCV forests.</p> <p>h. Report on the progress made in participatory and inclusive land use planning including:</p> <ul style="list-style-type: none"> i. The composition, terms of reference and activities of the National Interministerial Commission and the provincial commissions; j. Summary of the consultation processes and how the concerns have been addressed currently described under activity 1.5 of the National Investment Framework; and k. Summary on the activities conducted under the Grievance Mechanism of the National Land Use Planning Commission. <p>i. Report on progress made on mapping land use suitability for agriculture, mining, conservation, climate vulnerability and sustainable natural resource exploitation.</p>	

Table 6 Program's Results Matrix

OUTPUT 1: Technical Assistance Facility supports an enabling environment for forest protection and climate resilient commodity production		See programme results matrix narrative above for Corresponding CAFI Outcome, Milestone in LOI and Outcome in NIF				Links to	
Indicators	Reference situation (year) & data source	Target after 5 years	Means of verification	Indicative for budget monitoring activities	Hypothesis and risks	CAFI LOI	CAFI Results framework NIF results framework
# Projects which enter the &Green portfolio in Central Africa	0	5	&Green reports	0	CAFI De-risking is sufficient	See table 5	
OUTPUT 2: Scalable, replicable commercial models developed for deforestation and peat free commodity production		See programme results matrix narrative above for Corresponding CAFI Outcome, Milestone in LOI and Outcome in NIF				Links to	
Indicators	Reference situation (year) & data source	Target after 5 years	Means of verification	Indicative for budget monitoring activities ⁴²	Hypothesis and risks	CAFI LOI	CAFI Results framework NIF results framework
KPI 1: Progress toward Transformational Change A qualitative metric that assesses progress toward the Transformational Changes set out in investment rationales, that support the &Green mission. It is judged by monitoring evidence of progress against milestones relating to System Change, Scale, and	N/A	N/A	&Green reporting	See footnote	See &Green impact framework	See table 5	A.E. 2 Existence, implementation and supervision of policy and legal frameworks that limit the conversion of forests into agricultural concessions (by specifying the size of those concessions)

⁴² Costs of monitoring, reporting and verification are covered by &Green and clients (loan recipients)

Durability of the Transformation.								
<p>KPI2: #ha of Forest Protected</p> <p>Monitors the area of identifiable forest conserved plus forest restored, plus peatland conserved or rehabilitated. Any reversals are deducted. Forest' uses national definitions relating to crown cover, minimum area, land use type, and excludes plantation forests</p> <p>NB: The Forest KPIs include protection of peatlands. They are not mentioned in the indicators for brevity of communication.</p>	0			&Green MRV system	See footnote	See &Green impact framework	See table 5	A.P. 5 Hectares of improved food agriculture (a) on savannahs and (b) in forests
		2.05 million ha						
KPI3: #tCO2e of Climate Benefits	0		44.8 MtCO2e	&Green MRV system	See footnote	See &Green impact framework	See table 5	I-1 Emissions (tons of CO2eq) I-2 Absorptions (tons of CO2eq)
<p>KPI4: # ha of ecosystems with improved resilience</p> <p>Monitors the area of land rehabilitated, restored or protected, made up of the: area of forest protected (KPI2); plus area of non-forest ecosystems restored or improved; plus areas of degraded land restored through regenerative agriculture, silvo-pastoral agriculture or agroforestry</p>	0		2.05 million ha.	&Green MRV system	See footnote	See &Green impact framework	See table 5	A.P. 5 Hectares of improved food agriculture (a) on savannahs and (b) in forests

KPI5: # people with increased resilience Monitors and conservatively assesses the number of people where a benefit or service is provided or made possible to improve the resilience of livelihoods.	0	256,000 people	&Green MRV system	See footnote	See &Green impact framework	See table 5	A.P. 6 Number of households receiving food agriculture support (a) on savannahs and (b) in forests
KPI6: # of People Benefiting Monitors the number of individuals benefitting from &Green's transactions, and is the sum of: number of producers reached; community services provided to individuals; individuals benefitting from secured land tenure agreements; and jobs supported.	0	256,000 beneficiaries	&Green MRV system	See footnote	See &Green impact framework	See table 5	A.P. 6 Number of households receiving food agriculture support (a) on savannahs and (b) in forests
KPI7: USD of Capital Mobilised Monitors the ability to attract and direct capital towards supporting and implementing &Green's investment principles.	0	USD 128 million	&Green reporting	See footnote	See &Green impact framework	See table 5	

- VI. Risk Management

TABLE 7 - PROGRAMME RISK MANAGEMENT MATRIX

Risks	Risk Level: Very high High Medium Low (Likelihood x Impact)	Likelihood: Almost Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare - 1	Impact: Extreme - 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1	Mitigating measures
Contextual risks (including political risks)				
Host governments are not committed to slowing deforestation and therefore sustainable change cannot be achieved.	8 (Medium)	2	4	Involve relevant governments and their stakeholders from the initial stages to align incentives. Incorporate awareness of relevant government policies, programs and interventions at the national level that can facilitate local government buy-in and support. Further, a condition of Fund investments is the JECA approach, which includes evidence of local government commitments to avoided deforestation and ecosystem protection, including explicit targets and monitoring systems. &Green and its partners have already established relationships with many of these governments (see Annex 2 for detail on experience so far).
Increased incomes might motivate the farmers to expand their operation and encroach forest. This might result in additional deforestation.	6 (Low)	2	3	The Fund has very strong sustainability criteria that investees must meet prior to receiving loans. They include clear eligibility criteria for production areas. Programs are promoting Good Agronomic Practices (prerequisite for investment) as measures to improve productivity of existing plantation. Production Protection Inclusion agreements with communities and farmers embed sustainability at field level and the LPP and ESAP that must be provided are contractual obligations focused on

					environmental protection. The relevant landscapes are also independently monitored via satellite to detect deforestation events, including fire outbreaks.
<p>Emissions risk - project fails to achieve its GHG target because either:</p> <ul style="list-style-type: none"> • Anthropogenic or natural disturbances reverse carbon (ie: emissions); and/or • GHG emissions associated with intensification (e.g. greater mechanisation, more intensive use of fertilizers and chemicals, soil disturbance, higher enteric fermentation etc.) at least partially offset the GHG benefits of reduced intensification and carbon sequestration in protected forests. 	12 (Medium)	3	4		<p>A: Investees monitor forest areas for conservation and restoration, and this is checked by satellite monitoring, which includes GLAD alerts and follow-up actions, monitoring and case-by-case reporting on reversal outcomes and remediation by clients. Reversals are accounted for in the KPI framework. The initial portfolio has had some relatively small (<100ha) reversals related to fire. Considering the large areas of protected forest and expected small areas of reversals, the net result is projected to be slightly lower reported emissions benefits.</p> <p>B: Investments include optimisation of production, which includes intensification as well as best practices related to fertiliser, pesticide and herbicide applications (where relevant), and minimised tillage and soil disturbance to maintain Soil Organic Carbon. Investments will always see a reduction in intensity (ie: tCO₂e/t production) and most will see a reduction in absolute emissions. Some investments, notably beef production, may see an increase in absolute emissions within the farm boundary. However, the emissions from deforestation associated with beef is approximately 3x the emissions from intensified production, thus the net emissions in the supply shed (and globally) will be reduced in both intensity and absolute terms.</p> <p>Addressing both points, the forecast emissions impacts account for reversals (from the current portfolio) and conservative input assumptions. That is, the assumptions related to sequestration calculations are conservatively taken (typically IPCC Tier 2 uncertainty range lower bounds) and the 'actual' sequestration should be higher than that reported. This will tend to counter any reductions in sequestration.</p>
Programmatic risks					

Funds are not managed and reported adequately	6 (Low)	2	3	A monitoring and reporting system has been established during &Green Fund's initial operating period including investees being subject to fiduciary due diligence prior to approval. Annual program and project audits are in place, with regular audits conducted in accordance with the Fund's audit protocol. The Fund's governance structure includes very high transparency, annual public reports, and a Credit Committee that employs international best practice.
Operational risk - Due to the relatively early-stage of the Fund, there is a risk the Fund will not achieve its investment objectives, & strict lending criteria could constrain deal flow. The Fund is also exposed to operational and compliance risks stemming from the processes, people & systems of the Fund's service providers.	9 (Medium)	3	3	The Fund operates with a three-tier governance structure and has appointed a well-qualified investment team and back office to operate the Fund. The Fund will finance transactions alongside established financial institutions that will bring additional expertise in credit rating and financial structuring. Further, &Green Fund has established a track record and built an initial portfolio and pipeline of deals. The current portfolio yields 6.5-7%. All transactions are fulfilling their expected performance and all interest payments continue to be met by the client.
Operational risks due to &GREEN's lack of experience in the Central Africa region	6 (Low)	3	3	&Green has experience in deploying in new regions before. Frontier markets and jurisdictions There is a strong TA component in the project for &Green to partnership with IDH partnership with WWF Have carried out due diligence in Gabon JECAs in DRC and Gabon
Limited additionality of	6	2	3	&Green assesses developmental and financial additionality of Technical

grants funding	(Low)				<p>Assistance, independently from &Green Fund. This means that</p> <ul style="list-style-type: none"> TA is designed to adequately address the (perceived) risks, enabling the investment or project to occur, beyond what could be self-financed by the (potential) client or should be financed by the Investment fund manager as part of their regular investment process. TA will not be provided to commercially unviable projects, projects outside regulatory compliance and projects with inefficient business models. TA is developmentally additional, so that an investment's impact goals are achieved, that would not have been met without TA support.
Fiduciary risks					
The programme fails to 'crowd in' the ambitious level of complementary commercial finance that it expects.	6 (Low)	2	3		<p>CAFI funding, combined with the existing concessional capital and the downside protection focused structuring of each transaction will overcome the high (perceived) risk and lower the entry barrier for international private sector investors. The return &Green Fund can offer from its portfolio to all investors, concessional or commercial, is attractive for the amount of risk protection provided. There are no other investment vehicles that allow international private sector investors to get this type of fixed-income exposure to high impact climate and forest protection opportunities from tropical commodity supply chains, and therefore to contribute to an important topic for public and private net-zero ambitions and the Glasgow Leaders' declaration agenda. For CAFI this risk is further reduced as &Green Fund will only draw down tranches of funding as they are matched by private sector investor contributions.</p>
Sail Investments is a non-regulated entity, therefore	6	2	2		<p>It is not required by law nor requested from private sector investors that Sail Investments become regulated.</p>

the risk for an investor is regarded as more substantial than for a regulated investment manager.	(Low)				Capabilities and experience, right skillset, and structures in place to provide the equivalent of regulation should this be needed in order to achieve the objective of leveraging private sector money
&GREEN lacks an independent risk function that can perform an objective risk assessment of SAIL Investments proposals.	9 (Medium)	3	3	3	The Board of Directors the stitching will make all the final decision on investment decisions.
Commodity Price Risk: Volatility and cyclicity of agricultural commodity prices impact borrowers' ability to meet repayment obligations.	9 (Medium)	3	3	3	The Fund implements a comprehensive compliance framework for its service providers and for its borrowers, before and during the investment.
Currency Risk: The value of financial commitments and instruments issued in foreign currencies (other than the Fund's reporting currency, USD) fluctuates due to changes in foreign exchange rates.	9 (Medium)	3	3	3	The Fund will hedge all material currency risk, based on efficiency. Where a broker in a target country can hedge the transaction efficiently, the Fund will include it in the price charged to the client. When international borrowers have experience in hedging, they will do it themselves. The majority of the disbursement will be in USD, expected at an 80/20 ratio of USD to local currency (fully hedged) over the entire portfolio at maturity
Risk of costly and lengthy recovery process for defaulted loans	9 (Medium)	3	3	3	&Green and SAIL Investments have the experience and skillset to handle the recovery of loans in emerging markets, and has experience with prior repayments of borrowers

Lack of incentive to recover on defaulted loans if CAFI funds are to provide first loss buffer.	9 (Medium)	3	3	<p>The Stichting Board of Directors has fiduciary responsibility to all contributors to the Stichting to ensure that all rights of all the contributors (including CAFI) are protected.</p> <p>In every deal there will a portion (minimum 25%) of capital provided by other contributors to the Stichting and the private sector.</p>
Market Liquidity Risk: The Fund may invest in local debt instruments which may not be traded on a liquid exchange or market that provides regulatory authority over borrowers and debt instruments.	9 (Medium)	3	3	<p>The Fund's general policy is to hold debt instruments until maturity, it does not trade marketable securities.</p>
Risk that the Fund is misused for money laundering ("ML") and terrorism financing ("TF") ML/TF or any other financial misconduct or crime.	9 (Medium)	3	3	<p>The Fund has an AML/CFT Policy and dedicated AML/CFT Compliance Officer aiming to ensure that ML/TF risks in the process of fundraising for, and investments by, the Fund are properly identified, monitored, mitigated and reported in order to prevent the Fund and its Customers, governing bodies and service providers from being misused for ML/TF or any other financial misconduct or crime.</p> <p>The Fund is only allowed to invest in countries included in the DAC List of ODA Recipients, who also qualify against the Jurisdictional Eligibility Criteria ("JEC") policy of the Fund, and subject to Advisory Board approval. This UNSC requirement can be formally built in to the JEC monitoring process if required. No individual or entity that is listed on any UN Security Council sanctions list, including the UN Consolidated Sanctions list will be involved in any manner with the project or its activities, either as a counterparty, implementer, or beneficiary.</p> <p>The use of any materials and technology procured by the Fund is subject to the Fund's Code of Conduct (available on the website) which</p>

					<p>is applicable to “anyone acting on behalf of the Fund, including people taking a seat on the Fund’s formal governance bodies (including the Board of Directors, the Advisory Board and the Credit Committee), but also the Investment Advisor, Fund Administrator, Board Advisor and any partners and consultants contracted or otherwise acting on behalf of the Fund. Furthermore, the Fund expects its business partners to apply similar standards of conduct when working for and servicing the Fund.”</p> <p>The Fund also has a Complaints Management Policy (which includes provisions on Whistleblowing and is also available on the website).</p>
Reputational risks					
<p>The Fund’s inability to meet perceived expectations of its stakeholders in terms of promoting its development objectives and high standards of integrity and social and environmental sustainability.</p>	6 (Low)	2	3		<p>The Fund implements a comprehensive compliance framework for its service providers and for its borrowers, before and during the investment.</p> <p>The ESMS of &Green Fund explicitly requires its investments to use best practice certification or equivalent (i.e. e.g. for timber FSC would be the baseline for &Green Fund). The reason for this is the recognition of the value of certification for managing sector-specific issues and thereby addressing reputational concerns. Where no suitable international systems exist &Green Fund may also apply more localised standards, e.g. in Colombia &Green Fund’s investment HSJ is the very first project to apply the Aval GANSO standard in Colombia, developed by CIAT and Climate Focus. However, the paradigm shift &Green Fund targets requires the fund to go over and above certification in its requirements. &Green Fund applies consistently across all investments a policy of a) IFC Performance Standards compliance; b) contractually agreed impact roadmaps and targets (“Landscape Protection Plan”, LPP) that, where missed, will trigger a loan Event of Default; and c) a company-wide NDPE commitment. The LPP in particular requires engagement with stakeholders in the wider landscape of the project, which has a</p>

					mitigating effect on reputational risks.
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- VII. Monitoring & Evaluation:

a. Narrative M&E section

During the disbursement and loan repayment period, &Green Fund is responsible for the monitoring and verification of each investment project (loan recipients) and for reporting to CAFI. To assess the degree to which investments are transformational and measure the impacts that they deliver, to track progress and identify potential issues, as well as improvement opportunities, &Green applies a Key Performance Indicators (KPI) framework, which was internally developed and which has a clear hierarchy between top-level indicators and contributing indicators (the “Impact Framework”). This Impact Framework is embedded in &Green’s investment process and monitors, reports, and verifies impacts and progress towards the transformational change targeted in each transaction. The purpose of the Impact Framework is to provide clear, consistent and meaningful insights into the impacts of the Fund. KPIs have been developed from a review of best practices. These indicators are taken from &Green’s impact framework which covers seven (7) groups and includes Key Performance Indicators and Operational Performance Indicators. The KPIs are:

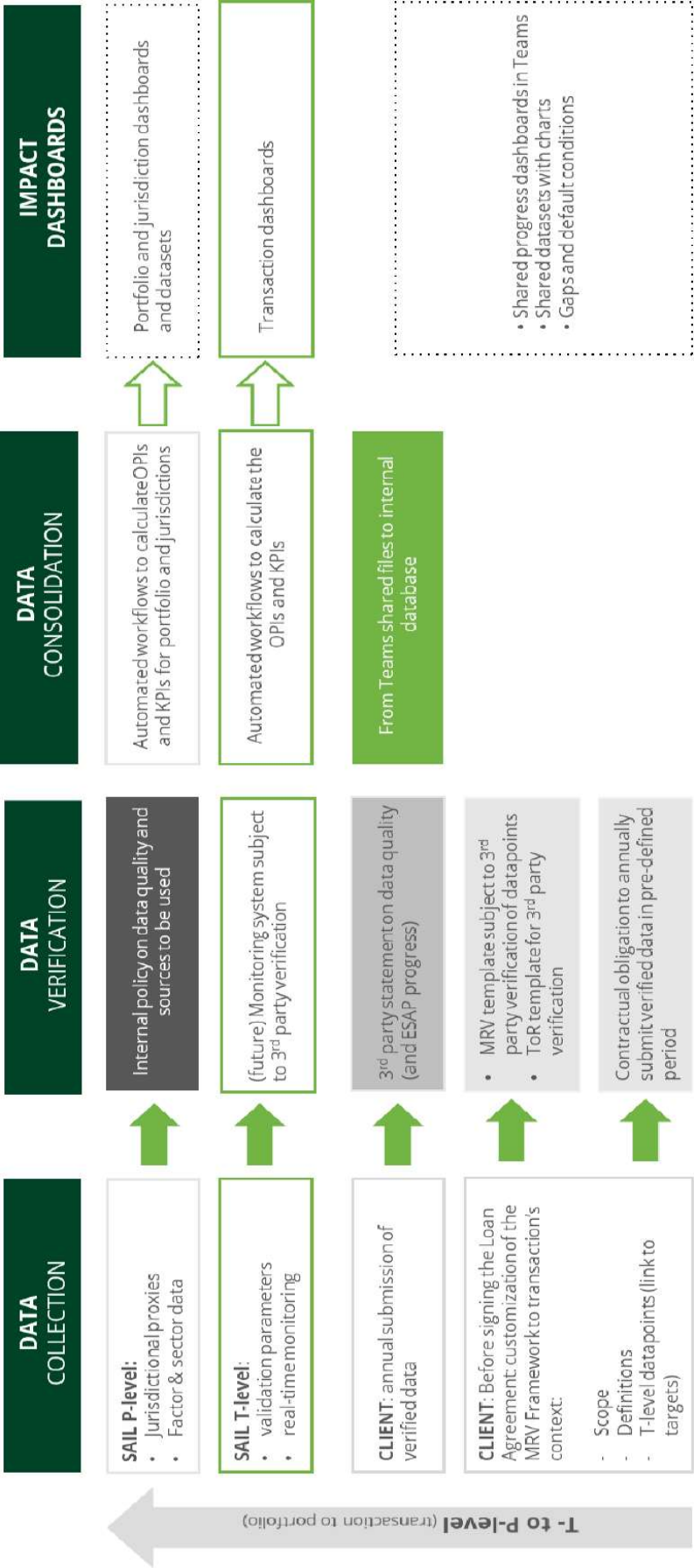
- Strategic;
 - KPI1: Progress toward Transformational Change
- Forest and Climate;
 - KPI2: #ha of Forest Protected
 - KPI3: #tCO2e of Climate Benefits
- Production;
 - KPI4: # ha of ecosystems with improved resilience
- People;
 - KPI5: # people with increased resilience
 - KPI6: # of People Benefiting
- Financial;
 - KPI7: USD of Capital Mobilised
- Partnership and Support;
 - OPIs only
- Compliance
 - OPIs only.

Refer to the document ‘&Green KPI Framework’ in annex 13 for more information on each of these KPIs and OPIs.

&Green Fund will oversee the implementation of projects by meeting with project owners and other stakeholders on a regular basis and engaging regularly with local and national government.

&Green uses a sophisticated and integrated monitoring, reporting and verification protocol as well as tools to conduct MRV of the indicators in its impact framework for each project. This includes detailed protocols with roles and responsibilities for data collection, data verification, data consolidation and finally analysis through the impact dashboards. This reduces transaction costs, facilitates quality assurance, and enables transparent reporting of results. Figure 6 below presents a summary of the MRV procedures. A detailed protocol to be used in the context of this CAFI funded project will be provided by &Green during the first 6 months following approval of this project.

Figure 6. &Green Monitoring, Reporting and Verification Protocol



Reporting on KPIs and OPIs will be made publicly available as a standard Annex in annual narrative reports, and may be made available on the &Green website with detail and description, including key assumptions.

&Green has undergone a mid-term evaluation in 2020 (see <https://www.andgreen.fund/wp-content/uploads/2021/12/Mid-term-Evaluation-of-andgreen-fund-24-April-2020.pdf>), this evaluation led to findings and recommendations:

1. &Green is a unique fund with an ambitious and innovative proposition
2. That same ambition challenges the Fund's resources and achievements
3. It is too early to draw conclusions on &Green's progress on its Impact Targets
4. The Fund's Impact Framework serves its purpose now, but requires finetuning and initiative

b. Gender mainstreaming

*The &Green Fund acknowledges that gender mainstreaming **will help the &Green Fund achieve its goals identified for environmental impact and social inclusiveness**. Particularly:*

- *Climate adaptation and mitigation pathways are not gender-neutral;*
- *Gendered needs and vulnerabilities of marginal groups, such as Indigenous Peoples, need to be mainstreamed into adaptation design, resilience capacity-building and mitigation services; and*
- *Gender-transformative impact can be driven through robust financial means, gender budgets and dedicated resources towards mainstreaming gender action in climate change and deforestation.*

The &Green Fund recognizes that that gender mainstreaming is both necessary and relevant for the programme to maximise its outcomes for zero deforestation. This assessment, therefore, details &Green Fund's internal Gender Approach and how it aims to bolster gender mainstreaming within its institutional structure. The assessment will also ensure that gender-responsive processes (including robust gender analysis, including assessment of SEAH-related risks, indicator selection, outcome mapping, monitoring and evaluation) are formalized within the external investment thesis of the &Green Fund. Embedding gender into deforestation commitments offers considerable opportunities for leveraging synergies between restoration goals, climate change adaptation as well as mitigation action and global commitments to sustainable development goals - SDGs (particularly SDG 5 – Gender Equality; SDG 12 – Sustainable Production and Consumption; SDG 13 – Climate Action; and SDG 15 – Life on Land).

A Gender Assessment and Gender Action Plan have recently been prepared by &Green for FMO and will apply to this project see (Annex 15).

c. Sexual exploitation, harassment, and abuse

&Green has adopted a Code of Conduct which provides the ethical framework in which the Fund operates. It provides an overview of the values, commitments, responsibilities and integrity that the Fund stands for. When operating within the framework of this Code of Conduct, the Fund creates a responsible and transparent environment not only in conducting its business, but also in its governance. The Code of Conduct addresses issues of gender equality and inclusion, sexual exploitation, harassment, and abuse, Bribery, Fraud and Anti-Corruption, conflicts of interests and the

protection of vulnerable groups amongst other, it is available at : https://www.andgreen.fund/wp-content/uploads/2022/02/211116_Green-Code-of-Conduct.pdf

The gender assessment and action will also ensure that gender-responsive processes (including robust gender analysis, including assessment of SEAH-related risks, indicator selection, outcome mapping, monitoring and evaluation) are formalized within the external investment thesis of the &Green Fund.

d. Cancun safeguards

An Environmental and Social Management Plan (Annex 7) recently prepared for FMO will be used for this project. It provides an analysis and recommendations of measures to ensure that the benefits of sustainable finance for commodity chains, in tandem with capacity building, are equitable and do not simply accrue to better-off households and/or more mainstream producer groups that are able to capitalize on new opportunities and respond better to changes implemented through the programme.

Furthermore, there are several policies and procedures through which this project will ensure respect for social and environmental safeguards. These are listed below.

IFC Performance Standards

&Green adopts the International Finance Corporation (IFC) Performance Standards as its framework for the management of E&S risks and impacts associated with the Borrowers and projects it seeks to finance.

&Green requires its Borrowers to obtain the free, prior and informed consent (FPIC) of all local communities (not just Indigenous Peoples) with customary rights to land used for both production and conservation components of projects that the &Green finances.

For the financing of SMEs, including smallholders and smallholder cooperatives, other local or international standards (e.g. RSPO principles & criteria in the case of the palm oil sector), including those developed specifically for smallholders, may be used where the performance standards are equivalent but may be more familiar or better adapted to the scale and intensity of management of the Borrower. Where such alternative standards are applied, the Investment Advisor must document the rationale for use of the standard in the publicly available E&S information provided for each transaction (see section 10.3 on 'External Communications and Reporting').

The IFC Performance Standards may be used in conjunction with relevant best practice standards, guidelines and tools (e.g. the Voluntary Guidelines on the Responsible Governance of Tenure, the Sustainable Agriculture Standard, RSPO Principles & Criteria, Forest Stewardship Council Principles & Criteria, the High Carbon Stock Approach Toolkit and the Climate, Community & Biodiversity Standards or other emerging best practice standards) where these provide additional detailed guidance or requirements that support compliance with the IFC Performance Standards.

&Green recognises that its Borrowers may not meet these standards at the point of signing the transaction agreement, and in these situations &Green will define a timeframe within which full compliance and/or remediation must be achieved as part of the LPP.

Forest and Biodiversity Framework

Considering the importance of biodiversity-related impacts in its investments, &Green has a specific Forest & Biodiversity Framework that mainstreams biodiversity concerns into investment decision-making. The framework embeds IFC Performance Standard 6 within & Green's E&S Management System (ESMS), ensuring that mainstream biodiversity concerns are considered as part of the investment decision-making. Guidance is provided on the depth of biodiversity specific studies for each transaction, which is commensurate with the level of biodiversity risk presented by the investment, in order to provide a pragmatic approach for balancing cost-effective risk management whilst maintaining the integrity of IFC Performance Standards.

NDPE Policy

&Green requires its Borrowers to make an unconditional written organisational policy commitment to no deforestation, no development of peatlands, and no exploitation (NDPE). &Green monitors progress towards the NDPE policy commitments throughout the tenor of its investments. Lack of progress is addressed with Borrowers based on contractually defined obligations and ramifications.

Landscape Protection

&Green requires its Borrowers to translate their vision for maximising long-term environmental impacts and social inclusion, and for contributing to sector transformation, into a Landscape Protection Plan (LPP) and to commit to the implementation of the LPP as a term of its investment agreement. The LPP describes the Borrower's strategy and the additionality of the strategy against sector practices in the landscape in which the Borrower operates. Additionally, the LPP defines the output and outcome targets of the strategy, the Borrower's accountability and the Monitoring, Reporting and Verification framework for these undertakings.

Sustainability Risks and Due Diligence

&Green has determined, upon advice from its legal advisors, that although its investments fall within the definition of "Sustainable Investment" in the EU's Sustainable Financial Disclosures Regulation (SFDR)⁴, the SFDR does not apply to &Green. Nevertheless, &Green adopts the policy of applying market best practice, irrespective of whether the regulation requires it to or not.

&Green has identified that its investments are exposed to Sustainability Risks⁵, which are analogous to the E&S Risks referred to in these Investment Principles. These Investment Principles include the identification of the Sustainability Risks during due diligence and the management and/or mitigation thereof through, inter alia, the ESMS, ESAP, NDPE and LPP. The

e. Complaint management

&Green takes all reasonable precautions to conduct its operations in a manner that avoids complaints about its conduct. Effective complaint handling offers many practical benefits to &Green and helps to improve the quality of services. Complaints provide evidence of poor decisions and/or poor service delivery. &Green works to assure its stakeholders that their complaints are easy to report, are acknowledged and are dealt with quickly, fairly and sensitively. In order to preserve and enhance its reputation, &Green attempts to identify dissatisfied counterparties and work out methods of resolving their complaints.

&Green relies on a [Complaints Management Policy](#) that is available on its website and is based on the following principles:

- All stakeholders are given the opportunity to raise their complaints;
- All complaints must be answered within three months from receipt; and
- All complaints must be documented and reported.

f. Fraud, misuse of fund

&Green has adopted a Code of Conduct which provides the ethical framework in which the Fund operates. It provides an overview of the values, commitments, responsibilities and integrity that the Fund stands for. When operating within the framework of this Code of Conduct, the Fund creates a responsible and transparent environment not only in conducting its business, but also in its governance. The Code of Conduct addresses issues of gender equality and inclusion, Bribery, Fraud and Anti-Corruption, conflicts of interests and the protection of vulnerable groups amongst other, it is available at : https://www.andgreen.fund/wp-content/uploads/2022/02/211116_Green-Code-of-Conduct.pdf

Furthermore, &Green has an [ANTI-MONEY LAUNDERING AND COMBATING THE FINANCING OF TERRORISM \("AML/CFT"\) POLICY](#)

VIII. Overall Project Budget

Table 3 A – WORK PLAN

Product	Activities	Title of the Activity	Impl. Org.	Impl. Partn	Period												Budget CAFI	Budget - other Source(s)	Budget TOTAL	%
A. COST OF PROJECT OUTPUTS																				
Product 1: Origination Support and Technical Assistance Facility																				
1	1,1	Activity 1.1: Origination Support	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$0	\$ 18.341.845	29,7%		
1	1,2	Activity 1.2: Development Capital Facility (DCF)	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$0	\$ 3.906.345	6,3%		
1	1,3	Activity 1.3: Pre- and post-investment Technical Assistance	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$0	\$10.000.000	16,2%		
Product 2: &Green Financing Facility																				
2	2,2	Activity 2.2: &Green Fund will recruit private sector co-investment to leverage CAFI and existing &Green Fund resources including GCF	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$0	\$ 4.435.500	7,2%		
2	2,3	Activity 2.3: Fund capital disbursed to large scale sustainable agriculture projects with robust environmental and social covenants incorporated into lending agreements as events of default	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$10.666.000	\$ 42.666.000	69,1%		
TOTAL COST OF PROJECT OUTPUTS																				
B. COST OF MONITORING & EVALUATION, SAFEGUARDS & GENDER, COMMUNICATION																				
B	B2	Oversight of Investments	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$0	\$ 405.750	0,7%		
TOTAL MONITORING & EVALUATION, SAFEGUARDS & GENDER, COMMUNICATION																				
C. MANAGEMENT COSTS																				
&Green	&Green	HR of the IO	&Green	&Green	x	x	x	x	x	x	x	x	x	x	x	\$0	\$ 358.753	0,6%		
TOTAL PMC																				
TOTAL PROJECT DIRECT COSTS																				
Indirect costs (max 7% of direct costs)																				
TOTAL COSTS																				

Table 3 B – BUDGET BY OUTCOME

CAFI OUTCOME	TOTAL CAFI (USD)	TOTAL PROJECT (USD)
1. Sustainable agricultural practices lead to less land conversion and increased food security;	\$51.106.345	\$ 61.772.348
2. Sustainable alternatives to current wood energy practices are adopted;		
3. Forestry sector and protected areas institutions and stakeholders have the capacity and the legal framework to promote, monitor and enforce sustainable management of forests;		
4. Future infrastructure and mining projects minimize their overall footprint;		
5. Land use planning decisions ensure a balanced representation of sectoral interests and keep forests standing, and better tenure security does not incentivize conversion by individuals, communities and companies;		
6. Population growth and migration to forests and forest fronts are slowed down;		
7. Better inter-ministerial coordination and governance resulting in a permitting, enforcement and fiscal regime of economic activities that do not push economic actors to forest conversion and illegal activities and a business climate favorable to forest-friendly investments.		
Total	\$ 51.106.345	\$ 61.772.348

Table 3 C – BUDGET BY UNDG CATEGORY

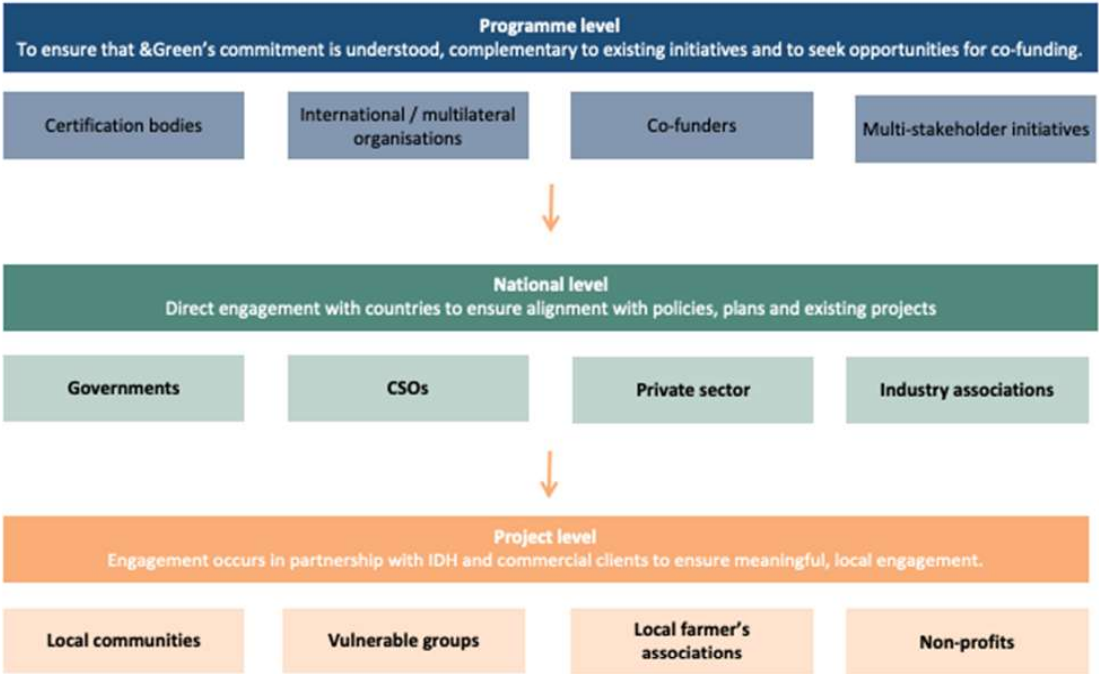
UNDG BUDGET CATEGORY	&Green	TOTAL USD
1. Staff and other personnel	764.503	764.503
2. Supplies, Commodities, Materials	-	-
3. Equipment, Vehicles, and Furniture (including Depreciation)	-	-
4. Contractual services	8.341.845	8.341.845
5.Travel	-	-
6. Transfers and Grants to Counterparts	42.000.000	42.000.000
7. General Operating and Other Direct Costs	-	-
Total Direct Costs		51.106.348
8. Indirect Support Costs (Max. 7%)	0	0
TOTAL Costs	-	51.106.348

IX. Annexes

ANNEX 1: Multi-stakeholder engagement in the program development process

Established in 2017, &Green Fund is already active in several jurisdictions and has a proven track record of engagement with stakeholders across commodity supply chains and CAFI target countries. &Green Fund follows a multi-stakeholder approach with governments, the private sector, relevant CSOs and local stakeholders, amongst others. This is done through engagements at programme, national and project levels (4). These past examples serve to indicate the Fund’s approach to stakeholder engagement and will be emulated for future projects.

Figure 7: &Green Fund stakeholder engagement at programme, national and project levels.



Programme-level engagements ensure that &Green Fund’s commitment to delinking commodity supply chains from deforestation is understood and is complementary to existing initiatives. The purpose of &Green Fund’s engagement at this level is one of cooperation and collaboration to achieve this shared vision. Stakeholders at this level include the World Bank, UN Environmental Programme (UNEP), financial institutions, multi-stakeholder initiatives and certification schemes, and research institutes. The stakeholder mapping in Table 8 captures the key stakeholder groups at programme level:

Table 8: Programme level stakeholders and their role

Stakeholder Group	Interests and influence relevant to the programme	Proposed role in the programme
Multi-stakeholder initiatives and certification bodies	<p>Multi-stakeholder initiatives and certification bodies can act as eco-system allies to advocate scalable solutions, like &Green Fund, to invest in inclusive agriculture especially when applied to specific deforestation commodities.</p> <p>Clients have to demonstrate compliance with certification standards.</p>	Provides standards and networks relevant to benchmark the investments. Initiatives can also act as convenors for certain commodities, providing networking opportunities and access to relevant information.
Co-funders	<p>Given &Green Fund's growth ambitions, potential new investors in &Green Fund are stakeholders with high priority. Co-invest partners are investors that invest alongside &Green Fund in their portfolio companies. They form an important stakeholder cluster because catalysing co-investment is a key part of the 'transformational' element of &Green Fund's investment thesis.</p>	<p>This is a key stakeholder group for &Green Fund, requiring pro-active engagement to help &Green Fund achieve its mission to invest in inclusive agriculture and protecting forests. Co-funders help grow the fund and provide scalability to &Green Fund's 'blueprints'.</p> <p>CAFI investment will help the Fund reach the scale required to achieve transformational change. Given the infancy of the Fund and the exposure to emerging markets, commercial investors need a 50:50 split of private to public sector investment to be comfortable with investing in the Fund.[1]</p>
Implementing Partners	<p>These are organisations who support the implementation of the fund financed by &Green Fund. As implementing partners, they are 'invested stakeholders' and as such will have an active interest to (as part of their mandate) communicate about the results achieved. Implementing partners can therefore act as ambassadors for &Green Fund, also at a global level.</p>	<p>Ensuring measurable impact in halting tropical deforestation.</p> <p>Progress in achieving environmental and social return targets of &Green Fund (including land rights and local community engagement).</p> <p>Highlighting the need for sustainable investment-models to scale inclusive agriculture and protect forests.</p>
Multilateral (international) organizations	<p>Multilateral (international) organisations, such as the World Bank or UN. It is important that the contribution of &Green Fund to invest in inclusive agriculture and protecting forests is understood and (where relevant) is seen as complementary to emerging or existing policy initiatives.</p>	<p>Could spark (additional) donor investments or facilitate (not hamper) local project implementation. To identify possible synergies, collaborations and opportunities for knowledge sharing.</p>

Research institutes	These are international scientific or research institutions that focus on sustainable finance (business) or international agricultural supply chains (life sciences). This stakeholder group is important to ensure alignment with and recognition of &Green Fund by academia and research institutions.	Ensure &Green Fund's approach is aligned with the latest state of play in terms of scientific research (input) and will contribute to &Green Fund being recognised as a scalable solution to invest in inclusive agriculture and protecting forests.
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National-level engagement involves direct engagement with governments to ensure alignment with country's policies, plans and existing projects. &Green Fund's Jurisdictional Eligibility Criteria Assessments (JECAs) assess whether jurisdictions have suitable policies in place for &Green Fund investments to make an impact. Stakeholder groups include government ministries, civil society organisations, industry associations and the private sector (Table 9).

The Fund, especially on land and forest governance, supports and requires its investees to engage with communities and local, regional and national government. These engagements are often enabled by supply chain and landscape convening partners, and its partner implementing organisations on the ground in the majority of &Green Fund target countries.

The &Green Fund's expertise and ongoing presence in target countries is used to mobilise government action that enables deforestation free, inclusive development, including land rights, land use planning, traceability and smallholder support programs. The Fund and its co-partners develop a roadmap to deforestation-free commodities, such as cocoa, at a national level. These roadmaps support the design and implementation of new policy instruments, guidelines and plans to tackle commodity-related deforestation in countries.

The &Green Fund TAF was formally launched in 2019 and aims to reduce risk and maximise the impact of the &Green Fund (potential) investment projects, by supporting investment-readiness, monitoring, post-investment client support and sharing of lessons and knowledge from &Green Fund and its investment projects with third party stakeholders. To maximise country ownership, policy dialogue, awareness-raising and capacity building measures with governments are undertaken. Capacity building and business model development is also carried out with private sector clients, as well as to design local community and smallholder inclusion.

Table 9: National-level stakeholders and their role

Stakeholder Group	Interests and influence relevant to the project	Proposed role in the project
Civil Society Organisations	These are non-profit, non-state groups, independently representing a wide range of societal interest. The relationship with this type of organisations can range from being &Green Fund's implementing partner in one of its investment deals, to being an active 'challenger' in the public arena.	Partnerships to enhance the impact of our investments and support the replicability of sustainable practice models. Engagement to mitigate environmental and social risks.
Government (relevant ministries and NDAs), public agencies or departments	&Green Fund's investments help progress government agendas directed towards climate, sustainability and economic growth targets. Governments require compliance with relevant policies and legislation.	Link &Green Fund to suitable investments, support the implementation of their policy frameworks and connect industry actors. Coordinate around local and regional strategies.
Industry association	View &Green Fund's investments as leading in ESG strategy	Helps &Green Fund investments act as catalytic in the industry, creating transformational scale at the sector level.
Local financial institutions	Potential co-funders, &Green Fund can take a leading role to de-risk assets and make them investment-ready for financial institutions to step in &Green Fund aims to deepen the capital markets of every country that it invests in. This will be achieved by enhancing local banks' understanding of and interest in sustainable agricultural models.	Provides scalability to &Green Fund's 'blueprints' Local financial institutions (who have the requisite local knowledge) will be able and willing to provide adequate finance to sustainable agricultural businesses into the future.
Private sector	Receiver of &Green Fund funding to adopt and develop sustainable supply chains and learn from &Green Fund benchmark projects.	The programme achieves transformational change through direct (funding) and indirect (industry benchmark) private sector engagement. The Fund's partners mobilise buyers and producers for sustainable, inclusive and deforestation free sector and supply chain development.

Project-level engagement occurs in partnership with commercial clients to ensure meaningful, local engagement. These stakeholders may include local farmer's associations, community groups, non-profits, and Indigenous Peoples (Table 10), as well as stakeholders established at the national level.

Through its Landscape Protection Plans (LPPs), &Green Fund works in partnership with commercial clients to ensure meaningful local stakeholder engagement at the project level. To enable transformational change, maximize positive impacts and mitigate E&S risks, &Green Fund engages local stakeholders throughout the investment process. &Green Fund ensures this process is driven by the client. That is, the business or organisation that &Green Fund invests in.

The Fund will convene stakeholders to develop multi-stakeholder agreements and processes, including by convening the development of green growth plans and PPI compacts, through which stakeholders agree on land use zones and targets for sustainable agriculture (Production), forests and natural resources conservation and restoration (Protection), and enabling opportunities for local communities, smallholders, women and youth to thrive (Inclusion).

The PPI approach aims to secure inclusive, sustainable deforestation-free production within a defined area (the 'Landscape'), involving various stakeholders as local communities, producers, financiers, investors, supply chain companies, local and national government and civil society. Sustainable and inclusive land-use planning and management is cemented in binding agreements between public, private and civil society stakeholders, according to well-defined targets, timelines, roles and responsibilities.

Table 10: Project-level stakeholders and their role

Stakeholder Group	Interests and influence relevant to the project	Proposed role in the project
Local stakeholders (community members, Indigenous Peoples, smallholders)	<p>Local communities are vulnerable to the impacts of climate change and decreasing productivity, particularly those whose livelihoods are dependent on the forestry sector, agriculture, and the ecosystem services that these provide.</p> <p>Deforestation can impact local people who rely on forests for shelter livelihoods, water, fuel and food security.</p> <p>Local communities' livelihoods are heavily dependent on their share of income from commodity production as well as on environmental degradation caused by unsustainable production practices.</p>	<p>The &Green Fund works in partnership with civil society (and other stakeholders including farmer organisations) to deliver interventions on agroforestry, protection of forest reserves, land-use plans and diversification of income. The strategy addresses the needs of local communities and helps make commodity farming a sustainable livelihood option.</p>

Consultants	Connecting responsible finance to land-use conservation projects	Collaborate on designing remediation plan for forest conservation and restoration in compliance with standards (for example RSPO). Engagement to mitigate environmental and social risks.
Grant facilitator	Support partnerships that deliver on commitments for deforestation-free commodities	Provides a combination of grants and technical assistance

ANNEX 2: Communication and Visibility Plan

Objectives

2021 saw &Green successfully established with suitable promotional channels, and as an actor in the blended finance/sustainable land use discussions globally, with sufficient outreach to balance publicity expectations versus modesty relative to achievements.

The 2022 Marketing and Communications Strategy centres around solidifying the 2021 achievements and maintaining the positive public presence of &Green, and, more crucially, building the capacity of our partnerships to develop communication benefits.

The strategy includes the following pillars:

- Utilise the existing, newly built platforms and strategic partnerships to communicate &Green successes and achievements and establish reputational protection by endorsement of relevant key initiatives. We will seek to increase our publications in non-&Green controlled outlets. This includes also in creating publications on and with clients on Learnings, as these have proven particularly attractive to a wider audience.
- Operationalising the &Green Stakeholder engagement strategy and maintaining stakeholder involvement. This will include creating the right tools, such as the envisaged launch of the new website but also a newsletter or relevant publications of &Green learnings through suitable channels.
- Building country and sector engagement, specifically to secure >10 No Objection Letters for GCF and build the relevant stakeholder engagement and convening strategies in collaboration with partners such as IDH. This is a component of the GCF proposed Grant Window.
- Linking &Green communication needs and risk management to the MACHINE processes.
- Continuation of pre-emptive communication and reputation risk management by monitoring the universe of our transactions for negative press, and pre-emptive development of defensive communication strategies.

SAIL is currently hiring a dedicated Communications Specialist to scale up the capacity in this space.

Communication tools chosen

Please see above the rationale for choosing specific tools for each phase and step of communication plan based on the targeted group and outreach strategy.

<https://www.andgreen.fund/stakeholders/>

ANNEX 3: The &Green rationale by Sector

Sector	Climate risks	Evidence of impacts (selected examples from the scientific literature)	Adaptation and mitigation interventions	Adaptation and mitigation benefits
Palm oil	<p>Clearing of land for palm oil plantations is one of the largest single contributors to GHG emissions (Russell et al, 2017; Meijaard et al, 2020)</p> <p>Palm oil plantations cover 20% of peatlands in South East Asia and are a significant driver of peatland oxidation (Miettinen et al, 2016)</p> <p>Carbon impacts extend beyond lost forest and peatlands, and result in substantial direct emissions from the oil palm plantations themselves (Jaafar et al, 2020)</p>	<ul style="list-style-type: none"> Conversion of peat swamps for palm oil in South East Asia alone contributes 0.8% of total global GHG emissions (Cooper et al, 2020) Palm oil is responsible for 30% of peatland fires in Indonesia (Maskun et al, 2021) 20% of the peatland area in Malaysia has been disturbed for palm oil production (Taheripour et al, 2019) Palm oil frontier expansion has been detected in Sebangau National Park in Kalimantan, Indonesia – one of the last remaining peat swamp forests (Robles et al, 2021) 	<ul style="list-style-type: none"> Develop plantations on degraded land rather than destroying forests and peatland (Mutsaers, 2019) Introduce appropriate management practices (Khatun, 2017) Use high-yield and disease-resistant cultivars (Murphy et al, 2021) Work with local and national governments to enable protection of high carbon storage areas (Umayah et al, 2021) Introduce and promote the use of sustainability industry standards (Macdonald, 2020) Ensure any investee company engaged in palm oil production commits to no deforestation or peatland depletion (Dermawan, 2022) Work with smallholder farmers so they understand the damage caused by land clearing (Suhada et al, 2018) Downstream mitigation – e.g. reducing methane emissions from palm oil mill effluent (POME), &/or including production of biogas or biofuels from production processes (Choong et al, 2018) 	<ul style="list-style-type: none"> Produce higher yields and meet global demand for palm oil while avoiding large-scale GHG emissions (Monzon et al, 2021) Retention of undisturbed carbon sinks and ongoing carbon sequestration (Miller et al, 2021)
Livestock farming: cattle	<p>Cattle are responsible for 9.4% of anthropogenic GHG emissions (FAO, 2013; Munidas et al, 2021)</p> <p>Livestock use ~80% of global farming land (for grazing and animal feed)</p>	<ul style="list-style-type: none"> Cattle account for almost twice as much global deforestation as palm oil, soy, cocoa, rubber, coffee and plantation wood fibre combined (Goldman et al, 2020) 	<ul style="list-style-type: none"> Introduce improved grass species on rangelands with higher nutrient content, lower moisture use, heat tolerance and/or pest resistance (Perera et al, 2019) Modify grazing management systems 	<ul style="list-style-type: none"> Intensification of existing cattle grazing areas can reduce pressure on forest land while contributing to global food availability and continued rural development (Garrett et al, 2018)

	<p>production), resulting in deforestation and carbon loss (Skidmore et al., 2021), reduced ongoing soil carbon sequestration (Arval et al., 2018), and use of land that could be allocated to lower-emission food alternatives (Simmons et al., 2022)</p> <p>Cattle farming contributes significantly to CO₂, CH₄ and N₂O emissions (Lynch & Pierrehumbert, 2019)</p> <p>Livestock manure and enteric fermentation are responsible for one-third of anthropogenic methane emissions (UNEP, 2021)</p> <p>Livestock is the most exposed agricultural sub-sector to the adverse impacts of climate change (Escarcha et al., 2018)</p> <p>Climate change leads to reductions in cattle productivity by directly depressing animals' adaptive response mechanisms (Rojas-Downing et al., 2017), altering the spread and prevalence of diseases (Bett et al., 2017), and causing heat stress and related welfare issues (Morignat et al., 2014); and indirectly by compromising the availability of feed crops and forage (Kandalam & Samireddypalle, 2015)</p>	<ul style="list-style-type: none"> • Extensive cattle ranching accounts for ~80% of deforestation in the Amazon (Trancoso, 2021) • Livestock methane emissions increased by 51% between 1961-2018, and this trend is expected to continue (FAO, 2018). • Rising temperatures and humidity are reducing dairy cattle milk yields in Tanzania (Ekine-Dzivenu et al., 2019) • The livestock sector accounts for 8% of global human water use: climate change (primarily rising temperatures) may increase this by a factor of 2-3 (Nardone et al., 2010) 	<p>(e.g. rotation) (McDonald et al., 2018)</p> <ul style="list-style-type: none"> • Use new/different pasture grasses, animal feed, supplements or changed genome to reduce methane emissions from methanogenesis in ruminants (Haque, 2018; McCauley et al., 2020) • Downstream mitigation – e.g. manure methane capture (Abdallah et al., 2018) • Develop the genome of new, or introduce existing, breeds tolerant to higher temperatures (such as Pe-Duro, Curraleiro or Indu-Brasil) (Pryce & Haile-Mariam, 2020) • Diversify crops and animals to reduce climate vulnerability (Idrissou et al., 2020) • Apply agroforestry and land management practices to increase GHG sequestration and soil organic carbon absorption (Jordon et al., 2020) • Plant copses of trees in open paddocks to provide shade and localised heat shelters for livestock (and some carbon sequestration) (Junior et al., 2020) 	<ul style="list-style-type: none"> • Supplementation of roughage-based cattle diets with red seaweed can reduce enteric methane emissions by over 80% (Roque et al., 2021) • Agroforestry can reduce GHG emissions, increase productivity / head of cattle per hectare, provide shade and enhance nutrient cycling (Maia et al., 2021) • Changes in livestock genome can simultaneously reduce methane emissions by 10-20% and increase drought and heat tolerance (i.e. mitigation / adaptation trade-offs can be managed) (Eenennaam, 2019) • Changes to feeding practices such as diet modification, feeding time and frequency, and production and conservation of feedstock, can promote higher intake or compensate for low feed consumption, thus reducing animal feed insecurity and malnutrition caused by climate change (Maleko et al., 2018)
Soy	<p>The global land area allocated to soybean production is now greater than that of South Africa; soy production is linked to</p>	<ul style="list-style-type: none"> • The area of soy cropping in Brazil has doubled in the past 20 years, with 20% of the expansion involving the 	<ul style="list-style-type: none"> • Ensure soil moisture content retention, through minimisation of tilling, covering soils with plants (cover crops) or mulches, and crop diversification 	<ul style="list-style-type: none"> • Augmenting soy with additional crop-types, rotating fallow land and adopting Integrated Crop-Livestock Production (ICLP) in an area serves to retain soil

	<p>extensive deforestation and clearance of natural vegetation (Brack et al, 2016; Dreoni et al, 2022)</p> <p>Soybean plantations are associated with a greater loss of soil carbon than other crop-types (Villarino et al, 2017)</p> <p>Land clearance for soy production is altering the climate (primarily, reduced rainfall and higher temperatures) at the regional level in South America, contributing to a vicious cycle of lower agricultural productivity (Spera et al, 2016)</p> <p>In China, climate change impacts on the dates of soy anthesis, the lengths of the vegetative and reproductive growth periods and the duration of growing seasons are evident and are more significant than the influence of crop management practices (He et al, 2020)</p> <p>If baseline rates of technical change continue, then soybean yield can be expected to decrease by 26-57% by 2050 compared with 2013-17 levels, depending on the warming scenario (Yu et al, 2021)</p>	<p>conversion of natural forest (Zalles et al, 2018)</p> <ul style="list-style-type: none"> • ~30% of the loss of Cerrado natural vegetation cover in Brazil is attributable to soy production (Rausch et al, 2018) • Soy is the second-largest contributor to N₂O emissions in Argentina and the largest crop-related source, accounting for more N₂O emissions than wheat, corn, sunflower and sugar cane combined (Castesana et al, 2020) • Climate change to date is estimated to have reduced soybean yields by 25% relative to yields under non-warming (i.e. pre-industrial) climate conditions (Iizumi et al, 2018) • The increasing frequency and intensity of drought in China is reducing soy yields – by ~10% in moderate drought years and ~22% in severe drought years (Wang et al, 2020) 	<p>(Nayak et al, 2019; Looby & Diaz, 2021)</p> <ul style="list-style-type: none"> • Develop or disseminate new crop varieties (heat- or drought-tolerant) through breeding (Khojely et al, 2018; Tiwari, 2022) • Move (or provide in current location) soybean crops to areas with lower air temperature – e.g. higher elevations, adjacent to protected forest areas that lower local ambient temperatures and stabilise humidity; provide biodiversity strips or corridors that also break up wind currents and provide some shade effects; and areas with broad-acre irrigation that absorbs latent heat (Hatfield et al, 2016; Kukul & Irmak, 2018; Fernandes et al, 2022) • Introduce and promote the use of sustainability industry standards (Gibbs et al, 2015; Kusumaningtyas & van Gelder, 2019) • Work with local and national governments to enable protection of high carbon storage areas (Nepstad et al, 2014; Lima et al, 2019) 	<p>organic carbon and increase resilience to climate change (Kumar & Babalad, 2018; Chalise et al, 2019; Nepstad et al, 2019)</p> <ul style="list-style-type: none"> • New soy varieties created through breeding can be more resilient to the impacts of climate change (Kulkarni et al, 2018; Raza et al, 2019) • Growing a range of crops allows income and risk diversification for farmers in case one crop underperforms or fails (Garbelini et al, 2020; Piedra-Bonilla et al, 2020) • The climate resilience of farmers and local communities is strengthened by adopting sustainable and climate-adapted soy farming practices (Ali et al, 2020; Siamabele, 2021; Akinvi et al, 2022)
Rubber	<p>Expansion of rubber plantations is an accelerating driver of deforestation and carbon emissions: the global land area devoted to rubber plantations has doubled in the past 20 years</p>	<ul style="list-style-type: none"> • The spatial extent of rubber plantations in South East Asia is now equivalent to two-thirds that of palm oil (Warren-Thomas et al, 2018) • 3m ha of forest loss in the Mekong region can be directly attributed to the 	<ul style="list-style-type: none"> • Rubber plantations constitute carbon stocks that are comparable to or exceed sub-humid, humid and temperate agroforestry or forestry systems and some tropical agroforestry systems (Brahma et al, 2016). When planted on 	<ul style="list-style-type: none"> • Reduced intrusion of rubber plantations into natural forests and hence retention of undisturbed carbon sinks (Grogan et al, 2019; Cho et al, 2022) • Enhanced carbon sequestration by existing rubber plantations (Singh et al, 2021)

	<p>(Singh et al, 2021)</p> <p>The land area allocated to rubber production is increasing rapidly in less traditional growing countries, including Myanmar, Cameroon, Côte d'Ivoire, Nigeria and the Congo Basin (Gitz et al, 2020)</p> <p>Climate change is already impacting rubber production due to drier seasons and more variable precipitation (Pinizzotto et al, 2021)</p> <p>Higher temperatures will likely reduce latex flows and therefore yields (Ismail & Gohet, 2021)</p> <p>As rubber is never planted in areas with average temperatures above 28°C, higher temperatures will likely have a severe impact on production (Jacob et al, 2021).</p> <p>Rubber plantations are particularly vulnerable to extreme rainfall events and high wind speeds (Chen et al, 2021; Qi et al, 2021)</p> <p>Most pests and diseases associated with rubber are influenced by climatic conditions (Mazlan et al, 2019)</p>	<p>expansion of rubber cultivation since 2000 (Ecofys, 2018)</p> <ul style="list-style-type: none"> • In Thailand, rubber plantations located on long-established cultivated land generate emissions of 0.5 tCO₂e/tonne of concentrated latex; on land where forest has recently been cleared for rubber production, the emission factor is 20 times higher (13 tCO₂e/t latex) (Jawjit et al, 2010) • Climate-driven geographical shifts in land suitability for rubber production are predicted in China (Liu et al, 2015), India (Ray et al, 2015), Malaysia (Hazir et al, 2018) and the Greater Mekong sub-region (Golbon et al, 2018). • Pestalotiopsis (a fungal leaf-fall disease), first detected in Indonesia in 2016, is increasing rapidly, driven by wetter and more prolonged rainy seasons, and has reduced latex yields by more than 30% (Febbivanti, 2021). It has since spread to Malaysia, Thailand and Sri Lanka (Chelong et al, 2020) 	<p>degraded land, rubber plantations can serve as an effective mitigation approach (Brahma et al, 2017; Jong et al, 2021)</p> <ul style="list-style-type: none"> • Increase the use of rubber wood to reduce the need for additional wood collection in forests and for timber plantations: e.g. 80% of wooden furniture in Malaysia is now made from rubber wood (Ratnasingam et al, 2018) • Promote the use of rubber or rubber wood as alternatives to fossil fuels: e.g. for bio-energy production (Riazi et al, 2018; Waewsak et al, 2020) and as a replacement for synthetic polymers (Micu, 2019) • Promote evaporative cooling and moisture recycling from rubber plantations to the atmosphere (Nouvellon et al, 2021) • Intercrop rubber plants with native tree species rather than monoculture (Penot et al, 2020) and with fruit crops, vegetables, legumes and natural flora (Déo-Gratias et al, 2018; Kadir et al, 2022) • Introduce management measures including shading young plants, mulching, irrigation, reducing surface runoff and using rain guards to protect the bark (Blagodatsky et al, 2021; Gay et al, 2021) • Extend rotation lengths to increase carbon stocks (Nizami et al, 2014) • Support breeding with genomic assisted selection and collection of wild germplasm (Isarangkool Na Ayutthaya et al, 2017; Wijesuriya, 2021) 	<ul style="list-style-type: none"> • Moving away from monoculture as a climate adaptation measure can provide shade, enhance soil nutrients, prevent moisture loss and reduce pest damage, potentially boosting yields and incomes for farmers (Esekhade et al, 2021) • Irrigation measures reduce the impacts of drought and keep rubber trees cooler (Mangmeechal, 2020) • Breeding can produce high yielding, climate-resilient and disease-resistant clones (Jacob et al, 2021).
Sustainable agroforestry: coffee	<p>Between 2001-2015, coffee plantations replaced ~2 million ha</p>	<ul style="list-style-type: none"> • Aside from Brazil, where increases in coffee production are being driven by 	<ul style="list-style-type: none"> • Cocoa and coffee are similar crops with overlapping areas of production, that can 	<ul style="list-style-type: none"> • Coffee production with appropriate agroforestry can significantly enhance carbon sequestration

	<p>of forest globally, of which 1.1 million ha were for robusta coffee and 0.8 million ha were for arabica coffee (Goldman et al, 2020)</p> <p>Demand for coffee is expected to triple by 2050; unless growers can significantly increase coffee productivity per hectare, the industry will need to increase the area under coffee production commensurately (Nab & Maslin, 2020)</p> <p>GHG emissions attributable to coffee-driven deforestation amount to ~20 million tCO₂e/year (Treanor & Saunders, 2021)</p> <p>Coffee is categorised as a 'highly sensitive' plant to climate change (DaMatta et al, 2018): extensive reductions in agro-climatic extent (and spatial drift) of suitable growing areas are anticipated (Bunn et al, 2015; Pham et al, 2019), as well as reductions in yields (Kath et al, 2020), impaired beverage coffee quality (Gokavi & Kishor, 2020) and greater pest incidence (Ziska et al, 2018; Lemma & Megersa, 2021).</p> <p>In the next 30 years, 75% of available, unforested land</p>	<p>technology, in nearly all other countries deforestation is the primary driver of increasing coffee production (Baker, 2014)</p> <ul style="list-style-type: none"> Expected climate change in Brazil may lead to a ~60 % reduction in the area suitable for coffee production in unshaded plantations by 2050 (Gomes et al, 2020) Climate-driven reductions in suitability are predicted in 90% of Nicaragua's coffee-growing areas, with lower elevations particularly impacted (25-50% projected suitability reductions) (Läderach et al, 2017) Approximately 15% of Peruvian coffee-growing areas will require systemic climate adaptation to remain viable (Morales et al, 2022) Local production systems in Uganda are maladapted to future climate conditions: without adaptation, coffee production in Uganda will likely become uneconomic in most of the country (Bunn et al, 2019) 39-59% of the current coffee-growing area of Ethiopia could experience climatic changes that are large enough to render it unsuitable for coffee farming (Moat et al, 2017) Four of the top five producing countries are expected to become less suitable 	<p>effectively be produced under sustainable agroforestry</p> <ul style="list-style-type: none"> Coffee can serve as an agent of reforestation (Somarriba & Lopez-Sampson, 2018) Identify agricultural land that may become less productive for current use and more suitable to coffee production (such as higher elevations), where sustainable / shade-grown coffee can be introduced (Rahn et al, 2018; López et al, 2020) Identify coffee production areas that are vulnerable to specific facets of climate change (changes in temperatures, rainfall variability, pests, etc.) and implement appropriate sustainable management actions, including: <ul style="list-style-type: none"> Introduce agroforestry systems that provide at least 50% shade cover and provide fruit, firewood, timber and other climate resilience benefits to farmers (Nesper et al, 2017; Rice, 2018; Harvey et al, 2021) Introduce incentives for local stakeholders to safeguard production areas, including improved land tenure security and crop consistency (and hence higher farm-gate prices) (Alemie & Amsalu, 2020; Nghiem et al, 2020) Replant coffee plantations with disease-resistant cultivars (Avelino & Anzueto, 2020) Provide incentives for local stakeholders to identify valued conservation areas for set-aside forest 	<p>(particularly when conducted on degraded land) (Justine et al, 2019; Zaro et al, 2020; Gonçalves et al, 2021), as well as reduce pressure on existing forest (Nijmeijer et al, 2019; Fitch et al, 2022)</p> <ul style="list-style-type: none"> Climate-adapted production systems – with appropriate geography, agroforestry and management systems – can maintain coffee output in the face of adverse climate change (Kumar et al, 2018; Mulinde et al, 2019) Adaptation actions relating to coffee production provide a disproportionately effective means of reaching smallholder farmers and enhancing their climate resilience (Shapiro-Garza et al, 2019; Jawo et al, 2021)
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	<p>suitable for Arabica farming will be lost due to climate change, and 63% of similarly suitable land for Robusta farming (Sachs et al, 2019)</p> <p>Coffee is predominantly a family farmer's crop, produced by an estimated ~20 million farms, of which 70-80% are smallholder households (Bacon et al, 2017; Panhuyzen & Pierrot, 2020) and a large majority are climate-vulnerable (Eakin et al, 2014; Harvey et al, 2018; Guido et al, 2020)</p>	<p>for growing by 2050 (Gruter et al, 2022)</p> <ul style="list-style-type: none"> • Processing of coffee beans results in considerably higher GHG emissions (~2.5 tCO₂e/t coffee beans) than cocoa or palm oil processing, largely due to methane emissions from wastewater and landfilled pulp (Wainaina et al, 2021) 	<p>protection, that may hold cultural significance as well as provide biodiversity reservoirs to increase ecosystem resilience (Gladkikh et al, 2019; Verburg et al, 2019)</p> <ul style="list-style-type: none"> • Introduce or scale-up appropriate agroforestry practices, such as introduction of native trees and crops (intercrops or companion plantings) (Mariño et al, 2016; Rahn et al, 2018) • Increase the coffee area grown under sustainability standards (Haggard et al, 2015; Elliott, 2018) • Promote downstream bio-energy generation using coffee residues – e.g. gasification using coffee grounds and husks, briquettes, etc. (Espeulas et al, 2020; Martinez et al, 2021) 	
Cocoa	<p>Between 2001-2015, cocoa farms replaced an estimated 2.3 million ha of forest globally, more than rubber, coffee or plantation wood fibre (Goldman et al, 2020)</p> <p>Cocoa production was responsible for ~1% of global forest loss in the period 1988-2008 (Kroeger et al, 2017)</p> <p>Cocoa production remains concentrated in West Africa (primarily Côte d'Ivoire and Ghana) but is expanding rapidly in South America, contributing to Amazonian deforestation (Castro-Nunez et al, 2020; Orozco-Aguilar et al, 2021)</p>	<ul style="list-style-type: none"> • ~10% of Ghana's forest loss since 2001 is attributable to cocoa production (World Bank, 2017); the corresponding statistic for Côte d'Ivoire is almost 3 times higher (UN-REDD, 2016) • 7 of 23 protected areas in Côte d'Ivoire have been partially or almost entirely converted to cocoa production (Bitty et al, 2015) • In Côte d'Ivoire, production of 1 kg of cacao beans is associated with emissions of ~1.5 kg CO₂e, with the high emission factor attributable to extensive deforestation (Vervuurt et al, 2022) • Cocoa farming in West Africa is sensitive to changes 	<ul style="list-style-type: none"> • Cocoa and coffee are similar crops with overlapping areas of production, that can effectively be produced under sustainable agroforestry • Cocoa can serve as an agent of reforestation: e.g. on previously cleared pastureland (Schroth et al, 2016; Middendorp et al, 2018) • Identify agricultural land that may become less productive for current use and more suitable to cocoa production (such as higher elevations), where sustainable / shade-grown cocoa can be introduced (Herawati et al, 2021; Sassen et al, 2021; Singh et al, 2021) • Identify cocoa production areas that are vulnerable to specific facets of 	<ul style="list-style-type: none"> • Effective agroforestry systems can mitigate the effects of climate change and maintain up to 75% of the area suitable for coffee production (Gomes et al, 2020; Gusli et al, 2020; Arimi & Omoare, 2021) • Agroforestry techniques have proven efficacy in addressing climate change stressors, including reduced water availability, excessive heat and wind damage (Apuri et al, 2018; Somarriba et al, 2018; Fisher-Ortiz, 2022) • LISA technologies safeguard food security and combat the negative impacts of climate change on productive land (Sarkar et al, 2020)

	<p>Low-shade and no-shade cocoa systems are replacing shade-based systems, with resultant loss of tree cover and carbon storage (Blaser et al, 2018)</p> <p>Prolonged dry periods, increasing mean temperatures, erratic precipitation and droughts are expected to be key climate change stressors on cocoa production (Bunn et al, 2019; de Sousa et al, 2019; Lahive et al, 2019), exacerbated by indirect effects on companion forest species, cocoa pollinators, and pests and diseases (Arnold et al, 2018; Cilas & Bastide, 2020; Jung et al, 2020; Lima et al, 2022)</p>	<p>in climate, notably: the maximum temperature reached during the year and the length and intensity of the dry season (Läderach et al, 2013; Black et al, 2020; Wongnaa & Babu, 2020)</p> <ul style="list-style-type: none"> • Climate aridification since the 1960s has already significantly reduced cocoa production in the eastern forest belt of Côte d'Ivoire (Ruf et al, 2015) • Climate change will shift the geography of cocoa production in West Africa, with Ghana, Nigeria and Togo being negatively impacted – potentially significantly – and new growing opportunities arising in Cameroon and Liberia (Schroth et al, 2016) • Climatic variability is reducing cocoa yields in Cameroon, including via poor pod formation and increased incidence of pests and diseases (Suh et al, 2022) • Brazil will likely experience a 37% and a 73% reduction in land areas suitable for cocoa expansion under RCP 4.5 and RCP 8.5, respectively (Igawa et al, 2022) 	<p>climate change (changes in temperatures, rainfall variability, pests, etc.) and implement appropriate sustainable management actions, including:</p> <ul style="list-style-type: none"> • Introduce agroforestry systems that provide at least 50% shade cover to mitigate temperature spikes and moderate humidity changes to reduce likelihood of plant mortality and improve consistency of fruit production (Jezeer et al, 2017; Roth et al, 2017; Niether et al, 2020) • Introduce incentives for local stakeholders to safeguard production areas, including improved land tenure security and crop consistency (and hence higher farm-gate prices) (Boeckx et al, 2020; Folefack & Darr, 2021) • Provide incentives for local stakeholders to identify valued conservation areas for set-aside forest protection, that may hold cultural significance as well as provide biodiversity reservoirs to increase ecosystem resilience (Santiago et al, 2018; Osei-Owusu & Frimpong, 2019) • Introduce or scale-up appropriate agroforestry practices, such as introduction of native trees and crops (intercrops or companion plantings) (Apuri et al, 2018; Niether et al, 2020; Saputra et al, 2020) • Introduce viable low-input sustainable agriculture (LISA) technologies in low-income countries 	
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			<p><u>(Gertsis & Vasilikiotis, 2018)</u></p> <ul style="list-style-type: none"> Encourage (through, for example, awareness raising, provision of seedlings and training on non-timber forest products) the use of native species in rural and peri-urban agro-ecosystems <u>(Asigbaase et al, 2019; Braga et al, 2019)</u> 	
Timber	<p>Clearing of forests for timber accounts for ~25% of global deforestation, just behind commodity production (27%) <u>(Curtis et al, 2018)</u>; logging is also a major driver of forest degradation <u>(Pearson et al, 2017; Ken et al, 2020)</u></p> <p>Timber production is responsible for ~13% of the GHG emissions from tropical deforestation and degradation <u>(Pearson et al, 2018)</u></p> <p>Global demand for timber is set to triple by 2050 <u>(FAO, 2022)</u></p> <p>Inefficiencies in primary wood utilisation and under-utilisation of wood waste contribute to unnecessary timber harvesting and associated GHG emissions <u>(Aalmo et al, 2019; Charis et al, 2019; Pandey, 2022)</u></p> <p>The timber industry is vulnerable to climate change <u>(Andersson et al, 2017; Brecka, 2018; Subramanian et al, 2019; Brecka et al, 2020)</u>, notably die-back driven by temperature and moisture changes <u>(Deb et al, 2017; Ofoegbu et al, 2017;</u></p>	<ul style="list-style-type: none"> Logging accounts for up to ~78% of forest-related GHG emissions in India, ~24% in Indonesia and ~10% in South America <u>(Pendrell et al, 2019)</u> Globally, timber production may experience a net increase due to climate change: ~8% by 2100 under RCP 2.6 and ~30% under RCP 8.5. However, the largest increases will likely occur in temperate and boreal regions – the tropics may experience reductions <u>(Favero et al, 2021)</u>; there will be considerable intra-regional shifts and disruption <u>(Tian et al, 2016)</u>; and the majority of timber producers, and particularly smallholders, are ill-equipped to adapt <u>(Keenan, 2015; Jandl et al, 2018)</u> A number of key timber supply countries, including Colombia, Mexico, Tanzania, DRC and Vietnam, appear to be in ‘timber deficit’, meaning the total area of forest currently used exceeds the area designated for production: there is a significant risk that 	<ul style="list-style-type: none"> Improve the efficiency of primary wood utilisation, which can serve to reduce the rate of harvesting <u>(McEwan et al, 2020; Iwanaga et al, 2021)</u> Promote the productive use of wood waste (bio-energy, plywood, etc.) <u>(Simangunsong et al, 2017; Dulys-Nusbaum et al, 2019)</u> Increase the forest area grown under certification standards <u>(Halalisan et al, 2018; Wibowo et al, 2018)</u> and in compliance with national laws <u>(Guan et al, 2017; Torres-Rojo, 2021)</u> Select and breed fast-growing tree species that accelerate carbon sequestration and are adapted to expected climate change <u>(Pilipović et al, 2018; Isabel et al, 2019; Ahtikoski et al, 2020)</u> Promote win-win strategies that boost timber yields and promote carbon sequestration, such as protecting trees from predation and replacing low-productivity forests with more vigorous stands <u>(Bellassen and Luyssaert, 2014, Pukkala, 2018)</u> Deploy reduced-impact logging techniques, which can reduce GHG emissions by almost half while maintaining timber production <u>(Ellis</u> 	<ul style="list-style-type: none"> Application of sustainable on-site timber production techniques, selection of appropriate sites (degraded land, denuded agricultural land) for extensification of timber production, substitution of materials for harvested wood products and fuller utilisation of timber residues offer substantive carbon sequestration and avoided emissions benefits <u>(Marchi et al, 2018; Ezquerro et al, 2019; Pioniot et al, 2019)</u> Modification of tree species (and mix) and the introduction of adapted management techniques can serve to avoid, or reduce the impacts of, climate change stressors <u>(Halofsky et al, 2018; Jhariya et al, 2019; Ontl et al, 2020)</u>, as well as sustain the livelihoods of forest-dependent communities <u>(Lescuyer et al, 2016; Lin et al, 2019; Nambiar, 2019)</u>

	<p><u>Shvidenko et al, 2017</u>), damage from increasingly frequent extreme events (heatwaves, fires, floods, storms) (<u>Keskitalo et al, 2016</u>; <u>de Oliveira et al, 2018</u>; <u>Da-Rocha et al, 2021</u>), and pests and diseases (<u>Wyka et al, 2016</u>; <u>Pureswaran et al, 2018</u>; <u>An et al, 2019</u>; <u>Zaiton et al, 2020</u>)</p> <p>Timber management approaches rarely incorporate carbon sequestration or community resilience objectives (<u>Torres-Rojo et al, 2016</u>; <u>Sheppard et al, 2020</u>; <u>von Hedemann et al, 2020</u>)</p>	<p>any further supply from these countries can only come from areas designated for forest conservation (<u>Dean, 2016</u>)</p> <ul style="list-style-type: none"> • Logging in violation of national laws may account for ~8-10% of global timber production (<u>Nguyen & Cao, 2020</u>) • Climate-linked wind damage is predicted to increase in many temperate forests (<u>Potterf et al, 2022</u>); wildfire frequency and extent will increase in temperate and tropical areas (<u>Mansoor et al, 2022</u>); and water stress will negatively impact timber yields in many tropical areas (<u>Lam et al, 2020</u>) 	<p><u>et al, 2019</u>; <u>Umunay et al, 2019</u>)</p> <ul style="list-style-type: none"> • Reforest degraded land with timber plantations (<u>Veintimilla et al, 2018</u>; <u>Rodríguez & Sabogal, 2019</u>; <u>Briceño et al, 2020</u>) • Promote mixed-species timber plantations to diversify away from climate risks (<u>Pukkala, 2017</u>; <u>Liu et al, 2018</u>) • Promote the use of harvested wood products in applications (furniture, buildings, etc.) that serve as durable carbon stores (<u>Iordan et al, 2018</u>; <u>Johnston & Radeloff, 2019</u>), as well as alternatives to materials with large carbon footprints (e.g. steel, plastics, cement) (<u>Leskinen et al, 2017</u>; <u>Breton et al, 2018</u>; <u>Švavilka & Kozlovská, 2020</u>) • Promote tenure and property rights that incentivise long-term, sustainable wood harvesting (<u>Aggarwal et al, 2021</u>; <u>Sarfo-Adu, 2021</u>) • Build smallholder capacities and incentives to adopt sustainable logging practices and adapt to anticipated climate change (<u>Arvola et al, 2019</u>; <u>Susilawati et al, 2019</u>) 	
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ANNEX 4: Feasibility Studies

Please see accompanying document: “&Green CAFI Feasibility Study”

ANNEX 5: Environmental and Social Impact Document

Please see &Green's ESMS disclosure publications at the following URLs:

English (pdf) – https://www.andgreen.fund/wp-content/uploads/2022/06/Green_ESMS_Disclosure_English.pdf

French (pdf) – https://www.andgreen.fund/wp-content/uploads/2022/06/Green_ESMS_Disclosure_French.pdf

ANNEX 6: Implementation Timeline

Sub-Activities	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
Sub-Activity 1.1.1: Origination Support															
Sub-Activity 1.2.1: Development Capital Facility															
Sub-Activity 1.3.1: Pre-Investment Technical Assistance															
Sub-Activity 1.3.2: Post-Investment Technical Assistance															
Sub-Activity 2.1.1 Promote &Green to private sector investors															
Sub-Activity 2.2.2 Negotiate and execute contribution agreements															
Sub-Activity 2.3.1 Junior investment capital for CAFI countries															

ANNEX 7: &Green investment manager bios

The SAIL Investments team supporting the &Green / CAFI collaboration includes the following experts:

JOHNNY BROM

Johnny previously worked on the sell- and buy- side of the investment industry, in South Africa and North America. Prior to setting up SAIL, Johnny spent time at IDH Sustainable Trade Initiative, where he created - and then ran - their Innovative Finance team. Johnny is SAIL's Founder and CIO, leading the investment team and the engagement with the & Green Board. Johnny is the chairman of SAIL's investment committee.

MICHAEL SCHLUP

Michael has broad supply chain experience and has been involved in various environmental management functions. He previously worked for the Gold Standard Foundation, Bunge and, most recently, Barry Callebaut. Michael leads the environmental return and social inclusion attributes of SAIL's business and he is responsible for the stakeholder engagement, the Jurisdiction Eligibility Criteria (JEC) approach for &Green, and for designing effective approaches to smallholders. Michael is a member of SAIL's investment committee.

BRETT MALLEN

Brett has worked in investment management for 16 years. He was previously COO (and acting CEO) of Sanlam Africa Investments, comprising African private credit, private real estate and public equity funds. Prior to that he was an Investment Principal on Sanlam's Private Equity team. Brett is admitted as an attorney in South Africa and holds an LL.M from Leiden University and a CFA Charter. Brett leads SAIL's compliance, regulatory, financial and risk management operations, whilst playing a leadership role in formulating and implementing strategy, raising capital and participating in the investment process. Brett is a member of SAIL's investment committee.

SANJIV LOUIS

Sanjiv brings a wealth of structured credit, capital markets and M&A experience from his career in investment banking in Asia, with UBS and Credit Suisse. He has spent over 20 years advising public and private sector companies in SE Asia on corporate finance matters. Sanjiv leads all of SAIL's deal origination, client relationships, structuring and co-lender arrangements in SE Asia.

GUSTAVO OUBINHA

Gustavo has more than 20 years' experience in banking and capital markets. He was Managing Director and an executive board member of Rabobank Brazil for 13 years, where he structured over USD 300 million in transactions for farm input suppliers and managed a USD 3 billion book of agri trade finance loans and a securitization book that reached BRL 1.5 billion. Besides leading origination in Brazil, Gustavo also acts as legal counsel support within SAIL as well as advising more broadly on

financial structuring.

ERIK PEEK

Erik has 25 years' experience in agri-banking and capital markets, 10 of those as CEO of Rabobank Brazil with USD 7 billion in Agri-loans. Erik is an accredited asset manager by CVM (Brazilian SEC) and is fluent in Portuguese, English, Spanish & German. Erik is responsible for deal origination across Latin America and participates in the management of the credit risk and pricing aspects of SAIL's business.

CARLOTA FERNÁNDEZ DE LEÓN

Carlota has eight years of experience in the financial services industry, working on both the sell-side and the buy-side in London, Amsterdam and Madrid. She joins SAIL from Carlyle's Alpinvest co-investment team. Prior to that, Carlota worked at Goldman Sachs on the Equity Capital Markets and Merger & Acquisitions teams. She holds an MBA from IE Business School and a degree in Business Administration and Finance from ICADE University. Carlota leads SAIL's Fundraising and Investor Relations capability.

NATALIA PASISHNYK

Natalia has 14 years of experience in advising corporations, financial institutions and government agencies on ESG risk management and sustainable business strategies. Notably, she has spent significant time in the field working on low-carbon supply chains in Brazil, whilst living there. Natalia holds a Masters degree in Sustainable Forestry and Land Use Management from Freiburg University. Natalia is responsible for the E&S compliance management and monitoring of all transactions that are originated by SAIL.

MARTHE TOLLENAAR

Marthe has over 10 years of experience in ESG strategy and compliance in forestry and agriculture investments across emerging market geographies. She has supported companies in the transition towards sustainable management practices, sharing learnings and experience, establishing partnerships and (co)developing frameworks that facilitate the implementation of impact commitments. Marthe works on implementing the E&S strategy formulated by SAIL for the existing and prospective investments in our client portfolios.

ADRIAN LAIN

Adrian has 6 years of experience in the fields of forestry, environmental research and sustainable commodities. Over the past 4 years Adrian has worked with the palm oil industry in Latin America and West Africa as a sustainability data and GIS analyst. Adrian is central to SAIL's monitoring and measurement of the environmental and social impact of investments, particularly through his GIS and sustainability data analysis expertise.

ANNEX 8: &Green Board Profiles

ADVISORY BOARD

RT HON. HELEN CLARK

CHAIRPERSON OF THE &GREEN ADVISORY BOARD

FORMER PRIME MINISTER OF NEW ZEALAND

FORMER ADMINISTRATOR OF UNDP

Helen Clark was Prime Minister of New Zealand for three successive terms from 1999 to 2008. She was the first woman to become Prime Minister following a General Election in New Zealand and the second woman to serve as Prime Minister.

Throughout her tenure as Prime Minister and as a Member of Parliament over 27 years, Ms. Clark engaged widely in policy development and advocacy across the international affairs, economic, social, environmental, and cultural spheres. She advocated strongly for a comprehensive programme on sustainability for New Zealand and for tackling the challenges of climate change. She was an active leader of her country's foreign relations, engaging in a wide range of international issues.

In April 2009, Ms. Clark became Administrator of the United Nations Development Programme. She was the first woman to lead the organisation, and served two terms there. At the same time, she was Chair of the United Nations Development Group, a committee consisting of all UN funds, programmes, agencies, and departments working on development issues. As Administrator, she led UNDP to be ranked the most transparent global development organisation. She completed her tenure in April 2017.

Prior to entering the New Zealand Parliament, Ms. Clark taught in the Political Studies Department of the University of Auckland, from which she earlier graduated with her BA and MA (Hons) degrees.

Ms. Clark continues to speak widely and be a strong voice on sustainable development, climate action, gender equality and women's leadership, peace and justice, and action on non-communicable diseases and HIV. She serves on a number of advisory boards and commissions, including as Chair of the Board of the Extractive Industries Transparency Initiative, and Chair of the Board of the Partnership for Maternal, Newborn, and Child Health. From July 2020 to May 2021, Ms. Clark was a Co-Chair of The Independent Panel for Pandemic Preparedness and Response which was set up by the World Health Organisation's Director General at the request of the World Health Assembly (WHA).

SABINE MILTNER

PROGRAM DIRECTOR, CONSERVATION AND MARKETS INITIATIVE

GORDON AND BETTY MOORE FOUNDATION

Sabine Miltner joined the Gordon and Betty Moore Foundation, a \$9 billion private foundation in the United States, in 2016. She oversees the foundation's work on decoupling food production from ecosystem degradation. Approved through 2026 with a total budget of \$400 million, the Conservation and Markets Initiative targets ending deforestation, conversion and overfishing in the production, sourcing, and financing of the most important food commodities, by aligning market incentives with

conservation outcomes.

Since joining Moore, Ms. Miltner has been on the board of several organizations, including IUCN-US. She is currently co-chairing the Sustainability Council of Bayer AG, a global life sciences company.

Prior to philanthropy, Ms. Miltner's career as a finance professional spanned the public and private sectors with a focus on sustainability/climate change and developing countries.

Ms. Miltner was a Managing Director and the Group Sustainability Officer of Germany-based Deutsche Bank AG and worked with senior management on the step-wise integration of sustainability and financial goals. She also co-chaired the bank's steering committee on climate change.

Previously, Sabine was a director at the Institute of International Finance, leading the work to improve conditions for private investment in developing countries. She started her career as an economist at the International Monetary Fund working in Africa, Eastern Europe and the Caribbean.

Sabine earned a PhD in economics from Harvard University and a M.A. in economics from the University of Mannheim, Germany.

ROSA LEMOS DE SÁ

MEMBER OF THE &GREEN ADVISORY BOARD

SECRETARY GENERAL OF FUNBIO, BRAZILIAN BIODIVERSITY FUND

Rosa Lemos de Sá was appointed Secretary General of Funbio since January 2010. Previously, she led the Andes-Amazon Initiative of the Gordon & Betty Moore Foundation in the United States, from 2006 to 2009, and worked at WWF-Brazil for 10 years, occupying the position of Director of Conservation from 2003 to 2006. Ms. Lemos de Sá has extensive experience in Protected Area Programs and studied endangered primate species and the impact of a hydroelectric dam on wildlife population as a Master and Ph.D. student, respectively. She graduated in Wildlife Management from the University of Wisconsin, USA, has an MSc in Ecology from the University of Brasilia and a Ph.D. in Wildlife Conservation from the University of Florida, USA.

PER FREDRIK ILSAAS PHARO

MEMBER OF THE &GREEN ADVISORY BOARD

DIRECTOR OF PARTNERSHIPS AND SHARED PROSPERITY AT NORAD

Per Pharo is Director of Partnerships and Shared Prosperity at Norad, the Norwegian Agency for Development and Cooperation. Prior to this role, Mr. Pharo served as Deputy Director of the Government of Norway's International Climate and Forest Initiative (NICFI), under the Norwegian Ministry of Environment, from its inception in 2008 until October 2011 when he was appointed as Director. NICFI was set up to deliver on the Norwegian Prime Minister, Jens Stoltenberg's Bali promise to annually spend up to 3 billion Norwegian kroner to contribute towards reducing the greenhouse gas emissions caused by deforestation and forest degradation in developing countries.

Before joining NICFI, Mr. Pharo worked at McKinsey & Company's Oslo office; at the Norwegian Ministry of Defense (on security policy, defense policy and defense transformation), and as a researcher at the Norwegian Institute of Defense Studies. He has a Candidatus Philologiae degree in history from the University of Oslo, Norway, and a BA in International and US politics and history from

Augustana College, Sioux Falls, South Dakota, USA.

MARC ENGEL

MEMBER OF THE &GREEN ADVISORY BOARD

FORMER CHIEF SUPPLY CHAIN OFFICER, UNILEVER

Marc Engel joined Unilever in 1990 at Unilever Meat Group in Oss, the Netherlands, where he was on the construction team building the Ragu tomato sauce factory, which he later ran as Production Manager. In his 20-year career with Unilever, Mr. Engel has worked in Singapore, the Netherlands, UK, Brazil, Switzerland and Kenya. As Unilever's Chief Procurement Officer from 2016 to 2022 he was in charge of the worldwide procurement of third-party goods and services. and established the "Partner to Win" programme, which has been instrumental in helping to transform Unilever's supplier relationships and to deliver its Sustainable Living Plan ambitions. He was appointed as Chief Supply Chain Officer in 2016 and has extensive experience in supply-chain operations, covering procurement, logistics, finance and strategy development.

Mr. Engel has an MSc in applied physics from the University of Groeningen in the Netherlands.

He is also a member of the A.P. Moller – Maersk Board of Directors, the Executive Advisory Board of SCM World and of the Supervisory Board of IDH.

BAYU KRISNAMURTHI

MEMBER OF THE &GREEN ADVISORY BOARD

SENIOR LECTURER, DEPARTMENT OF AGRIBUSINESS, BOGOR AGRICULTURAL UNIVERSITY

Dr. Bayu Krisnamurthi was Vice Minister of Trade for the Republic of Indonesia from 2011 to 2014, Vice Minister of Agriculture for the Republic of Indonesia from 2009 to 2011, Deputy Coordinating Minister for Agriculture and Marine, Coordinating Ministry for Economic Affairs of the Republic of Indonesia, from 2005 to 2009, and CEO of Indonesia Estate Crop Fund (IECF) for Palm Oil 2015 – 2017.

He received his PhD in Agriculture Economics from Bogor Agriculture University (1998) – the university at which he started his professional career as a Lecturer / Researcher in 1988. Dr. Krisnamurthi is an active Senior Staff, Lecturer and Researcher at the Agribusiness Department of the Faculty of Economic and Management of Bogor Agriculture University.

While serving as a government officer, Dr. Krisnamurthi co-initiated and/or co-founded the ISPO (Indonesia Sustainable Palm Oil) certification system and PISAgro (Partnership on Indonesia Sustainable Agriculture), a private sector movement promoting Sustainable Development, Food Security and Poverty Alleviation, and including about 25 companies, including MNC. He was also The Program Coordinator for the Indonesia National Social Security Program, and a member of the Indonesia National Coordinating Team for Poverty Reduction, (2008 – 2010); Program Coordinator of the Indonesia Biofuel Development Program (2006 – 2008); and Team Coordinator for the Indonesia National Coordinating Team for Food Stabilization (2007 – 2010).

Dr. Krisnamurthi received the Republic of Indonesia's highest medal of honor, "Bintang Mahaputra Utama", for his work, dedication and achievement; and special honor of "Ordre du Merite Agricole" from the Republic of France for his role and contribution to world agricultural development and Indonesia – France cooperation.

BOARD OF DIRECTORS

NANNO KLEITERP

CHAIRPERSON OF THE &GREEN BOARD OF DIRECTORS

HONORARY CHAIRMAN OF THE EUROPEAN DEVELOPMENT FINANCE INSTITUTIONS (EDFI)

Nanno Kleiterp is a Board Member at Arise, a leading African investment company backed by three investors, Norfund, Rabobank and FMO. Arise has US\$ 1bn in assets under management and is a minority shareholder in about 10 locally-owned financial services providers in Sub-Saharan. Mr. Kleiterp is also a Board Member at Sudameris Bank, a leader in the creation of the round table for sustainable finance in Paraguay. Sudameris is the 4th largest bank in Paraguay, with US\$ 1 bn in assets. He has also recently been appointed Chairman of the Board of ILX Management, the manager of emerging market focused private credit fund, ILX Fund I.

In 2019 Mr. Kleiterp was appointed Honorary Chairman of the EDFI, an association that comprises 15 European bilateral DFIs and a total investment portfolio of EUR 40 billion committed to supporting the private sector in developing countries. He was the first independent Chair of EDFI from 2017 to 2019.

Mr. Kleiterp has been Chairman of the Board of Trustees of the Van Leer Foundation, which promotes Early Childhood Development, since 2018 and he is a Member of the Advisory Board of Commonland, which aims to transform degraded landscapes into thriving ecosystems and communities based on sound business cases and aligned with international policies and guidelines. He is also a Member of the Advisory Board at Form International, a forest management and services company that manages forest assets in Africa and delivers a range of technical and financial services to clients worldwide, and is Chairman of the Board of the International Union for Conservation of Nature (IUCN) in the Netherlands. Since 2018, he is also a Fellow of the World Resource Institute (WRI).

From 1987 to 2016, Mr. Kleiterp held a number of positions at FMO, the Dutch development bank, including serving as the Chief Executive Officer from 2008 to 2016.

In 2016, he published the book "Banking for A Better World" (Amsterdam University Press), which lays out the case for transformational investments in developing countries and the role of Development Finance Institutions.

FELIA SALIM

MEMBER OF THE &GREEN BOARD OF DIRECTORS

MEMBER OF THE BOARD OF DIRECTORS AND CHAIR OF THE RISK MANAGEMENT COMMITTEE OF INDONESIA EXIMBANK.

Felia Salim has spent more than 30 years in finance and banking. From 2004 to 2015, she served as Vice President Director of PT Bank Negara Indonesia, one of Indonesia's largest state banks. With her leadership, the bank introduced ESG criteria into the bank's credit model, which received numerous awards for sustainability. She held other notable positions as Managing Director of the Jakarta Stock Exchange and at the height of the Asian Crisis in the late nineties, she served as Deputy Chairperson of The Indonesian Bank Restructuring Agency, after an assignment as Head of the Secretariat for the Financial Sector Policy Committee.

Ms. Salim actively supports not-for-profit initiatives and has been instrumental in developing several key organizations, such as the Partnership for Governance Reform of Indonesia (Kemitraan) and The Transparency International Indonesia. These organisations cover a wide range of initiatives: from working with communities, multi-sector governance reform and active participation in policy change.

Alongside her governance work, Ms. Salim has been deeply engaged in sustainability-climate emergency, land use and food safety-security through her active participation in key organizations both national and international: such as member of the HSBC Climate Advisory Panel, the Climate and Land Use Alliance, the Global Alliance for Improved Nutrition. Through these engagements her work covers Asia, Africa and Latin America.

Currently, Ms. Salim serves as a member of the Board of Directors and chairs the Risk Management Committee of Indonesia Eximbank.

CLAUDIA ARANGO

MEMBER OF THE &GREEN BOARD OF DIRECTORS

Claudia Arango is an accomplished private equity and impact investor with a proven track record and more than 20 years of international experience in private markets across a diverse number of sectors including agribusiness, telecom, logistics, transportation, retail, media, and industrial services. During Claudia's career, she has provided board leadership to several organizations in Latin America and the US where she has successfully guided companies to grow both domestically and internationally through her strategic leadership, M&A expertise, and hands-on approach.

Ms. Arango is currently a Managing Partner of Exagon Impact Capital ("XIC"), a private equity firm with a mission to achieve superior returns in infrastructure investments in Latin America and the Caribbean while simultaneously achieving a positive impact integrating strict ESG guidelines into the investment decision and project execution. Previously, Ms Arango was a Director with the AIG Global Emerging Markets Private Equity Group and she is the former Managing Director and founding member of the Latin American Private Equity Fund at The Rohatyn Group ("TRG") in New York, a leading multi-billion asset management firm focusing on emerging markets.

Ms Arango received an M.Sc. in Finance from the University of Maryland and a B.S. in Industrial Engineering from the Universidad de los Andes in Bogotá, Colombia.

JOOST OORTHUIZEN

MEMBER OF THE &GREEN BOARD OF DIRECTORS

CHIEF EXECUTIVE OFFICER AT INVEST INTERNATIONAL

In 2021, Joost Oorthuizen was appointed as the first CEO of Invest International, a new development and finance facility to support governments and companies with finance and to provide project development capacity. Its shareholders are the Dutch government and FMO. It brings together 100 development professionals & investment managers from FMO (the Dutch development bank) and RVO (The Netherlands Enterprise Agency) under one roof, with over EUR 2 billion of development and project finance. Its mandate is to create Sustainable Development Goals (SDG) impact in emerging

markets in sectors that are relevant for the Dutch economy.

Mr. Oorthuizen built his career in the fields of international trade, finance and sustainable development. He holds a Ph.D. in natural resource management from Wageningen University, The Netherlands, a post-Masters qualification in change management and was schooled at Insead in financial management. He is the founding CEO of IDH – The Sustainable Trade Initiative, and under his leadership IDH became a 350 person, global organization, working with corporates and governments in mainstreaming sustainability in global value chains in agriculture, textiles and energy. Mr. Oorthuizen has set up various impact investment funds. He is a regular speaker at international conferences.

ANNEX 9: Selected &Green Case Studies

PT HILTON DUTA LESTARI (HDL)

&Green is working with HDL to reduce deforestation across four districts in the province of West Kalimantan and improve incomes for up to 85,000 inhabitants in the area. The loan from &Green will be specifically utilized to construct a Crude Palm Oil (CPO) mill. The mill will capture production from a 30km radius around HDL’s estates and will obviate the need for ca. 5,000 farmers in the landscape as well as in HDL plantations to transport palm fruit (“FFB”) up to 100km (at great commercial and environmental cost) to other non-RSPO* certified and non-NDPE** mills. Through HDL’s NDPE-compliant mill, the project offers a replicable blueprint to sustainably finance independent mills across Indonesia.

PROJECT SUMMARY	
COUNTRY	Indonesia
PROVINCIAL JURISDICTION	West Kalimantan
INVESTEES COMPANY	PT Hilton Duta Lestari (HDL)
SUPPLY CHAIN	Palm Oil
TOTAL &GREEN INVESTMENT	USD 12 million
EFFECTIVE DATE	31 March 2022
LOAN TERMS	8-year tenor

* The Roundtable on Sustainable Palm Oil (RSPO) is the leading global palm oil certification that aims to make sustainable palm oil the norm.

** NDPE stands for No Deforestation, No development of Peatlands, and No Exploitation and is a policy commonly used to ensure sustainable operations.

INVESTMENT RATIONALE

Nearly 60% of the CPO produced globally in 2020 originated from Indonesia, making the palm oil industry the largest export commodity for the country. These palm oil supply chains are highly fragmented, opaque, and result in steep price deductions for smallholders; the resulting limited capacity to invest into the productivity of their crops often leads smallholder farmers to encroach other forested areas. Green’s loan demonstrates that collaboration among supply chain and landscape participants can drive rural economic development, create jobs and safeguard resources and biodiversity. Within Indonesia, HDL’s blueprint has the potential to shift the narrative for destructive land-use by adopting transparent models of sustainable and inclusive supply chain sourcing at scale. HDL’s success and replication of the model enables smallholders to achieve higher yields, higher incomes and inclusion in best practice supply chains that are deforestation-free. This enables more robust and diverse supply chains, with a greater climate resilience due to maintenance of forest resources.

ENVIRONMENTAL RETURN & SOCIAL INCLUSION

HDL’s commitments have been detailed in two documents developed together with &Green: the Landscape Protection Plan (LPP) and the Environmental and Social Action Plan (ESAP). These are the key documents which &Green uses to work towards transformational impact with HDL. The LPP

describes HDL's landscape and the context of its operations in West Kalimantan, providing an overview of the strategies needed to achieve the expected environmental and social impacts over the loan term. The Environmental and Social Action Plan (ESAP), a contractually binding part of the LPP, sets specific targets for the implementation of strategies on the ground, as well as performance indicators for the impacts.

Environmental and social targets for the project include:

- (i) sustainable intensification of oil palm production;
- (ii) inclusion of smallholders in the landscape;
- (iii) forest conservation and restoration.

In addition, HDL commits to comply and maintain compliance to international standards (IFC Performance Standards) and establish itself as an integrated palm oil producer with an RSPO certified estate and mill by 2025, and fully NDPE compliant supply chain by the first half of 2023.

ENVIRONMENTAL & SOCIAL RISK ASSESSMENT

Various expert consultants have conducted E&S due diligence and gap analyses of HDL's supply chain and main operations. More specifically:

HDL's existing operations and impacts of its future mill have been assessed against the IFC PS, through a Gap assessments and E&S Impact Assessment. An HCV-HCS assessment, based on RSPO's guidelines was also carried out.

Additional studies were commissioned to assess HDL's future supply chain, the risks associated with it and to develop NDPE-compliant sourcing strategies centred on smallholder inclusion.

In combination, reviews of documentation and first-hand site visits provided a comprehensive picture of the project situation and its E&S impacts and risks.

Since 2019 and following the results of initial E&S Due Diligence studies, HDL has demonstrated noticeable commitments and efforts for improving its E&S performance.

HACIENDA SAN JOSÉ (HSJ)

&Green's financing will be used by HSJ to sustainably scale up their operations in the Vichada province of Colombia, ultimately impacting up to 180,000 hectares by the end of the loan tenor. The project objectives include protecting and restoring forest; fostering social inclusion through knowledge sharing, employment creation and community engagement; and sharing data and learnings to encourage positive change in the cattle industry.

INVESTMENT RATIONALE

&Green's investment in HSJ will help transform the Colombian cattle sector from a low quality, inefficient sector associated with deforestation in the Amazon rainforest, to a sustainable, inclusive, deforestation-free and efficient supply chain that produces high-quality beef.

HSJ intends to expand to have influence over approximately 180,000 hectares of sustainably managed livestock farming at the end of &Green's loan period, which will include more than 13,000 hectares of forest conservation, as well as material gallery forests; but more importantly, will set the bar for the expansion of sustainable livestock management in Colombia.

HSJ's commitments have been detailed in two documents: the Landscape Protection Plan ("LPP") and the Environmental and Social Action Plan ("ESAP"). Through these public documents, HSJ is committed to the protection and restoration of up to 27,000 hectares of tropical forest in Colombia's underdeveloped Orinoquía region at the end of the loan tenor. As &green's first investment in Colombia, this transaction sends a message about supporting players that operate beyond "Business-as-Usual" from a production and protection perspective.

ENVIRONMENTAL RETURN & SOCIAL INCLUSION

HSJ is committed to meeting the highest sustainability standards throughout their supply chain. This includes a commitment to ensure No Deforestation, No development of Peatlands, and No Exploitation (NDPE) within any of their operations and supply chains.

The Environmental Return and Social Inclusion targets HSJ has committed to reflect the expected impact on forest, cattle production and social inclusion, and are described in the LPP and detailed in the ESAP; these are the key documents which &Green uses to work towards transformational impact with HSJ.

ENVIRONMENTAL & SOCIAL RISK ASSESSMENT

An ESG review will be undertaken annually by an external expert, selected in consultation with

PROJECT SUMMARY

COUNTRY	Colombia
JURISDICTION	Colombia
INVESTEES COMPANY	Agropecuaria Bambusa S.A.S (Hacienda San José ("HSJ"))
SUPPLY CHAIN	Cattle Production
TOTAL &GREEN INVESTMENT	COP 30 billion (approx. USD 7.7 million)
EFFECTIVE DATE	31 December 2021
LOAN TERMS	12-year tenor
CO-INVESTORS	Through the sale of cow-calf farms to local and international investors, HSJ will raise an additional USD 240 million over the period of the &Green's investment.

&Green. This review includes a full IFC PS compliance update, progress updates on impact targets and other action items of the Environmental and Social Action Plan (ESAP). A different reviewer will be selected every 3 years to ensure continued objectivity. HSJ will have their own internal monitoring framework to track their progress against the ESAP items and will report their updates annually to &Green.

To guide the expansion of HSJ's operations, a team of experts also developed a tailored Land Acquisition Tool (LAT) that allows HSJ to do a structured assessment of each new plot of land prior to acquisition. The LAT is composed of two sections; a Go/No Go analysis, focusing on critical conditions and a viability analysis, assessing the inputs needed to ensure all impact and compliance obligations are met. The LAT is developed in accordance with the IFC Performance Standards and the Aval GANSO standard for sustainable cattle management.

Annex 10: &Green KPI Framework

Please see accompanying document: "&Green KPI Framework"

Annex 11: &Green Gender Assessment Plan

Please see accompanying document: "&Green Gender Assessment Plan"