



# LENDABLE DECARBONIZATION FUND (LDF)

INSTRUMENT ANALYSIS  
SEPTEMBER 2023



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LAB INSTRUMENT ANALYSIS

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## DESCRIPTION & GOAL

An innovative mechanism that finances small and medium enterprises and middle market companies in emerging markets to decarbonize value chain activity (or activities) through sustainability-linked loans (SLLs). It also supports a subset of borrowers with carbon offset potential by providing market readiness support.

## SECTOR

Energy Access, Energy Efficiency, Renewable Energy, Sustainable Agriculture, Transport

## FINANCE TARGET

Aims to raise an initial USD 250 million in an open-ended fund by year three and reach USD 500 million by year five.

## GEOGRAPHY

Africa, Southeast Asia, South Asia, and Latin America with Initial loans in Kenya, Uganda, India, Indonesia, and Mexico.

The Lab identifies, develops, and launches sustainable finance instruments that can drive billions to a low-carbon economy. The 2023 Lab cycle targets two thematic areas (gender and adaptation), three geographic regions (Brazil, India, and East & Southern Africa), and one global open slot.

## AUTHORS AND ACKNOWLEDGEMENTS

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## SUMMARY

As the Global South economy grows, key sectors such as transport, energy, and agriculture must be developed to avoid locking in emissions. In addition, the fact that the projected majority of future greenhouse gas (GHG) will come from the Global South and only one-third of total climate finance is flowing to these regions if we exclude China (CPI)<sup>1</sup> makes it imperative that solutions supporting decarbonization are conceived and promoted.

One instrument successfully deploying additional capital towards sustainability since its inception in 2019 is the sustainability-linked loan product (SLL). SLLs<sup>2</sup> are financial instruments that incentivize companies to achieve predetermined sustainability performance targets (SPTs). Depending on how each loan is structured, the interest rate is adjusted down (or up) upon achieving (or missing) these targets. An SLL inherently provides transparency and a clear link with sustainability performance for its investors.

Approximately USD 747 billion of SLLs have been issued to date, predominantly in developed markets or by large corporations in middle-income markets.<sup>3</sup> Despite this additional capital deployed toward sustainability, SLLs have failed to address small and medium enterprises and middle market companies (SMEs/MMEs) in emerging economies.

The Lendable Decarbonization Fund (LDF) aims to catalyze an SLL market for climate-focused SMEs/MMEs in emerging economies, using a proprietary technology called Maestro that provides real-time, verifiable data on borrowers' SPTs, reducing administration costs and increasing transparency. The fund also supports a subset of borrowers with carbon offset potential by providing market readiness support through a carbon project development facility (TA Facility).

- **Innovative:** LDF is the first fund to deploy SLLs, support carbon project development, and leverage a proprietary technology to reduce administrative and monitoring, reporting, and verification (MRV) costs.
- **Financially Sustainable:** Preliminary modeling suggests it can achieve commercial capital returns from the start.
- **Catalytic:** The open-ended fund aims to achieve assets under management of USD 250 million by year three and USD 500 million by year five. The fund's track record will demonstrate that SLLs are commercially viable for SMEs/MMEs in emerging markets.
- **Actionable:** Lendable, an impact investment fintech platform with a mission to promote financial inclusion, has a proven track record in impact measurement through their Maestro platform and has successfully launched four financial inclusion-focused debt funds in emerging markets to date.

Lendable is expanding its investment pipeline, and the immediate next steps are to raise the catalytic tranches of the instrument to start fundraising for the commercial tranches of its capital structure.

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<sup>1</sup> Climate Policy Initiative. 2021. Global Landscape of Climate Finance 2021

<sup>2</sup> "SLLs are any types of loan instruments and/or contingent facilities (such as bonding lines, guarantee lines or letters of credit) for which the economic characteristics can vary depending on whether the borrower achieves ambitious, material and quantifiable predetermined sustainability performance objectives. The use of proceeds in relation to a SLL is not a determinant in its categorisation and, in most instances, SLLs will be used for general corporate purposes. Instead, SLLs look to support a borrower in improving its sustainability performance. The borrower's sustainability performance is measured by applying predefined SPTs to predefined KPIs". Sustainability Linked Loan Principles (SLLP). LSTA.  
<https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/>

<sup>3</sup> Bloomberg NEF. 2022. <https://sponsored.bloomberg.com/article/scb/incentivizing-change-with-sustainability-linked-loans>

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## CONTEXT

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*Sustainability-linked loans have been successful for larger corporates in more sophisticated markets but have not penetrated the SME and MME space in emerging markets.*

As the Global South grows, it is important to develop key growth sectors to avoid locking in emissions. Most future GHG emissions will come from the Global South, so solutions that support decarbonization and economic growth, showing they are complementary rather than competing necessities, are of utmost importance.

One such instrument that has successfully deployed additional capital towards sustainable growth since its inception in 2019 is the sustainability-linked loan product (SLL). SLL products have reached a total size of USD 747 billion in 2022, a growth of 244% from 2020. SLLs now represent 19%<sup>4</sup> of the overall sustainable debt market (Bloomberg).<sup>5</sup>

In addition, private investment in sustainability-linked assets is growing fast, accounting for twice the global fund market growth rate. Global ESG assets under management increased by 12% between Q3 and Q4 of 2022, reaching USD 2.5 trillion (Debt Explorer).<sup>6</sup> An explanation is the fact that investors are not only increasingly urging their investees to incorporate sustainable practices but also looking at instruments that offer transparency to avoid greenwashing, increasing the overall credibility of the sector.<sup>7</sup>

These specialized loans require trusted monitoring, reporting, and verification (MRV) regimes, providing evidence against greenwashing. This creates a barrier to investment as it can pose an unmanageable administrative burden due to costs and time constraints on personnel for SMEs. Leveraging technology to address the high administrative overhead can be a viable solution to enable the issuance of SLLs for enterprises with smaller financing requirements.

In addition, enterprises in emerging markets are well-placed to access additional sources of revenue by monetizing emissions reductions through the voluntary carbon market. The voluntary carbon market is projected to grow from USD 2 billion in 2022 to USD 5-30 billion by 2030 (McKinsey).<sup>8</sup> This presents an immense opportunity for project developers, specifically companies capable of issuing carbon credits.

Given this context, Lendable created LDF. This mechanism enables the deployment of SLLs to enterprises by reducing underwriting and MRV costs and complexity with the added advantage of supporting voluntary carbon offset project development to a subset of its client base.

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<sup>4</sup> See annex 1 for graphical representation of sustainable debt annual issuance.

<sup>5</sup> Bloomberg NEF. 2022. <https://sponsored.bloomberg.com/article/scb/incentivizing-change-with-sustainability-linked-loans>

<sup>6</sup> Debt Explorer. 2020. Sustainability-linked and green loans hold ground in volatile market. <https://debtexplorer.whitecase.com/leveraged-finance-commentary/sustainability-linked-and-green-loans-hold-ground-in-volatile-market>

<sup>7</sup> Crunchbase. (2023). Crunchbase. <https://www.crunchbase.com/hub/southeast-asia-companies-less-than-500m-in-revenue>

<sup>8</sup> McKinsey & Company. 2020. A blueprint for scaling voluntary carbon markets to meet the climate challenge. <https://www.mckinsey.com/capabilities/sustainability/our-insights/a-blueprint-for-scaling-voluntary-carbon-markets-to-meet-the-climate-challenge>

# CONCEPT

## 1. INSTRUMENT MECHANICS

LDF's structure incentivizes, assists, and streamlines the adoption of sustainable practices for MMEs and SMEs in emerging economies.

### 1.1 CUSTOMER BASE

LDF targets SMEs and MMEs in emerging economies serving local or regional markets striving to decarbonize aspects of their value chain. The driver behind this is that, in many cases, shifting to a more sustainable approach in a primary activity can offer significant cost-saving advantages and additional revenue, ultimately improving an enterprise's bottom line.

The companies exploring decarbonization strategies to enhance their business models that Lendable aims to serve can be broken down into two groups: those who aim to decarbonize their operations (Direct Users) and those who sell products or services that enable others to decarbonize (Enablers). The figure below presents the demarcation of Lendable's landscape of borrowers alongside examples to clarify this distinction.

**Table 1: Customer base examples**

	Direct users		Enablers
Defined by	Decarbonization of one or more value chain* activity	Defined by	Climate-focused product offering
Examples	Sugar mill establishing a co-generation plant	Examples	Enterprise that sells EVs (buses, cars, three-wheelers, scooters)
	Wholesale distributor replacing its existing fleet with EVs		Enterprise that sells solar home systems, pico-solar systems
	Food and beverage co. promoting local sourcing over imports		Enterprise that sells clean cookstoves

\*Value chain activity based on Porter's value chain: <https://www.isc.hbs.edu/strategy/business-strategy/Pages/the-value-chain.aspx>

To be eligible for an LDF loan, a clear alignment to SDG13: Climate action must be present, which would be observed by a transparent GHG emission thesis. It is important to note that there is no requirement to have a financially viable carbon credit project.

There is a positive pipeline development outlook for Lendable as McKinsey and the Boston Consulting Group have estimated that there are more than 10,000 African companies with

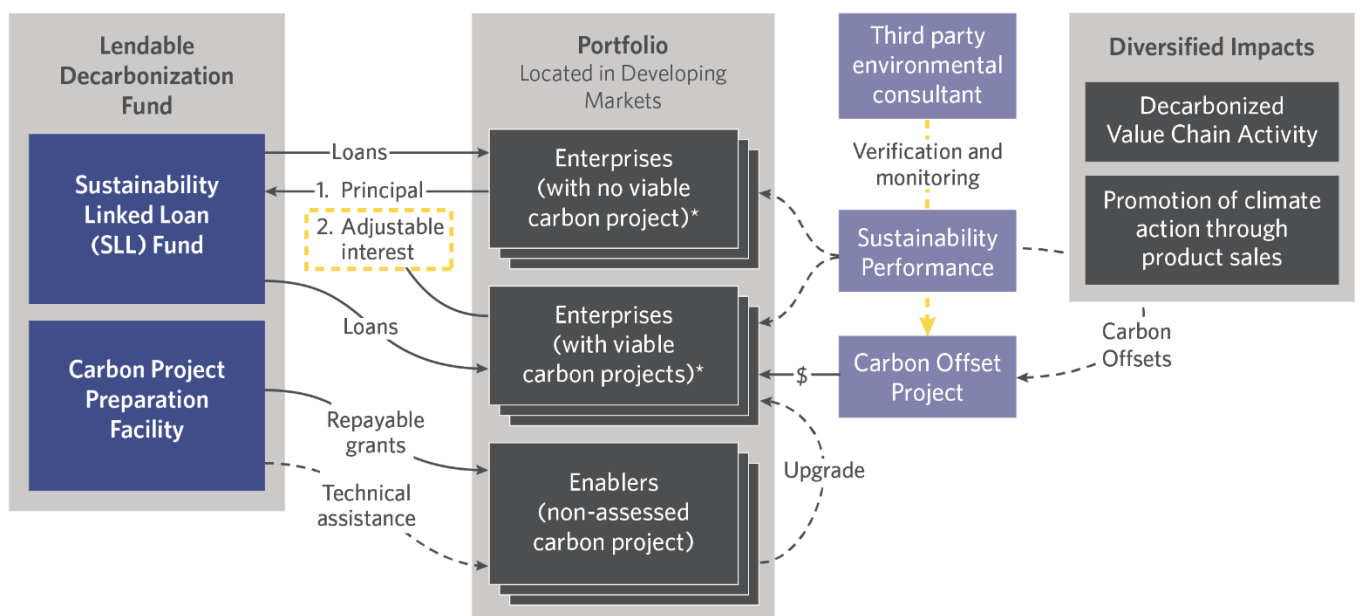
annual revenues of USD10-100 million<sup>9</sup> and around the same number of companies in Southeast East Asia with annual revenues between USD 100-500 million.

## 1.2 HOW THE INSTRUMENT WORKS

LDF has three key features:

1. **Sustainability Linked Loan Fund (SLL fund):** Deploys SLLs to incentivize the achievement of pre-agreed sustainability performance targets through an interest adjustment mechanism.
2. **Maestro application:** Lendable's proprietary technology, Maestro, is embedded into client's systems to support loan monitoring and impact tracking, reducing administration costs.
3. **Carbon Project Preparation Facility (CPPF):** Provides technical assistance and funding to support new carbon offset projects for companies that have the potential to monetize carbon revenues—further details in Annex 2.

**Figure 1: Instrument Mechanics diagram**



\*Can be both Direct users and enablers

The SLL fund and Carbon Project Preparation Facility (CPPF) are represented on the left-hand side of Figure 1 and comprise the LDF entity. The Maestro application<sup>10</sup> is an overarching tool used by all actors involved but is not represented graphically.

The portfolio box in the middle of the figure illustrates how the SLL fund will provide loans to enterprises that have no financially viable carbon projects and those that do. These companies will be both direct users and enablers.

<sup>9</sup> Financial Times. (2015). @FinancialTimes. <https://www.ft.com/content/6e2e0a7a-504a-3ac1-bd83-e68f21090d5b>

<sup>10</sup> In July, 2023 Lendable announced that it partnered with Standard Bank group to provide MRV services for an SLL facility provided to M-Kopa in Kenya and Uganda. The announcement is available at: <https://lendable.io/news/lendable-provides-monitoring-and-verification-services-for-m-kopas-202-million-sustainability-linked-debt-facilities/#:~:text=Lendable%20is%20excited%20to%20announce,Uganda%2C%20led%20by%20Standard%20Bank>



The third box down represents enterprises that qualify for CPPF grants. Further details on these three groups have been presented below:

Enterprises with no current carbon projects: The defining characteristic of this group is that their management has decided not to pursue establishing a carbon offset project due to a lack of economic feasibility, regulatory issues, or other factors. These companies must present a decarbonization case directly with their enterprise or through enabling others to decarbonize to be eligible for LDF loans, which will be tailored to help meet agreed-upon sustainability performance targets. This will make a significant portion of the fund's portfolio to ensure a solid credit foundation and minimize its exposure to carbon credit markets.

Enterprises with financially viable carbon projects: For this group, the enterprise has a proven track record of viable carbon offset projects. LDF will support the enterprise by funding the establishment of the carbon project and all related inventory or capital expenditures through an SLL loan. Depending on the client's need, LDF will be flexible in structuring loans and using a portion of the carbon project's future revenue to align incentives and support a robust payback plan.

Enablers that have carbon project potential. These clients are not immediately eligible for SLL fund loans but can receive support from the Carbon Project Preparation Facility (CPPF). Repayable grants and technical assistance will enable these enterprises to design and set up carbon projects. Once completed, these companies are effectively upgraded into Enterprises with viable carbon projects and can be fast-tracked into the SLL Fund originating process.

In effect, LDF will support companies across the carbon project maturity spectrum.

The right side of Figure 1 illustrates the diversified impacts these enterprises produce. These impacts can be categorized as (a) decarbonized value chain activity or (b) promotion of climate action through product sales or service. We will delve more into these impacts in section 5.

It is important to mention that these impacts will help determine the interest rate adjustments in the SLLs and allow for the successful issuance of carbon offsets for the companies that have current carbon projects that are viable or future projects that have the potential for viability. Regarding carbon offsets specifically, LDF will be agnostic of its certification program and will work with such programs on a case-by-case basis. For example, its client base will be able to issue verified carbon units (VCU), certified emissions reductions (CER), and renewable energy certificates (REC) certified by Verra, Gold Standard, or I-REC, respectively. The mechanism will also have the goal of aligning with Article 6.4<sup>11</sup> once the mechanism is up and running. Each project will dictate the stakeholders best placed for a successful carbon project deployment.

Finally, a third-party environmental auditor plays a crucial role in supporting and verifying the companies' sustainable performance targets and offset generation. It is foreseen that in some markets, one entity can provide this service. However, partnerships must be closed case-by-case by client and region.

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<sup>11</sup> Article 6.4 of the Paris agreement provides a structure for a carbon credit market on which greenhouse gas ("GHG") emission reductions or removals may be transferred internationally.

## 2. INNOVATION

*The first SLL mechanism to target SMEs and MMEs in emerging and frontier markets. This is a largely overlooked market with significant potential for sustainability-linked investment.*

LDF was created in response to a pressing concern among Lendable's impact-focused clientele and investors about the lack of access to sustainability-linked financing for emerging market enterprises. Lendable wanted to serve this largely overlooked market and deploy more sustainability-linked capital. LDF was designed to overcome the principal barriers that obstruct the flow of funding for sustainability and decarbonization efforts in emerging markets for SMEs and MMEs.

In designing this mechanism, Lendable incorporated two successful financial instruments that enterprises in emerging markets have not yet been able to access effectively: SLLs and carbon credit revenues. A core enabler of Lendable's strategy is their proprietary Maestro technology, which has been tried and tested in Lendable's current impact-focused fintech client base as an effective digital MRV tool.

### 2.1 BARRIERS ADDRESSED: LDF TACKLES HURDLES IMPEDING INVESTMENT IN SUSTAINABLE ACTIVITIES

**Table 2: Barriers Addressed**

Barrier	Solution
<b>Uptake of loans for sustainability investments</b>	
<b>Lack of business case for decarbonization.</b> Enterprises are not fully aware of the cost-reduction benefits of decarbonization.	<b>SLL Fund.</b> A fund that promotes loans with an interest adjustment based on sustainability targets will incentivize enterprises to explore opportunities where they will see the business case for such investments.
<b>High loan pricing deters enterprises from considering investment.</b> Enterprises' knowledge of local rates on loans discourages them from considering financing.	<b>SLL Fund.</b> Interest adjustment levels will be negotiated with companies where they will participate in understanding exactly how their investments will bring them financing cost benefits.
<b>High underwriting and MRV costs.</b> High administrative costs of underwriting and MRV.	<b>Associated technology.</b> Maestro proprietary tech supports underwriting, and MRV will simplify enterprises' process and administration burden and ultimately reduce costs.
<b>Leveraging carbon credits as an additional revenue source</b>	
<b>Lack of funding for pre-feasibility.</b> Companies may not have the risk capital to study the opportunity.	<b>Carbon PPF.</b> Grants will play a facilitating role, reassuring companies that their investments will yield tangible results.
<b>Lack of project setup know-how.</b> Enterprises often do not know where to start and who to contact.	<b>Carbon PPF.</b> Support is provided from inception to completion at all stages through expert consultants paid for by the CPPF.

<p><b>Lack of risk capital available.</b> In some instances, the cost of setting up the project might be too high a percentage of the total initial project size, which renders the project not economically viable.</p>	<p><b>Carbon PPF.</b> Repayable grants when required to cover initial appraisal, PDD costs, and MRV. These reduce risk to SME / MME while aligning with long-term value. These grants might serve to set up projects that otherwise would not have gone forward.</p>
<p><b>Reputational risk.</b> Investors are wary of financing projects based on risks of over-crediting, extractive investing, and double counting.</p>	<p><b>SLL &amp; Carbon PPF.</b> Lendable to ensure that all projects meet the highest industry standards around methodologies, MRV, 3rd party audit, and community benefit based on credit value.</p>

## 2.2 INNOVATION: LDF LEARNS FROM SUCCESSFUL CLIMATE AND SUSTAINABILITY FINANCIAL INSTRUMENTS

Table 3 lists four types of investment instruments and approaches the LDF learns from and capitalizes on to create a truly unique financial vehicle.

**Table 3: Existing approaches**

Item	Source of Learning	Differentiation
1. Sustainability-linked loans	On interest adjustment mechanism.	LDF will deploy various SLLs rather than just structure one deal.
2. Existing SDG enhanced voluntary carbon offsets <sup>12</sup>	Improving quality through incorporating SDG related MRV into the deal.	Envisioned that Maestro tech will provide robust MRV on carbon, gender, and social impact, leading to increased integrity that will make offsets more marketable.
3. Common SME debt funds with TA Facility	Understanding how it supports underlying projects and how it is managed.	No SME fund was identified that claims to support carbon project development with market readiness support.
4. First loss structuring following existing scalable models	Capped return for the first loss tranche, converting excess profits into non-redeemable shares.	It has the same technical function but is used in a different context.

Additional reflections:

- The vehicle is pioneering a new frontier in the SLL trajectory: SMEs and MMEs in emerging and frontier markets.

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<sup>12</sup> Widge, V. (2021, September 5). *Delicious and abundant: yes, we're talking about voluntary carbon markets - CPI*. CPI. <https://www.climatepolicyinitiative.org/delicious-and-abundant-yes-were-talking-about-voluntary-carbon-markets/>

- LDF has an inclusive, innovative approach by offering SDG-enhanced voluntary carbon offsets to the market that will subsidize products for BoP underlying customers and may provide an upside for investors.
- Providing funding for the development of carbon projects will reduce the risk of carbon project developer firms taking a disproportionate amount of potential future revenue. After all, their business model is based on paying for the feasibility studies in exchange for a percentage of the offset revenue-sharing agreement to compensate for the risk taken. This will crowd out carbon trading firms who use a disproportionate amount of revenue with a better borrower-aligned debt mechanism, resulting in better benefit-sharing regimes where applicable.

## 2.3 CHALLENGES TO INSTRUMENT SUCCESS

An innovative vehicle that addresses diverse areas is bound to encounter challenges during implementation and to sustain success. Table 4 outlines four key challenges identified by the secretariat that could potentially hinder this instrument's successful launch and continuous viability.

**Table 4: Challenges to instrument success**

Item	Description	Mitigating Factor
Dilution of Expertise	Covering a broad range of investment sectors and areas, Lendable may spread themselves too thin.	<ul style="list-style-type: none"> <li>• Human resource strategy: Ability to hire exceptional staff.</li> <li>• Secure key partnerships.</li> <li>• Partner with key stakeholders such as on-the-ground environmental consultants when necessary.</li> </ul>
Financial risks	<ul style="list-style-type: none"> <li>• Credit risk</li> <li>• Currency risk</li> <li>• Interest rate risks</li> <li>• Operational Risks</li> <li>• Political and regulatory risks</li> </ul>	<ul style="list-style-type: none"> <li>• Expertise that Lendable has established over the last seven years of lending in these markets.</li> <li>• Maestro supports the DD process and lowers credit risk</li> <li>• Risk management and hedging capabilities of borrowers' currency risks</li> </ul>
Increased mechanism management costs	Aspects of the mechanism inherently rely on 3rd party consultants and verifiers.	<ul style="list-style-type: none"> <li>• Use of blended finance to compensate for increased costs</li> <li>• Voluntary carbon offsets give the fund an upside that strives to compensate for initial costs</li> <li>• The carbon admin aspect is grant covered</li> </ul>
Greenwashing perception	If not properly addressed, investors will not trust the investment	<ul style="list-style-type: none"> <li>• Lab support</li> <li>• Thought leadership on methodologies</li> <li>• Leverage and showcase Maestro capabilities</li> </ul>

# MARKET TEST AND BEYOND

## 3. IMPLEMENTATION PATHWAY AND REPLICATION

*Lendable, an experienced impact loan provider in the Global South, will roll out the LDF as the flagship instrument for its newly established sustainable finance strategy.*

### 3.1 LDF'S IMPLEMENTATION SUPPORTED BY PROPONENT'S TRACK RECORD

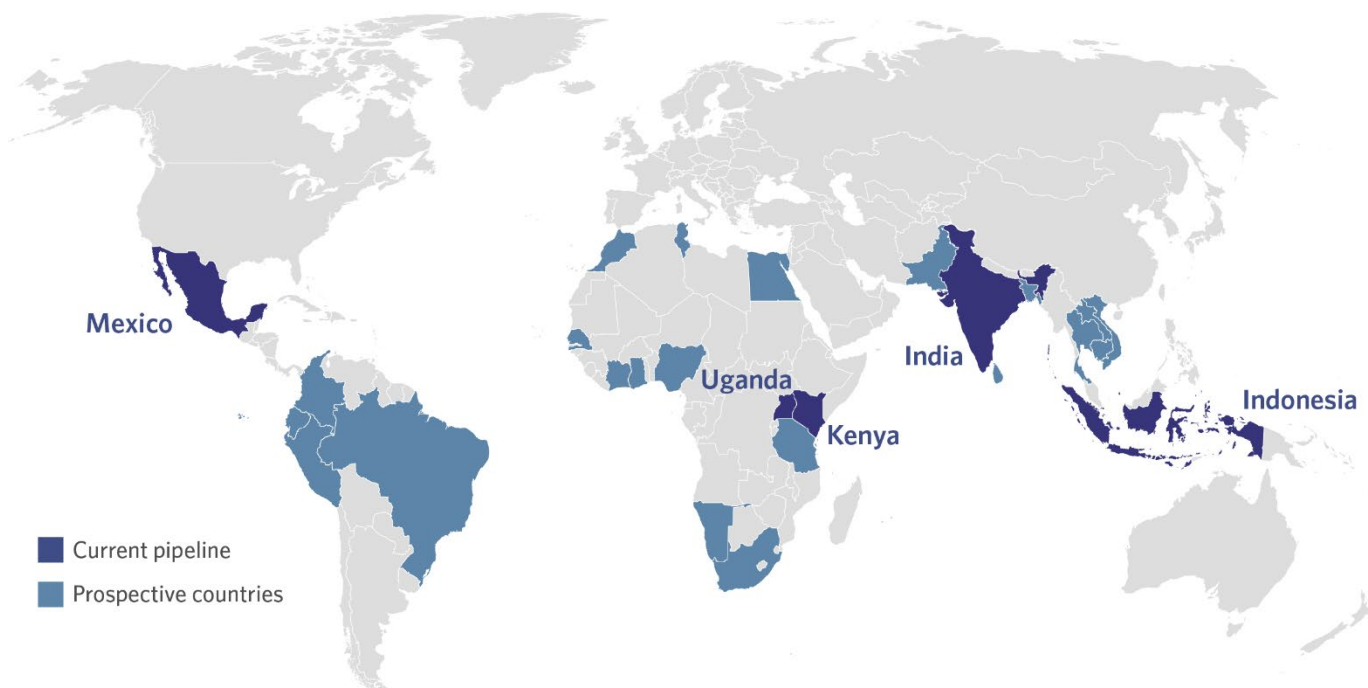
LDF's proponent, Lendable, is an impact investment fintech platform. Over the last seven years, Lendable has primarily focused on promoting financial inclusion and opportunity creation through debt investments in fintechs. It has enabled market access to impact investments to global investors through funds, co-investments, and technology solutions. Founded in 2015, Lendable has deployed over USD 380 million of capital through four funds and realized more than USD 45 million in principle.

For LDF, Lendable will leverage its expertise while also building a new sustainability-focused investment team to source loans and create the appropriate stakeholder ecosystem required in each jurisdiction. Lendable already has significant deal flow through its existing network and offices in Nairobi, Singapore, and Buenos Aires. This includes continuing to nurture or establish relationships with local finance institutions, environmental consultants, and locally present firms working in the carbon offset space.

### 3.2 TARGET COUNTRIES

Lendable plans to consider investments and deploy LDF in all the countries they operate in and key markets for scaled decarbonization. Lendable has an active pipeline in Uganda, Kenya, and India. At the time of publication, it is originating deals in Mexico and Indonesia.

**Figure 2: LDF's Geographic Scope**





### 3.3 PORTFOLIO COMPOSITION

LDF is structured as an open-ended fund, meaning that from a capital raising perspective, it will have continuous capital inflows and is well-positioned to scale since Lendable can grow its investor base without creating new legal structures. Lendable expects LDF to reach an AUM of USD 250 million within three years. At this size, it seeks to support 10-20 companies with an end goal of deploying USD 10-50 million loan ticket size to each.

The fund will provide both on-balance-sheet recourse loans and off-balance-sheet loans where collateral offered will solely be the carbon offset project revenues. Those companies that do have a carbon offset project will pledge the potential revenue as additional security for LDF. The primary source of loan payback for all loans will be cashflows from operations, but for off-balance sheet loans revenues from the carbon contracts may serve as a secondary source of loan repayment.

**Table 6: LDF's Targeted Portfolio composition**

Loan Structuring	Collateral Provided as Security	Allocation
On balance sheet	High	50 - 70%
Hybrid	Med	5-20%
Off-balance sheet*	Low	10-30%

\*Collateral will be the future cashflow of the prospective carbon project

### 3.3 ENVISIONED IMPLEMENTATION TIMELINE

**Figure 3. Implementation Timeline**

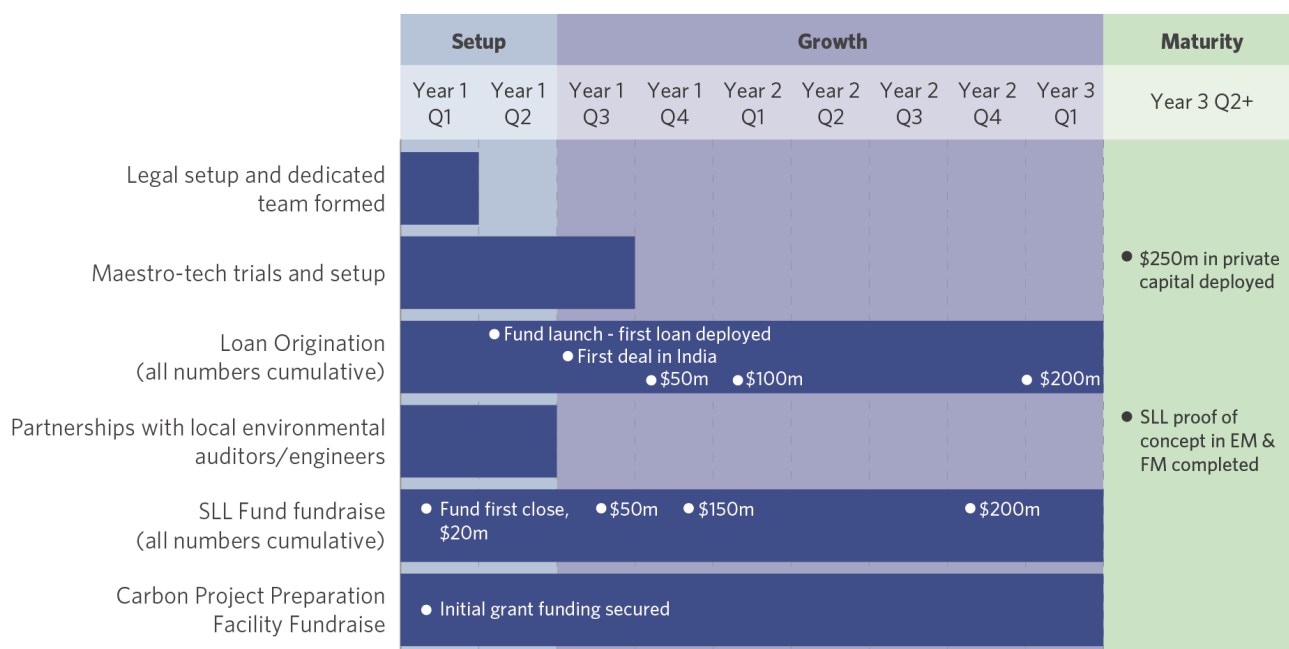


Figure 3 illustrates the implementation timeline Lendable has put forth for LDF. Once the vehicle is legally set up and launched, Lendable aims to resolve all key personnel hires in the first three months of operation. At the time of publication, Lendable is advanced in this activity, having already hired its impact manager. They are far along in the process with two

other candidates with expertise in the sustainable finance space. Three takeaways to highlight from the figure are:

- It is estimated that Maestro technology calibration will take three quarters.
- Fundraising and origination are ongoing, reaching USD 250 million by year three.
- By year three/four, Lendable believes LDF's portfolio will demonstrate that SLLs for MMEs and SMEs are viable in developing economies through their borrowers' payback record and recorded impacts achieved.

## 4. FINANCIAL IMPACT AND SUSTAINABILITY

### 4.1 QUANTITATIVE MODELING

#### 4.1.1 PRELIMINARY CONTEXT

Lendable developed an interpretive model that calculates fund revenue based on an average annual total portfolio yield constituted by three components. (1) weighted average target interest rate calculated from its five target sectors (2) revenue shared from successful carbon projects and (3) a facility fee of 2% upfront. The proportion of the total yield these represent in the base case is 85%, 12%, and 3.70%, respectively. On the operations side, the model assumes a fund size of USD 250 million, management fee of 2%, third-party expenses of 0.25%, and an annual loss rate of 0.5%, which aligns with Lendable historical results. The variables for the base-case funding assumptions can be found in Annex 3.

#### 4.1.2 SENSITIVITY ANALYSIS ON NET PORTFOLIO YIELD

**Figure 4. Average portfolio yield effect on tranche IRR results**

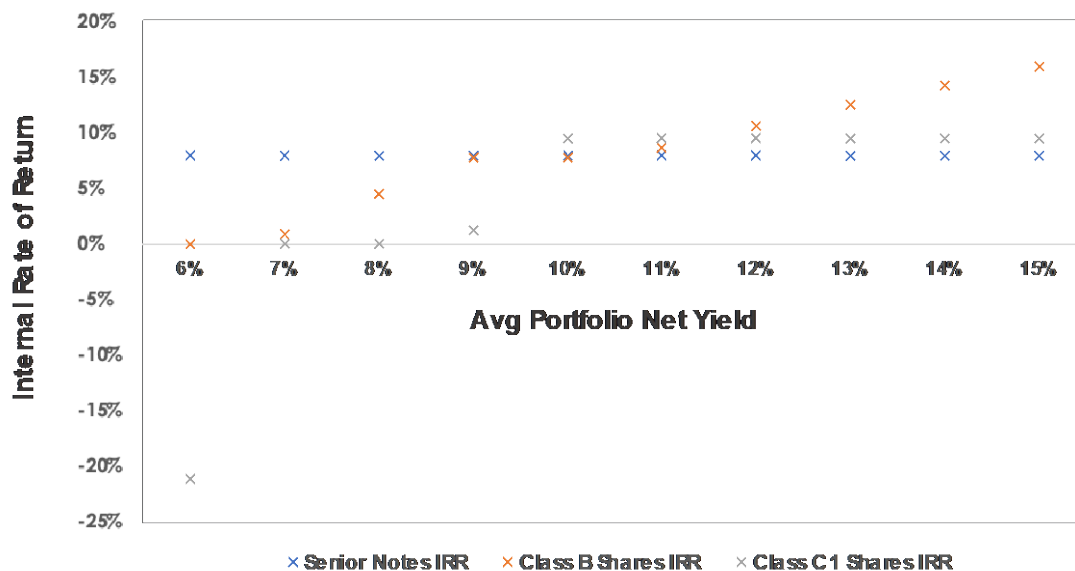


Figure 4 illustrates the sensitivity of each tranche's IRR to different net portfolio yields, i.e., total yields minus losses. The key takeaway is that while the risk for senior noteholders is low, there is a net portfolio yield threshold below which the subordinated tranches see erosion of return and, in extreme scenarios, even loss to the C-share principal. In this context, capital raising for the C shares becomes critically important.

It is difficult to determine whether that threshold is accurate as it is determined by institution-specific appetite and market conditions. However, as the figure shows, a net portfolio yield below 9% would appear to be where returns start getting constrained.

Net portfolio yield is driven by a combination of interest rate spread and loss rates. To achieve interest rates at or above its target, Lendable plans to use the same strategies it has used in past funds, investing dynamically across geographies and sectors where the spreads are in line with their investors' return goals. Large loss scenarios are mitigated by downside protection and the fund's inherent diversification.

#### 4.1.3 INTEREST RATE ADJUSTMENT EFFECT ON A SAMPLE LOAN'S GROSS IRR

The Lab team wanted to study further the effect of the interest rate adjustment on a sample illustrative loan. As Table 7 below shows, these adjustments do not have much effect. The assumed characteristics for the base case, highlighted in green, can be observed in Annex 3. It is important to reiterate that each loan will be unique regarding how it is structured and will always be designed so that the lowest case gross IRR meets LDF's capital providers' return expectations.

**Table 7. Stepdown mechanism effect on Loan gross IRR in basis points**

		Interest stepdown amount			
		0.50%	1.00%	1.50%	2%
Quarter of Adjustment	4	-18	-56	-95	-133
	8	-1	-23	-45	-67
	12	10	0	-10	-21
	16	18	14	11	8

#### 4.1.4 KEY TAKEAWAYS FROM MODELING

The Lab has concluded that two aspects of the vehicle would need closer attention from management to increase the probability of success. *Note: The Lab Secretariat acknowledges that these are typical within all leveraged debt funds.*

1. Ability to re-invest quickly to avoid uncommitted capital.
2. Ability to raise capital through senior notes will be a function of putting into place subordinated tranches that accept the projected returns.

## 4.2 PRIVATE FINANCE MOBILIZATION AND REPLICATION POTENTIAL

As mentioned in Section 1, LDF will operate as an open-ended fund, allowing continuous capital raising within the same legal structure. As a debt fund, LDF is designed to generate stable and predictable cash flows, making it conducive to a leveraged capital structure. Lendable's primary approach to mobilizing commercial capital for LDF involves offering senior notes to private investors, representing 50-60% of the total capital raised.

To ensure a balanced risk allocation, LDF will have two other tranches: B and C shares. 30-40% of the total capital will come from B shares, consisting of equity investors. The C shares are intended to be LDF's catalytic tranche, responsible for raising the remaining 10-20% of

the initial capital. This tranche will be structured with a capped return and capitalization mechanism. Essentially, any profits exceeding a predefined rate of return will be retained by the fund and capitalized. As the C shares tranche grows, it will allow the fund manager to attract additional funding from the two tranches above it (B shares and senior notes). This innovative approach incentivizes investors by enabling them to contribute to the fund's growth and success while mitigating their financial risk through a robust C-tranche.

Thus, upon reaching USD 250 million in AUM, LDF aims to mobilize USD 150 million of private debt capital. If Lendable can attract fully commercial equity capital for the B shares, there would be a nine times total private capital (debt & equity) mobilization factor potential.

## 5. ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACT

*LDF's primary goal is reducing tCO2e, but it will naturally positively affect other Sustainable development goals.*

### 5.1 CONCEPTUALIZING LDF'S SOCIAL AND ENVIRONMENTAL IMPACTS

In SLLs, impacts and achieved performance drive the interest adjustment feature of the loan product to be offered. A key finding during the Lab process was that there is no need for LDF to start from scratch in terms of key performance indicators (KPIs) to use to assess sustainable performance targets. For example, through the sustainability-linked bond principals' initiative, the International Capital Market Association (ICMA) has developed an illustrative KPI registry (ICMA)<sup>13</sup> that is searchable by theme and sector. Lendable will focus on metrics aligned with SDG impact and measure against SDG were viable. To provide some examples, some metrics that LDF's loans can potentially use can be viewed in Annex 4.

To understand the projected impacts that LDF can produce, it is helpful to expand on some examples used in section 1.1.

**Table 8: Illustrative examples of use of funds and impacts in LDF's client base**

Example Enterprise	Use of SLL Funds	Potential Impact Metrics
<p><b>Direct User:</b> Food and beverage company that promotes local agribusinesses to source product ingredients.</p>	Provide funding for working capital lines of credit to local agribusiness firms to promote sustainable production of a desired crop with their out-growers.	<p><b>Primary:</b></p> <ul style="list-style-type: none"> <li>tCO2 reduced – (transport mile reduction)</li> </ul> <p><b>Secondary:</b></p> <ul style="list-style-type: none"> <li>Increased farmer revenue</li> <li>#of farmers reached</li> </ul>
<p><b>Direct User:</b> A sugar mill establishing a co-generation plant</p>	Provide funding for equipment and construction costs of a bio-mass plant, utilizing bagasse, a renewable byproduct of the	<p><b>Primary:</b></p> <ul style="list-style-type: none"> <li>tCO2 reduced – (energy consumed v. grid)</li> </ul> <p><b>Secondary:</b></p> <ul style="list-style-type: none"> <li>Increased farmer revenue</li> <li>#of farmers reached</li> </ul>

<sup>13</sup> ICMA. 2023. Sustainability-Linked Bond Principles. <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/>

	sugar cane industry, to reduce energy costs.	
<b>Enabler:</b> Enterprise that sells Electric vehicles (buses, cars, 3-wheelers, scooters) to consumers	Provide funding for equipment and manufacturing costs to deploy electric vehicles.	<b>Primary:</b> <ul style="list-style-type: none"> <li>● tCO2 reduced v.diesel or petrol vehicles</li> </ul> <b>Secondary:</b> <ul style="list-style-type: none"> <li>● Vehicles replaced</li> <li>● Increased savings for end users</li> <li>● Improved air quality</li> </ul>
<b>Enabler:</b> Enterprise that sells clean cookstoves to consumers	Provide funding for equipment and manufacturing costs to deploy clean cookstoves.	<b>Primary:</b> <ul style="list-style-type: none"> <li>● tCO2 reduced (through avoided forest loss)</li> </ul> <b>Secondary</b> <ul style="list-style-type: none"> <li>● # of cookstoves deployed</li> <li>● Number of households with Improved health outcomes</li> </ul>

## 5.2 PROJECTED ENVIRONMENTAL SOCIAL AND ECONOMIC IMPACT METRICS

The diverse nature of LDF's customer base, presents a complex challenge for gauging and projecting environmental and social impact metrics. However, while acknowledging the inherent uncertainties, using an illustrative impact calculation may provide insights and an understanding of LDFs impact potential.

**Table 9: Illustrative Impact Results**

Sector	Assumed total investment Fund lifecycle (USD)	tCO2e abated	Beneficiaries Reached
Transport	187.5 m	4m	~520K
Energy	125m	64m	~1,000
Clean cookstoves	100 m	52m	525,000
Sustainable Agriculture	100 m	22m	1,000,000
<b>Total</b>	<b>512.5m</b>	<b>142m</b>	<b>1,542,000</b>

Table 9 focuses on the climate action aspect of the projects invested in as measured by the total tCO2e. It is clear, however, that the fund will promote other sustainable development goals. Some examples and reasoning for this are found below:

**SDG1- No Poverty:** Highly vulnerable people will benefit from the instrument as products that serve them, such as solar home systems and clean cookstoves, can improve their current livelihoods.

**SDG2 - No hunger:** LDF will aim to support enterprises that distribute organic fertilizer, increasing productivity levels for smallholder farmers.

**SDG 5 - Gender equality:** LDF's management itself will strive to follow 2X Challenge guidance and plans to have a gender specific SPT in all loans it provides where is relevant.

**SDG 7 - Affordable and Clean Energy:** Solar systems will be promoted through portfolio loans, increasing energy access throughout development economies.



**SDG 8 – Decent work and economic growth:** LDF will promote sustainable growth by funding companies to decarbonize value chain activities that will create jobs in the sector.

**SDG 11 – Sustainable cities and communities:** Through promoting electric vehicles, LDF will support communities to be more resilient, less dependent on carbon fuels, and have better air quality.

**SDG 12 - Responsible Consumption and Production:** Supporting decarbonization of MME's value chain activities will result in more sustainable operations and inputs of the products they offer.

**SDG 13 - Climate Action: This will** be achieved through LDF's main target, which is a clear case for reducing GHG emissions for each loan it provides.

## NEXT STEPS

Lendable's experience as an established impact-focused fund manager leaves them well-positioned to set up LDF and attract investors. The team needs to focus on raising the three tranches that make up the capital stack for the SLL fund, as well as the donor money for the carbon project preparation facility.

The immediate next steps for LDF's setup and launch are:

1. Hire a core team and set up the fund.
2. Roadshow to attract anchor investors for the SLL fund.
3. Find an impact-aligned partner or partners for the Carbon Project Preparation Facility.
4. Use the funds raised to begin investing in projects in their active pipeline while continuing to identify additional investment opportunities that align with the fund's climate criteria.

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- Estimated carbon emissions negated
- Sample price range for carbon type

#### Direct Users:

- Carbon footprint estimates and baseline creation
- Internal carbon pricing

#### Both

- Project Design Documents
- Registration subsidization
- Audit subsidization
- Engagement with vendors and suppliers
- Carbon offset marketing support

**Summary:** CPPF will offer a range of services to support the development of an enterprises carbon project. These include advisory support from both the core team and local experts, assistance in generating all essential due diligence paperwork for the data room, facilitation of connections with strategic partners and potential buyers, as well as the provision of re-payable grant funding. As a result of these efforts, several positive outcomes are anticipated. These encompass a reduction or avoidance of greenhouse gas emissions, decreased transaction costs and a quicker path to market, thereby minimizing operational risks. Furthermore, the initiative aims to drive an increase in verifiable impact, contributing to a more sustainable and efficient implementation process.

## ANNEX 4: SUPPLEMENTARY INFORMATION ON INTERPRETIVE MODEL

### Funding Assumptions

Class	Spread	SOFR+	Ending Share	Ending Share
Senior Notes	2.5%	7.64%	60.0%	\$150,000,000
Class B Shares	2.0%	7.14%	30.0%	\$75,000,000
Class C Shares	3.5%	8.64%	10.0%	\$25,000,000
			100.0%	

Class	Term	Redemption	Distributions		Subordination (up to and including class)				Description
			Return	Type	Frequency	Ranking	Min	Max	
Senior Notes (Class A)	2-12 years	Fixed	7.64%	Coupon	Quarterly	Senior	100%	100%	Offer a set coupon (SOFR+) paid quarterly with a scheduled, bullet maturity
Class B Shares	Unlimited	Every 10 years	7.14%	Dividend	Annual	Mezzanine	30%	100%	Dividend represents minimum
Class C Shares	Unlimited	Every 10 years	8.64%	Dividend	Annual from Yr	First Loss	10%	100%	Dividend represents minimum

### Illustrative loans assumptions

#### Illustrative Loan Assumptions

Amount	10,000,000
term	5
Paid	Quarterly
Periods/Quarters	20
Opening Interest	12.00%
PMT	-672,157

Quarter of Adjustment	12
Amount at Adjustment	5,233,488
% adjusted down	1%
New interest	11.00%
Adjusted PMT	-664,344

## ANNEX 5: NON-EXHAUSTIVE SAMPLE OF ICMAS KPIS PER SECTOR POTENTIALLY RELEVANT FOR LDF

Sector	Subsector	Theme	Potential KPI
Consumer Goods	<ul style="list-style-type: none"> <li>Logistics</li> <li>Distributors</li> </ul>	Climate change (GHG emissions and energy)	Proportion of zero emissions vehicles in the car and truck fleet (%)
Consumer Goods	<ul style="list-style-type: none"> <li>Apparel,</li> <li>Accessories &amp; Footwear</li> <li>Appliance Manufacturing</li> <li>Building Products &amp; Furnishings</li> <li>E-commerce</li> <li>Household &amp; Personal Products</li> <li>Multiline and Specialty Retailers &amp; Distributors</li> <li>Toys &amp; Sporting Goods</li> </ul>	Climate change (GHG emissions and energy)	Energy consumed (total or per product)
		Climate change (GHG emissions and energy)	Proportion of renewable energy consumption vs. total energy consumption
		Water	Volume of fresh water withdrawn/consumed
		Water	Proportion of reused/recovered/recycled water
		Waste	Weight of waste to landfill
		Raw material sourcing and recycling (circular economy)	Revenue from products third-party certified to environmental and/or social sustainability standards
		Raw material sourcing and recycling (circular economy)	Proportion of raw materials third-party certified to an environmental and/or social sustainability standard
		Supply chain	Number of facilities audited to a social responsibility recognized norm
Energy	General	Climate change (GHG emissions and energy)	Avoided GHG emissions (absolute or relative e.g., per dollar invested)
		Community inclusion & involvement (in. Human rights)	Expenditure on locally sourced goods and services
		Community inclusion & involvement (in. Human rights)	Local employees in total workforce, in target countries or regions
		Climate change (GHG emissions and energy)	Energy production from renewable sources (proportion or absolute)
		Climate change (GHG emissions and energy)	Amount/share in bio refinery capacity, biofuels and/or biogas
		Climate change (GHG emissions and energy)	Installed renewable energy capacity (proportion or absolute)
		Climate change (GHG emissions and energy)	Total energy consumed (absolute or intensity)
		Climate change (GHG emissions and energy)	Proportion of renewable energy consumption vs. total energy consumption
		Biodiversity (incl. soil/land use)	Reduction of chemicals use (e.g., fertilizer, pesticide) as farming input
Food & Beverages	Food - Wholesale	Climate change (GHG emissions and energy)	% of renewable energy consumption vs. total energy consumption
		Supply chain	% traceability to direct/indirect suppliers
		Waste	Food waste (metric tonnes)
Transport	Public Transport	Climate change (GHG emissions and energy)	% of environmentally friendly fleet (non-fossil fuel powered)
	Public Transport	Climate change (GHG emissions and energy)	Avoided tons of CO2