



*Mercon LPP*

## **Landscape Protection Plan for Mercon**



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## 1. &GREEN'S INVESTMENT IN MERCON

### 1.1 The Objectives: Transaction and its LPP

Mercon is a vertically integrated coffee company. Its footprint encompasses all segments of coffee value chains, from upstream Robusta production on four farms of a total of 1,644 hectares (ha), including 600 ha of forest conservation area in the Atlantic region of Nicaragua; midstream operations, including 22 wet and dry mills of which six are under Mercon's own management, plus warehousing, in countries of origin; downstream coffee sourcing and trading operations in ten countries through which Mercon sources raw green coffee beans from more than 9,000 third-party suppliers and distributes processed coffee to consumers in 40 countries.

&Green sees potential in a long-term partnership with Mercon to drive the transformation of coffee growers to become climate resilient and thus not needing to shift production into forested regions. Furthermore, &Green and Mercon will partner to drive landscape-level forest protection as a core function of a sustainable coffee value chain. After developing a landscape-level sustainable sourcing program blueprint in the Lam Dong province of Vietnam, Mercon will thereafter scale the program across its supply chains in the jurisdiction. This partnership intends to shift sourcing from farm-level compliance requirements to one that is climate resilient and improves the livelihoods of small farmers. This will ultimately create deforestation-free sustainable coffee production landscapes.

The landscape protection plan (LPP) presented in this document reflects Mercon's long-term sustainability strategy and describes the environmental, social, and transformational impacts to be generated during the financing period.

### 1.2 Environmental and Social Due Diligence (ESDD) Overview

The E&S risks and impacts associated with this project are limited, site-specific, and can be readily addressed through generally accepted mitigation measures, thus the project is a Category B project as per IFC E&S risk classification, as confirmed by ERM due diligence.

Mercon's operations in Vietnam have been assessed against the IFC PS by ERM. Although Mercon is executing an IFC PS compliance ESAP, developed by proper IFC for the corporate level, &Green contracted ERM to run the check focusing on how the corporate ESAP is cascaded and implemented at the country-level as well as to reconfirm the material risks of the transaction.

In addition to the **documents review**, **ERM conducted an external factor review**, i.e. analysis of publicly available data on Mercon's Vietnamese operations to verify relationships with surrounding communities, representative NGOs, environmental control agencies and the Public Prosecution Service.

ERM also **interviewed four of Mercon's management staff** including the Manager and the Agronomist of the Sustainability Department of Lam Dong factory, the Human Resources Manager of Mercon Vietnam and the Country Manager of Mercon Vietnam.

ERM **visited the dry mill and warehousing facility of the Lam Dong factory, two certified farms** near Dalat city **as well as met with local authority officials** of the Tram Hanh Commune where these farms are located. The authorities included the deputy chairman of the People's Committee of Tram Hanh Commune, the representative of Plant



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Protection Department from the Agriculture and Rural Development Department of Lam Dong Province, the Chairwoman of Women's Union of Tram Hahn Commune as well as the representative of Lam Vien Forest Management Board.

**ERM did not visit the wet mills, neither the conventional farms, and did not interview the middleman** (key figures in the supply chains of coffee in Vietnam). These limitations will be addressed through the ESAP and subject to the next due diligence with contractually binding corrective actions is required.

**ERM did not apply the &Green's Forest & Biodiversity Framework** to assess the compliance of Mercon's supply chains with IFC PS6, as this will be part of the ESAP and an essential element of NDPE and LIFT Landscapes. The specialized due diligence with the respective framework application will occur during the first year of the loan and will result in the contractually binding targets.

### 1.3 The project area: the scope of the landscape protection plan

The initial project area is comprised of three pilot landscapes where Mercon will test the concept of LIFT Landscapes. These are the coffee production areas of currently traceable suppliers in the Lam Dong province in Vietnam (&Green's approved jurisdiction). The landscapes contain the production regions and a 5-kilometer buffer zone, with an estimated 63,000 of forest cover in total.

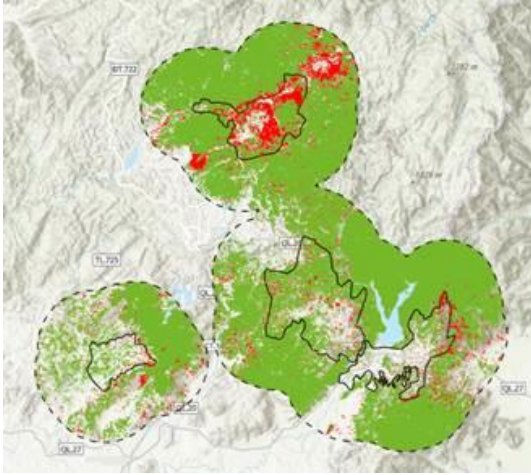
Figure 1. Location of currently traceable coffee production regions in Lam Dong province, used in Mercon's sourcing.



Figure 2. Pilot landscapes, containing ca. 63,000 hectares of forest cover, with areas deforested in the last 20 years highlighted in red.



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Once Mercon maps all its landscapes of interest, the project area will increase significantly. The methodology to define the NDPE and LIFT Landscape, that will be developed as a part of ESAP, will follow the IFC PS and &Green's Forest and Biodiversity Framework.

## 2. LANDSCAPE CHARACTERISTICS

Lam Dong is a mountainous province located in Vietnam's South Central Highland Region, with an area of 9,764.8 km<sup>2</sup>, or about 2.9% area of Vietnam's total land mass. Located on three plateaus of altitude of between 800 and 1,000m above sea level and in the upper reaches of the Da Dang, La Nga and Da Nhim rivers, the province boasts big potential of minerals and perennial industrial plants, forestry, tourism, services and livestock breeding.

The province has 150,770 ha of coffee, 18,240 ha of tea, 23,880 ha of cashew, 1,130 ha of pepper, 5,200 ha of strawberry and 6,885 ha of durian plantations.

The Lam Dong region is leading the country in hi-tech agriculture, with nearly 50,000 ha applying hi-tech cultivation methods. More than half of the Japanese enterprises investing in hi-tech agriculture in the country are located in Lam Dong, according to the Ministry of Planning and Investment's Foreign Investment Agency.

The province has a total area of 645,171 ha of forest and forest land (597,669 ha forested land and 47,502 ha of land preserved for forest plantation) and forest cover of 60.1 percent (Nguyen, 2014). Most of Lam Dong's forests are of poor and degraded quality, though there is a lack of data on the rate of forest degradation in the province (Nguyen, 2011).

**Error! Reference source not found.** indicates the land use of 12 administrative units in 2021, the total forest cover of this province having fallen to 54.97%, with the highest forest cover belonging to the to Lac Duong districts. Meanwhile, only 0.3% of the land in Bao Loc district is forest. Further details of the level of deforestation in Lam Dong province will be discussed in Section **Error! Reference source not found.**

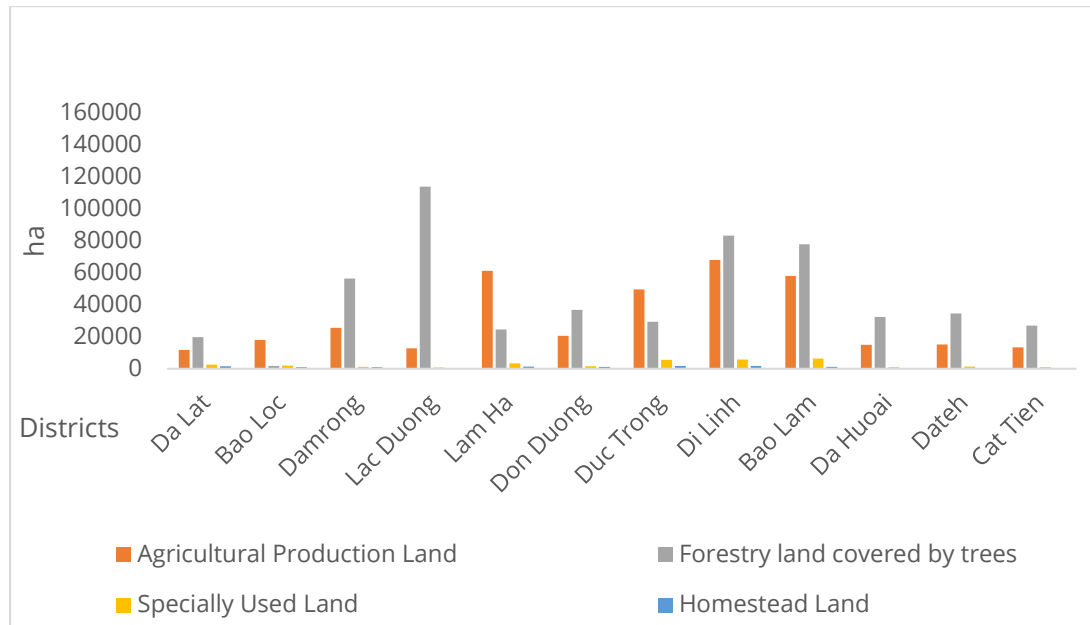
Lam Dong's Forest resources are suffering from external and internal pressures. According to the report of Nguyen (2014), Various factors have contributed to deforestation and forest degradation in Lam Dong including:



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- Logging activities by state forest enterprises;
- Expansion of agricultural crops, particularly cash crops (coffee, rubber);
- Re-settlement scheme for local people and spontaneous migration;
- Illegal logging and forest fire.

Figure 3. District land use by types of land in 2021 (Lam Dong Statistical Book 2021, 2021).



## 2.1 Legal land classification

Forests in Vietnam have been classified into three types: 'production forests' (rừng sản xuất), 'protection forests' (rừng phòng hộ) and 'special use forests' (rừng đặc dụng). Special use forests, falling into the category of either 'national natural reserve' or 'national park', are protected under the state Forest Protection Unit and other state management agencies from any exploitative activities within them, under the rubric of 'environmental and biodiversity protection' and 'national heritage preservation'. Protection forests are defined as less valuable than special use areas in terms of biodiversity and environmental significance, and therefore certain exploitative activities are allowed in them. The category of production forests is reserved for economic development. Local people can use parts of these forests for cultivation – but under the guidelines and monitoring of the Forest Protection Unit.

The 2003 Land Law only recognizes individual households as legal entities entitled to receive land use rights while collective ownership rights are not recognized. Under this law, only agricultural land and production forest are allocated to households.

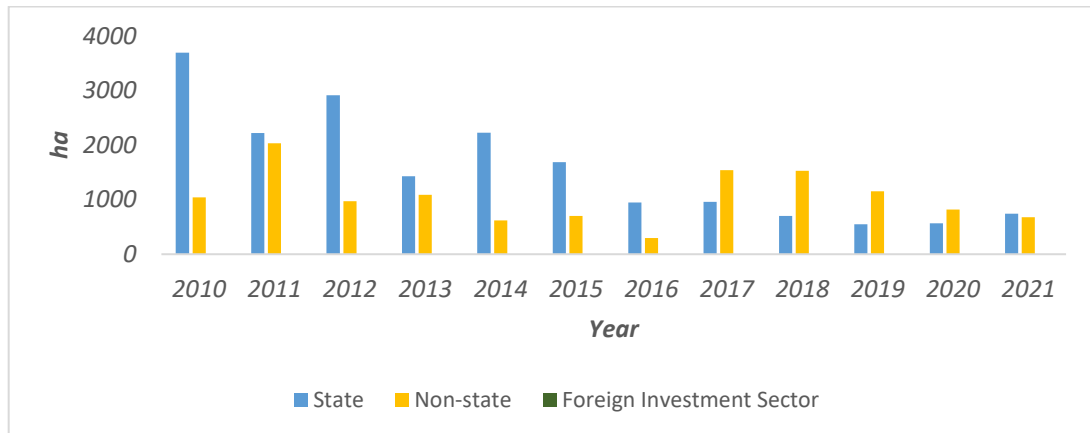
In general, forests in Lam Dong are managed as either state property (e.g. People's Committees, army units, Management boards for protection forests, Management boards for special-use forests, and State-owned companies), non-state property (households, joint venture enterprises, and private companies), and foreign investment sector.



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In the period of 2017-2020, there was a significant increase in the level of non-state forest ownership, however, the figure had been reduced by 2020. The forest management type within the area is “forest contract for forest protection”, which means that the state contracts households to protect the forest with the contracted households will receiving cash payment as recompenses (Nguyen, 2014).

Figure 4. Area of Concentrated Planted Forest by Types of Ownership. .



Describe the legal land classification of the landscape areas (as per government spatial plans). I.e. public / protected area, private area, type of use-function (if relevant), etc. Describe the environmental governance implications related to the land classification. Relevancy is based on whether the land classifications helps understand the deforestation trends better (i.e. do they have implications regarding land use and forest protection?) and whether they have been considered for the design of the LPP of the company.

## 2.2 Topography and soils

Lam Dong largely consists of highland topography similar to other provinces in the Central Highlands.

The province has a relatively varied terrain from mountains and plateaus to flat small valleys. These characteristics drive the climate, edaphology and fauna and flora of the province, as well as creating wonderful landscapes. One notable feature of the topography of Lam Dong is how it varies across the province. In the north, the terrain consists of high mountains: Lang Bian plateau has high peaks from 1,300 m to over 2,000 m, for example, Mt. Bi Doup (2,287 m) and Lang Bian (2,184 m). While the east and west of the province is comprised of low mountain ranges (500 -1,000 m). The south covers the region between Di Linh and Bao Loc highland plateaus having a slope of less than 25 degrees accounts for more than 50% of the total area.

The eight soil groups represented in Lam Dong include fluvisols, grey soil, cambisols, luvisols, bazan soil (ferralsols), acrisols, alisols and leptosols.

The whole province has 225,400 ha of land which is suitable for agricultural production. 200,000 ha of land, mainly in Bao Loc-Di Nguyen plateau, is suitable for perennial plants with high economic value, such as coffee, tea and mulberry: the tea and coffee growing area accounts for around 145,000 ha, mainly in Bao Lam and Bao Loc, Di Linh and Lam Ha districts, and the vegetable growing area accounts for about 23,800 ha, mainly in Da Lat, Don Duong and Duc Trong districts. The remaining agricultural land is not proximate to



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residential areas and has limited potential for exploitation due to flooding or dry, thin or rocky soil.

## **2.3 Climate and Hydrology**

Lam Dong has a tropical monsoon climate varying with altitude, with two distinct seasons: rainy season is from May to November and the dry season is from December to April. The average temperature ranges from 18 to 25°C but temperatures across regions: the higher the region, the cooler the weather. Average rainfall is from 1,750 - 3,150 mm / year and average humidity is 85 - 87%. The average sunshine per year is 1,890 - 2,500 hours.

Relative humidity in the months of rainy season is quite high (84-91%). With the highest humidity (90%) occurring in the months of June, July, August and September. The dry months: 69-83% in Da Lat, in Lien Khuong 73-80%, 83-92% in Bao Loc.

The level and seasonality of rainfall in the province vary according to south-westerly winds. During the dry season (from November to March), due to the influence of North-East monsoon, rainfall is very limited, accounting for only 10-15% of rainfall of all year. The rainy season coincides with the southwest monsoon. Rainfall during this season accounts for 85-90% of annual rainfall. In some years, heavy and continuous rain causes flooding in some areas along Da Nhim river damaging crops.

Lam Dong is located within the Dong Nai river system, with abundant water supplies, a relatively dense stream network and large hydroelectric potential. Rivers in this province are fairly evenly distributed, with average density of 0.6 km/km<sup>2</sup> and a bottom slope of less than 1%. Most rivers and streams run from the northeast to southwest. Due to the mountainous and partitioned terrain, most river basins here are quite small with many rapids upstream. The three major rivers belong to Dong Nai river system and include Da Dang River, La Nga River and Nhim River.

## **2.4 Ecological features**

Lam Dong is the most biodiversity-rich province in the Central Highlands and south-central region, hosting Bidoup-Nui Ba National Park, one of the largest biosphere reserves of Vietnam with an accumulated area of 70,038 hectares, housing nearly 2,000 species of plant and 60 species of animal. Around 91 plant species are endemic to Lam Dong and its surrounding regions.

Lam Dong still contains ca. 512,000ha of natural forest as of 2010 (the latest available mapping), although large parts of it in different stages of degradation. There is 68.8ha of planted forest, which are home to a number of rare flora and fauna species listed in Vietnam's Red Book.

The desktop review of the pilot landscapes has identified 11 species of conservation concern (IUCN Global Red Data List or Vietnam Red Data Book species) that may potentially occur in these areas. Since the habitat within these landscapes are degraded and it only overlaps with a small, degraded area of Bidoup-Nui Ba AZE, large fauna species are unlikely to occur in the Project area, and therefore are screened out.





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No.	Scientific Name	Common Name	IUCN	VRDB	Justification
<b>AMPHIBIA</b>					
1	<i>Hylarana montivaga</i>	N/A	EN	NL	According to IUCN, <i>Hylarana montivaga</i> is only known with certainty to be native from approximately 1,500-2,000 m asl in Lam Dong Province, southern-central Viet Nam, with the Estimated Extent of Occurrence (EOO) of 3139 km <sup>2</sup> . In addition, this species is associated with forest and has mostly been observed adjacent to streams.
2	<i>Megophrys gerti</i>	Gert's Mountain Toad	EN	NL	This species is currently known from the Langbian Plateau between elevations of 700-2,000 m asl in Dak Lak, Lam Dong, Khanh Hoa, Binh Dinh Provinces, Viet Nam, with the EOO of 4303 km <sup>2</sup> . This species is associated with small streams and has been recorded from montane forest with dense undergrowth.
3	<i>Nanohyla pulchella</i>	Pretty Narrow-Mouth Frog	EN	NL	According to IUCN, Pretty Narrow-Mouth Frog is known only from 1,490–2,048 m asl in south-central Viet Nam from Bidoup-Nui Ba National Park, Lam Dong Province, and Chu Yang Sin National Park, Dak Lak Province, with the EOO of 3901 km <sup>2</sup> . This species is associated with moist montane evergreen forest and is mainly terrestrial.
4	<i>Rhacophorus calcaneus</i>	Vietnam Flying Frog	EN	NL	According to IUCN, Vietnam Flying Frog is currently known only from approximately 1,300–2,000 m asl in Lam Dong, Dak Lak and Khanh Hoa Provinces in the Central Highlands of Viet Nam, with the EOO of 4138 km <sup>2</sup> . This species is associated with evergreen forest and has mostly been observed in trees or other vegetation above the ground adjacent to streams including cascades
5	<i>Rhacophorus vampyrus</i>	Vampire Flying Frog	EN	NL	According to IUCN, Vampire Flying Frog is known to occur between 1,470 and 2,004 m asl within two protected areas in southern Viet Nam: Bidoup-Nui Ba National Park, Lac Duong District, Lam Dong Province, with the EOO of 2082.5 km <sup>2</sup> . This is a montane species that inhabits areas of moist evergreen forest.
6	<i>Theleiderma palliatum</i>	Cloaked Moss Frog	EN	NL	According to IUCN, Cloaked Moss Frog is currently known only from a single locality at 1,625 m Asl within Bidoup-Nui Ba National Park, Lac Duong District, Lam Dong Province, with the EOO of 1443.43 km <sup>2</sup> . This is a small, arboreal species that inhabits montane evergreen forest.
7	<i>Kurixalus viridescens</i>	Greenish Frilled Treefrog	EN	NL	According to IUCN, the Greenish Frilled Treefrog is only known from 1,540-1,590 m asl, within Hon Ba Nature Reserve, Khanh Hoa Province and Bidoup Nui Ba National Park, Lam Dong Province, with the EOO of 355 km <sup>2</sup> . This species is only known from primary montane evergreen forest, close to mountain peaks, at high elevations above 1,500 m above sea level.

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No.	Scientific Name	Common Name	IUCN	VRDB	Justification
1	<i>Murina harpioloides</i>	Dalat Tube-nosed Bat	EN	NL	According to IUCN, Dalat Tube-nosed Bat is only known from one location on the Dalat Plateau in Viet Nam (Lam Dong Province), where it occurs from 1,400 to 1,800 m above sea level, with the EOO of 829 km <sup>2</sup> . This species is found in mountainous mixed subtropical forest where it is quite moist throughout the year as there is no pronounced dry season. Nightly temperatures in that area could be relatively low, especially in the end of winter.

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1	<i>Trochalopteron yersini</i>	Collared Laughingthrush	EN	NL	According to IUCN, this species resident in dense undergrowth of primary and logged montane evergreen forest, secondary growth and scrub bordering forest, occupying a narrow altitudinal band from 1,500-2,440 m, although it has been recorded below 1,450 m.
2	<i>Laniellus langbianis</i>	Grey-crowned Crocias	EN	VU	According to IUCN, this species is endemic to montane central Annam, Vietnam, with the EOO of 7200 km <sup>2</sup> . It is resident in closed-canopy, tropical montane evergreen forest from 900-1,700 m (most recent observations come from a narrow altitudinal band from 910-1,130 m). It is arboreal and forages with mixed-species flocks for invertebrates, particularly caterpillars, primarily in the outer canopy of broadleaved evergreen and coniferous trees.
3	<i>Chloris monguilloti</i>	Vietnamese Greenfinch	LC	NL	According to IUCN, this species is endemic to the Dalat plateau of south Annam, Vietnam with the EOO of 20000 km <sup>2</sup> . It occurs in open pine forest, including <i>Pinus kesiya</i> forest, secondary growth, and forest edges near to cultivation from 1,050-1,900 m, although it has been reported as low as 600 m.

## 2.5 Socio-economic features

Lam Dong, which covers an area of 9,781.2 km<sup>2</sup>, is one of the five provinces situated in the South of the Central Highlands<sup>1</sup>. Lam Dong's area accounts for nearly one fifth of the entire Central Highlands area; nevertheless, it has the second highest population density in Central Highlands.

<sup>1</sup> The Central Highlands of Vietnam, or "Tây Nguyên", is one of the six regions of Vietnam, consisting of five provinces (Dak Lak, Dak Nong, Gia Lai, Kon Tum, and Lam Dong)



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Table Population of Provinces in the Central Highlands

Province	Total Area (km <sup>2</sup> )	Average Population (Thousand persons)	Population Density (Person/km <sup>2</sup> )
Kon Tum	9,677.3	568.8	59
Gia Lai	15,510.1	1,569.7	101
Dak Lak	13,070.4	1,909.0	146
Dak Nong	6,509.3	664.4	102
Lam Dong	9,781.2	1,321.8	135
Total	54,548.3	6,033.8	111

In 2021, the population of Lam Dong province totalled 1,315,389 inhabitants, consisting of 47 ethnic groups<sup>2</sup>. The Kinh ethnic group are the largest demographic (74.28%) with ethnic minorities accounting for the remainder of the provincial population. Among 47 ethnic minority groups in the province, there are indigenous peoples such as Co Ho (175,531 residents, 13.54%), Ma (38,523 people, 2.97%), Chu Ru (22,475 people, 1.74%), M'nong (10,517 persons, 0.81%), Raglai, Gie-Trieng, Xtieng, Bru-Van Kieu, Ba Na, Ede, and Gia Rai. There are also other ethnic minorities migrating from the northern mountainous areas such as Nung (24,423 people, 1.88%), Tay (20,248 people, 1.56%), Hoa (13,788 people, 1.06%), Thai, Dao, and Hmong.

The labour force aged 15 and over numbered 798,547<sup>3</sup> persons in 2021, accounting for 60.7% of the total provincial population. Of which, 522,340 people worked in the agriculture, forestry and fishery sector (occupying 66.4% of the total employed population); 65,292 persons in the industry and construction sector (8.3%); and 199,023 individuals employed in the service sector (25.3%). The percentage of workers with diplomas and certificates aged 15 and over was 18.8% in 2021, higher than the rural average of 8.3 per cent yet lower than the 34.1 per cent average in urban areas

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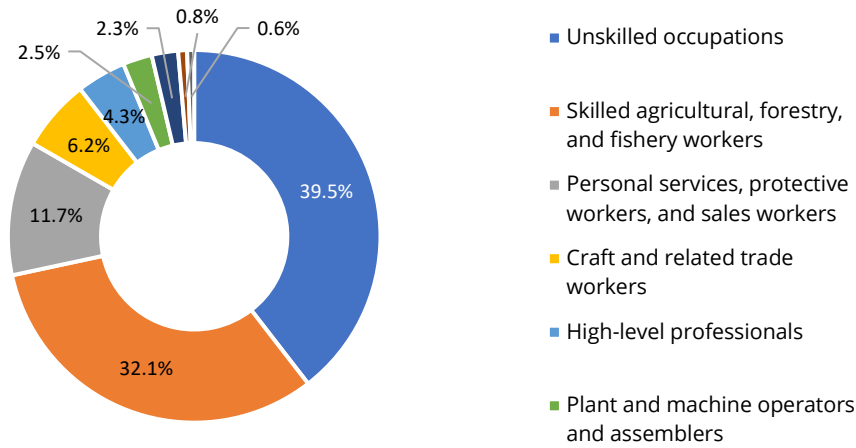
<sup>2</sup> CEMA Lam Dong (2022). Report on the implementation of policies to support education in ethnic minority areas for the period 2010-2021 (Báo cáo tình hình triển khai thực hiện chính sách hỗ trợ giáo dục vùng dân tộc thiểu số giai đoạn 2010-2021)

<sup>3</sup> Lam Dong Provincial Statistics Office (2022)



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Figure 5. Employed Population by Occupation. Lam Dong Provincial Statistics Office (2022).



The unemployment rate in Lam Dong averaged 1.49%<sup>4</sup> in 2021, compared to 3.25% in urban areas and 0.38% in regional areas, respectively. The under-employment rate in those of working age was 3.3%. This sits between the rates in urban and rural areas were of 5.87% and 1.69%, respectively.

### 3. DEFORESTATION AND RELATED PRACTICES

#### 3.1 Deforestation trends in the landscape

The Lam Dong Provincial REDD+ Action Plan (PRAP) acknowledges that the principal driver of deforestation is the conversion of forests to agriculture (>70% of GHG deforestation-related emissions) (SNV, 2021). This is a mixture of direct larger scale conversion of forests for commodity crops such as coffee, tea, rubber and cashews, as well as the conversion of subsistence agricultural lands to these commodity crops which leads to the displacement of poor households (often ethnic minorities) who then shift cultivation towards the forest margins (SNV, 2021).

The expansion of permanent crops keeps pushing subsistence farming from marginalized farmers into more remote and forested areas, making it more difficult for the poorest households and particularly ethnic minorities to benefit from more sustainable and profitable practices. Agricultural inputs received by the farmers are typically of low quality and processing is limited, resulting in low prices that neither support investment in quality, nor promote better practices and markets. Foreign-owned companies are not permitted to source directly from small scale farmers but must instead buy through a registered local company or cooperative. This has resulted in significant challenges in

<sup>4</sup> Lam Dong Provincial Statistics Office (2022)



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terms of providing targeted conditional financial and advisory services, as well as in terms of traceability of the sector.

In June 2013, the Prime Minister of Vietnam approved the Agricultural Restructuring Plan (ARP) prepared by the Ministry of Agriculture and Development (MARD) (Ministry Of Agricultural and Cultural Development (MAR), 2014). This Plan calls for a shift in sectoral goals beyond physical targets to include a broader set of indicators of sustainable development (Ministry Of Agricultural and Cultural Development (MAR), 2014). Particular Reference was given to addressing adverse environmental impacts of certain agricultural expansion processes and the need to mainstream effective environmental management practices into the agricultural sector (MARDMAR, 2014). The strategic orientation of the Vietnam Sustainable Agricultural, Transformation Project (vnSAT), which is a part of ARP plan, was established to support the implementation of the Government's plan (Ministry Of Agricultural and Cultural Development (MAR), 2014).

The VnSAT project was initially implemented in Tan Nghia commune in 2017 (Minh, 2021). After 4 years of operation, the participating commune's economy has developed markedly as the support activities of the project such as investing in re-cultivation coffee models, conserving water use, and further scientific and technical training activities which have helped local actors consolidate their knowledge of better farming practices coupled with higher productivity (Minh, 2021). This led to the fact that the farmers did not need to exploit more forest land for cultivating coffee.

One of the most influential projects on the coffee cultivation technique of the farmers is CAFÉ-REDD, which is funded by the German Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV) and running from 2018 to 2024, with a total funding budget of approximately EUR 2.8 million.

### **3.2 Current land use practices in the commodity's sector**

Vietnam is the second largest producer of coffee in the world, after Brazil, and the largest producer of the Robusta variety. From 1986 to 2016, coffee production in Vietnam has increased 100-fold. In 2021, coffee exports reached 1.52 million tonnes, worth approximately \$3 billion. The Vietnam Coffee and Cocoa Association is targeting expanding into the market for of instant roasted coffee while reaching a total export revenue of USD 5-6 billion by 2030<sup>5</sup>, i.e. a further doubling of revenue.

Coffee production in Vietnam is concentrated in the Central Highlands (80%), with Robusta production accounting for 92% of the total national production. The small portion of Arabica grown in the country hails almost entirely from the Lam Dong province. Smallholder production accounts for 80-90% of Robusta coffee from the Central Highlands, with farms of up to 2 hectares in size.

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<sup>5</sup> [Coffee industry targets \\$6 billion export value in 2030.](#)



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Smallholder production practices are typically intensive and costly<sup>6</sup>. Tree stock aging, spread of coffee planting onto less suitable or unsuitable land, and recurring droughts all require a heavy application of fertilizer and pesticides to maintain performance and slow the crop's deterioration.

Decades of intensive cultivation and expansion onto marginal land has degraded the soil quality and left smallholders less resilient the effects of climate change and more vulnerable to fluctuations in the price of coffee. As a result, many smallholders are in a negative spiral of declining yields leading to the increasing application of inputs to compensate, which is further reducing their already limited margins.

Sensitive to climate change, ca. 50% of suitable lands for coffee are expected to be lost by 2050<sup>7</sup>, with production areas moving to higher altitudes. Land which is currently forested, may become more suitable for growing coffee, which is likely to increase the deforestation risk.

Generic producer subsidies, risk insurance against losses due to weather extremes, sustainability standards, and financing of specialty coffee have been seen to fail in achieving adaptation or broader sustainability benefits<sup>8</sup>. In addition, although climate resilience is often claimed as a positive impact, such affirmations are rarely validated via credible research and documentation.

In terms of the relevant compliance framework, recently the EU has put in place legislation<sup>9</sup> to ensure the EU's consumption of only deforestation-free and legal products, through requirements on certification, level of contaminants, etc. This legislation has been imposed on specific commodities, including coffee and its derived products.

### 3.3 Agriculture in Lam Dong

The natural land area of Lam Dong province is 978,119.72 ha, consisting of red basalt soil, alluvial soil, red-yellowish ferralitic soil, and ferralitic soil. These categories of soil are well suited to the cultivation of long and short-term industrial crops and fruit trees.

**Coffee:** It is an industrial plant cultivated rather early in Lam Dong province. The combination of varied conditions of topography, paedology, climate, weather and altitude has favoured the simultaneous cultivation of three varieties of coffee, namely Arabica, Robusta, and Cherry. All of the districts and Da Lat city in Lam Dong province are suitable for planting and cultivating coffee. Coffee has been identified as one of the three top

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<sup>6</sup> [Coffee, environmental degradation and smallholder livelihoods](#).

<sup>7</sup> [Future Climate Scenarios for Vietnam's Robusta Coffee Growing Areas](#), CIAT 2012.

<sup>8</sup> [Brewing up climate resilience in the coffee sector](#). IDH, 2019.

<sup>9</sup> Proposal for a regulation on deforestation-free products



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ranking industrial crops in the strategy of socio-economic development. Over the period of 2017-2021, the planted area of coffee in Lam Dong province slightly increased. By 2021, the planted area reached 176,072.06 ha, accounting for 58.7% of the province's agriculturally cultivated area, with an output of 563,085.95 tons<sup>10</sup>. Meanwhile, the coffee area in Da Lat city accounted for only 2.93% of the provincial coffee cultivated area.

By 2021, there were 33 enterprises and more than 250 individual business households in the province engaged in purchasing and processing coffee with a capacity of about 300,000 - 320,000 tons (accounting for about 62% of the total coffee output of the province). The exported output of coffee in 2021 reached 53.6 thousand tons, worth USD 103.5 million<sup>11</sup>, making up 14.9% of the export turnover of Lam Dong province.

**Tea:** In 1927, the French built the first tea factory in East-South Asia and named it the Cau Dat L'Arbre Broyé Tea Department. They applied tea processing processed at the factory. Later, the factory was converted to its current use, and renamed Cau Dat Farm located in Xuan Truong commune of Da Lat city. In 1954, there were 409 plantations of tea and coffee in Lam Dong province.

**Flowers and Vegetables:** Da Lat city, a region endowed with a climate of semi-temperate zone, is appropriate to the growing of a variety of high value vegetables such as cabbages, carrots, cauliflowers, and onions. Flower-growing in Da Lat has been a long running tradition however has recently become a long ago but has been undertaken on a large scale. Commonly grown flowers are geodorum, orchids, gladiolus, the chrysanthemums, carnations, roses the loosestrife, and the dahlia. Profiting by the mild climate of temperate zone and appropriate pedological conditions, Da Lat flowers are characterised by their bright colours, their durable freshness and the greenness of leaves and buds.

Lam Dong province possesses many comparative advantages of climate and soil for agricultural development, so the province has identified agriculture as a key economic driver, in which utilising high-tech agriculture is one of its priorities. For years, the province has tapped into its geographical advantages to create many well-known agricultural brands in both Vietnam and the world, leading its agricultural products to gradually penetrate deeper into the global value chain.

The province's agricultural value is approximately VND 191 million<sup>12</sup> per hectare a year, nearly double the national average, and labour productivity is VND 62 million per year, equivalent to 1.17 times the national average. In addition, The province currently has 61,159 hectares of high-tech agriculture, accounting for one fifth of the total cultivation land area, with many models achieving annual revenue of over VND 3 billion per hectare. Lam Dong province also has 13 enterprises recognised as high-tech agricultural

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<sup>10</sup> Lam Dong Provincial Statistics Office (2022)

<sup>11</sup> Department of Agriculture and Rural Development of Lam Dong Province (2022)

<sup>12</sup> Nhan Dan Newspaper (2021)



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enterprises, 90 cooperatives and farms employing IoT<sup>13</sup> and organic farming, and 175 linkage chains with the participation of 201 enterprises and cooperatives and 17,000 farming households.

## 4. COMPANY'S PRACTICES

### 4.1 Supply chain management

In 2018, Mercon's Board of Directors formally adopted a Corporate Responsibility and Sustainability (CRS) Policy of three group-level policies: Environmental, OHS, and Stakeholder Engagement policies which were implemented in 2020. These policies as adopted by Mercon Vietnam, are displayed in the facilities of Lam Dong Vietnam and are considered to be in line with IFC PS by ERM, as per due diligence results. Furthermore, during 2020 and early 2021, the Company defined a Farm Code, applicable to its Robusta farms in Nicaragua.

Mercon has already implemented the building blocks of supply chain risk assessment, through increasingly sourcing from third-party "sustainability" certified suppliers (when pre-financed), such as the Rainforest Alliance (RAF), UTZ, 4C, and first party regulation (Starbucks Café Program), Nespresso AAA Sustainability Program, and Mercon's own E&S Standards "**Leading Innovation and Farmers Traceability**" (LIFT).

Mercon has been rolling-out the **LIFT program** since 2015. Its main objective is to provide coffee traceability at the farm level. This program is dedicated to smallholder producers and has three main pillars; (i) increase coffee productivity by 40% within three years, (ii) promote environmental management (reforestation, conservation of water resources, protection of natural forests and soil improvements); (iii) promote social development. LIFT provides short-term, pre-harvest and harvest financing, and long-term financing for farm rehabilitation, planting material, effluents management, technical support to achieve voluntary certifications (e.g. Rainforest Alliance, UTZ). Through technical assistance and other value-added services, Mercon promotes best practices that have a direct impact on productivity and quality, as well as creating awareness of the environmental impacts and providing practical tools to lower carbon footprint and protect environmental resources.

Mercon has a recently approved a **Supplier Code of Conduct (SCC)**, applicable to sourcing operations at all origins. The SCC defines the minimum standards for suppliers relating to harmful child / forced labour, lack of fair employment, illegal deforestation, use of banned pesticides, among other issues. Specifically for deforestation, the SCC commits suppliers to using environmental practices that avoid deforestation and protect against conversion of natural and critical habitats that lead to loss of biodiversity. Together with FMO and CIAT, Mercon is working on the procedures for SCC internal auditing and remediation plans, adopting the level of control approach, although ERM has not found the evidence of

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<sup>13</sup> Internet-of-Things





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Supply Code enforcement throughout the supply chains yet. **In Vietnam, the SCC is operational at partner mill and exporter level, while Mercon is still evaluating the feasibility of implementing the SCC at supplier level.**

An IFC E&S review concluded that Mercon has assigned competent technical resources to implement its corporate and plant-level EHS management system and programs. This was confirmed by ERM which conducted interviews with management during due diligence and concluded that the team is knowledgeable of their assigned areas and have relevant experience to allow them to carry out their assigned E&S responsibilities. Additionally, Mercon uses external consultants to support them in environmental impact assessments, supply chain risk assessments and occupational health and safety gap analysis, also deemed competent by ERM.

IFC's ESDD (2021) identified the following improvement areas in Mercon's EHS management system: (i) implementation of the Farm and Supplier Codes applicable to its farming and sourcing operations; (ii) further implementation of comprehensive multi-year environmental and OHS audits and management plans to all operations (farms, mills, warehouses and sourcing) addressing risks and impacts (e.g. water supply, including hydrogeological study and sustainable extraction yield, wastewater treatment, ambient and point source air emission, solid and hazardous waste management, safe hazardous material storage) based on internal/external EHS audits, with the preparation of Corrective Action Plans (CAPs), as necessary; (iii) monitoring and reporting of environmental management plans, including Key Performance Indicators (KPIs) allowing Mercon to assess its overall environmental compliance and performance; (iv) finalize and implement the supply chain risk assessment and management procedures of its sourcing operations; and (v) develop and implement EHS/labour requirements applicable to contractors, including due diligence, monitoring oversight, and enforcement.

Mercon Vietnam is cascading the implementation of the action plan on the country level with deliverables as per the ESAP of IFC, some of them already delivered<sup>14</sup> and under the IFC's review. &Green's ESAP relies on the deliverables of the IFC's ESAP, excluding only the supply chain- and biodiversity-related issues which are addressed more specifically by &Green.

## **5. COMPANY'S LANDSCAPE PROTECTION STRATEGY**

### **5.1 &Green's Vision for the coffee sector in Vietnam and Mercon's commitments**

Mercon is committed to source coffee for its Vietnam-based business from deforestation-free coffee supply chains by 2027. To do so, the company will design and gradually roll out

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<sup>14</sup> Mercon's Sustainability team shared the deliverables with &Green and ERM. These are considered in the &Green's ESAP.



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the landscape-level traceability system, engagement with relevant stakeholders as well as safeguarding MRV mechanisms throughout the first 5 years of the loan.

For the export part of the business, which has very limited if any, influence over the suppliers, Mercon focus on the risk mitigation approach, applying only NDPE policy. For the vertical supply chains, in addition to mitigating deforestation and human rights risks through the NDPE policy, Mercon will enable transformation of farming practices through setting up its LIFT landscapes. The company will replicate its LIFT Program experience, incentivizing coffee farmers to become climate resilient as well as adopt good agricultural practices that will benefit their livelihoods in medium and long-term. Mercon will enhance its ESMS to achieve full compliance with the IFC PS during the first three years of loan tenure.

Figure 6. Expected timeline of NDPE roll out in the exporting business of Mercon. Green colour indicates supply chains compliant with NDPE (compliance verification to take place in 2026).

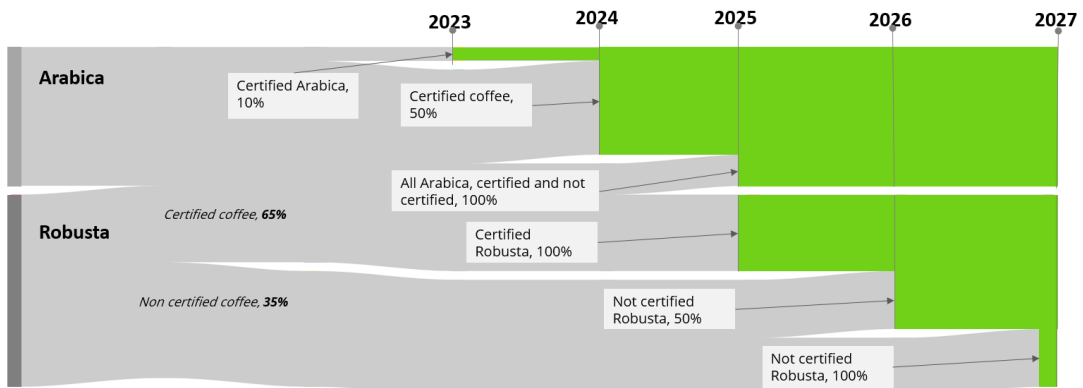
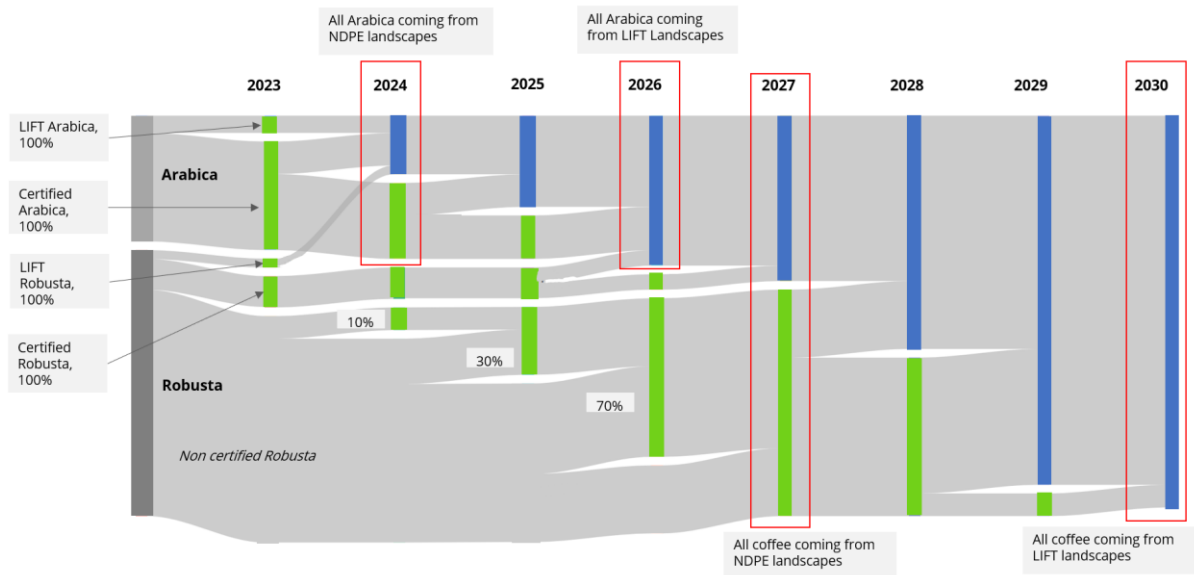


Figure 7. Expected roll out of NDPE and LIFT landscapes in the vertical supply chain of Mercon. Green colour indicates supply chains compliant with NDPE (compliance verification to take place in 2025). Blue colour shows supply chains that in addition to NDPE, turned into LIFT landscapes.



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## 5.2 Mitigation of deforestation risks: NDPE Landscapes

**By the end of 2025, Mercon will aim to procure all Arabica in the export segment deforestation and exploitation free landscapes.** By the end of 2027, the same will apply to Robusta.

**Arabica in the vertical segment of Mercon's Vietnam operations will be assessed against NDPE policy by the end of 2023, assuring compliance of these supply chains by the 2025 when the first NDPE verification will occur.**

During the first year of the loan tenure, Mercon will parametrize the NDPE-compliant landscapes and develop a methodology to monitor and verify such compliance. The NDPE landscapes will also consider the biodiversity aspects as per &Green's Forest & Biodiversity Framework (including cut-off dates) as well as specifics and consistency of certification schemes used. Additionally, the parameters will look to enable/accelerate compliance with EU regulation on deforestation free products.

By the end of 2023, Mercon will test the methodology on all certified coffee of vertical supply chains as well as on 10% of certified Arabica in export business.

At present, the location of the supply chains of coffee used for export is not known, thus the amount of forests that will be indirectly protected by NDPE policy from this business will be assessed once the landscapes are mapped. In case of the vertical supply chains, the landscapes with the mapped production regions contain around 63,000 of hectares of forests. This figure will be constantly increased once more production landscapes will be traced.

The roll out model is built using 2019/2020 figures, thus the proportions of Arabica vs. Robusta, and certified vs. not certified volumes may change in future. The condition to prioritize Arabica supply chains as the ones with higher exposure to deforestation risks, will remain under any composition in order to achieve Arabica NDPE compliance by the end of 2025.



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### 5.3 Transformation of coffee supply chains: LIFT landscapes

Mercon has accumulated significant experience related to good coffee production practices through the LIFT program, including in Vietnam. It has also conducted initial screens on relationship between climate resilience and such practices in Central Highlands together with the International Center for Tropical Agriculture (CIAT).

The LIFT Program is originally designed to provide useful tools, training and services to coffee farmers with whom Mercon has relationship either indirectly as in Vietnam, or directly as in Nicaragua.

In order to transform its supply chains of coffee, making them sustainable and climate resilient, Mercon is designing LIFT Landscapes. The concept is inspired by the LIFT knowledge but builds upon the landscape approach. The LIFT landscapes are the NDPE landscapes (i.e. already identified and monitored by Mercon) that contain a certain proportion of LIFT-inspired farms and are commercially attractive for Mercon. These showcase farms, owned by local opinion makers, will be used for awareness raising programs among other farmers the landscapes, demonstrating practical benefits of climate-smart and deforestation free agriculture, both in terms of land use and access to markets that value such features. The model farms will also serve to monitor climate resilience features.

The concept of the LIFT landscape will be designed during the first year of the loan tenure. As an essential input into the program design, Mercon will conduct a study on the potential benefits that the LIFT landscapes can provide for farmers, starting from commercial bonuses up to community issues (e.g. assisting cooperatives, supporting education and wellbeing etc.). Additionally, Mercon with technical assistance of &Green will conduct a local study of climate hazards related to the coffee production in Vietnam over a mid-term perspective (8-10 years) to guide the risk management of Mercon as well as to build the results into the LIFT Landscapes roll out strategy. The expected results of this study include the location of areas to be negatively or positively impacted for Arabica and Robusta production, financial scale of impacts and potential adaptation measures.

During the first year of the loan, Mercon will test the concept in its landscape with existing LIFT farms, gradually rolling it out in the NDPE landscapes in the following years. **Mercon is expected to source all its coffee in vertical supply chains from LIFT Landscapes in 2030.**

### 5.4 IFC PS compliant ESMS adapted for local context

Mercon Vietnam has a number of open ESAP items as per its commitments with IFC, which coincide with due diligence conducted by ERM for &Green Fund.

In addition to these compliance items, Mercon will enhance its ESMS, namely supply chain management according to the requirements of IFC PS and adapted for its NDPE policy and LIFT Landscapes program. **&Green's Forest & Biodiversity Framework will be an essential element of the LIFT Landscapes**, thus a thorough analysis of local biodiversity will be conducted by Mercon in order to define the parameters that safeguard the F&B Framework. **Mercon will reach full compliance with IFC PS by the end of third year of the loan tenure, following the prioritization defined in the IFC PS matrix.**



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## **6. MONITORING, REPORTING AND VERIFICATION**

The summary of all of the company's actions and targets specified in section 4 are summarised in the ESAP agreed between &Green and Mercon.

Company's reporting and verification framework with respect to &Green's LPP and E&S Action Plan (ESAP) will be built with the objective to report on activity-based progress against the defined E&S Action Plan activities. To support monitoring of Company's progress, &Green will rely on a three-level MRV framework:

First, through Company's self-reported progress reports: Progress achieved against the agreed upon milestones will be monitored and self-reported on a 6-monthly basis during the first two years of the transaction, and annually for the remaining tenor of the &Green loan, until 2030. Templates for the E&S (self-reported) progress report will be agreed during the contracting phase of the transaction. Templates might be updated during the loan period to ensure relevancy against progress achieved and recommended actions.

Secondly, through additional third party reports, provided by independent expert consultants that have been recommended to support Mercon in the first 1 to 3 years of the transaction (i.e. on a quarterly or bi-annual basis). These reports will be required to supplement Mercon's self-reported progress reports and to further clarify Company's progress on priority items included in the ESAP.

Lastly, third party external audits will be carried out annually to review the overall progress of Company against the targets defined in the ESAP, linked to IFC PS compliance, NDPE implementation, ER/SI targets and E&S governance. An annual report should be prepared to document annual progress towards completion of ESAP items, supported by an updated version of the IFC PS matrix. The later should be treated as "living documents" and serve the purpose of supporting Mercon in reaching its compliance targets (i.e., adding, omitting, modifying recommendations) as appropriate. The audit period should be defined as the standard calendar year from 1 January to 31 December of each year. Review/audit of ESAP items should therefore be performed in January of each year, corresponding to ESAP activities accomplished in the previous calendar year. At this time, it would be appropriate for the next review/audit to take place in January 2024 and cover the 2022 calendar year. Lastly, all annual third party reviews will be disclosed on &Green's website.