



Transition Plan

Regeneration from Leaf to
Landscape: TTE's Net-Zero &
Nature-Positive Journey

**For -
Climate & Nature Transition**

Talawakelle Tea Estates PLC

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1.1 Strategic Vision and Commitments

TTE has long recognized that enduring business value is inseparable from the health of ecosystems, the stability of the climate, and the wellbeing of rural communities. As a certified leader in regenerative plantation management, TTE is committed to a just and nature-positive transition that delivers shared value for the business, biodiversity, and society.

In line with this vision, TTE has set out a forward-looking, science-aligned transformation pathway centered on the following headline commitments:

Net Zero by 2050 (Climate Commitment)

TTE has committed to reach net-zero greenhouse gas (GHG) emissions across its value chain by 2050. This target is formally **validated by the Science-Based Targets initiative (SBTi)**, covering Scope 1, 2, and 3 emissions, including land-based emissions under the **Forest, Land and Agriculture (FLAG)** guidance. Interim targets include:

- A 50% reduction in absolute Scope 1 and 2 emissions by 2030 from a FY2021/22 baseline.
- Progressive reduction in Scope 3 emissions, with active traceability across purchased goods, logistics, and downstream buyers.

Nature Positive by 2035 (Biodiversity Commitment)

As a pioneer in ecosystem restoration and agroecological land management, TTE has adopted a strategic commitment to become **Nature Positive by 2035**. This aligns with the **Kunming–Montreal Global Biodiversity Framework (GBF)** and the Science-Based Targets for Nature (SBTN) framework. Key elements include:

- Protecting and restoring at least 100 hectares of high-value natural ecosystems (buffer zones, riparian strips, degraded slopes) by 2030.
- Enhancing on-estate biodiversity through native species reforestation, soil regeneration, and agroforestry.
- Zero deforestation across estates and outgrower supply chains.

Net Positive Water by 2030 (Water Stewardship Commitment)

Recognizing water as a critical natural asset for climate resilience and tea production, TTE has pledged to become **Net Positive for Water by 2030**. This includes:

- Reducing absolute freshwater withdrawal per kg of made tea through circular irrigation and process water reuse.
- Replenishing more water than is withdrawn via watershed protection, riparian buffer restoration, and recharge zone interventions.

- Alignment with CEO Water Mandate principles and SBTN Water target-setting pathways.

Integrated Climate–Nature Transition under ReGen 2030 Agenda

These commitments are integrated under TTE’s broader **ReGen 2030 Agenda** a regenerative development framework that unifies climate action, biodiversity recovery, water stewardship, and community resilience. This integrated vision allows TTE to:

- Prioritize real economy transformations across operations and landscapes.
- Manage trade-offs and synergies between decarbonization, adaptation, and ecosystem services.
- Mobilize partnerships, nature finance, and stakeholder engagement across the full value chain.

Together, these commitments form the strategic bedrock of TTE’s Climate and Nature Transition Plan (2024–2050), shaping investment decisions, operational priorities, and stakeholder accountability at every level of the business.

1.2 Rationale and Materiality Approach

Talawakelle Tea Estates PLC has adopted a double materiality approach to transition planning, recognizing that climate and nature-related issues have both a **financial materiality** impacting enterprise value and an **impact materiality** influencing ecosystems, communities, and planetary thresholds.

Financial Materiality

The company’s exposure to climate and nature-related risks is highly relevant to its long-term performance and business continuity. As a land-based, export-oriented agribusiness operating in ecologically sensitive highland catchments, TTE faces material financial effects from:

- **Physical climate risks:** Increased frequency and severity of floods, landslides, erratic monsoon cycles, prolonged dry spells, and crop heat stress all impacting field productivity, factory efficiency, and CapEx requirements.
- **Transition risks:** Growing compliance obligations for carbon and biodiversity disclosures; new trade regulations (e.g., deforestation-free sourcing); carbon pricing and scope 3 audit expectations from ESG-sensitive export markets.
- **Water security risks:** Reduced upstream flows, competition for water, and changing hydro-periods affecting factory operations and micro-hydro capacity.
- **Nature-related risks:** Declines in pollinator abundance, pest outbreaks, topsoil erosion, and vegetation loss that directly influence estate yields and cost structures.

These risks are assessed under IFRS S2-aligned financial impact categories effects on cash flows, financial position, and financial performance and disclosed in the company’s SLFRS S1/S2 financial reports.

Impact Materiality

TTE's business activities also have direct and indirect effects on nature, water systems, and climate. Through its operations and value chain, the company interfaces with:

- **High-biodiversity landscapes:** Including riparian corridors, steep montane slopes, and remnant forest patches.
- **Water-critical basins:** Which support downstream livelihoods, wetlands, and drinking water access.
- **Emissions hotspots:** Especially from fertilizers, factory energy use, and logistical transport.

By addressing these impacts through regenerative practices, ecosystem restoration, and clean energy, TTE not only reduces its ecological footprint but also contributes to global goals such as halting nature loss by 2030 (GBF Target 1) and reaching net zero by mid-century (Paris Agreement).

Materiality Determination Process

Material climate and nature-related topics were determined using:

- Stakeholder consultations (internal and external)
- Risk exposure assessments (using TNFD LEAP and IFRS S2 guidance)
- Scenario analysis across three SSP-aligned futures
- Value chain hotspot mapping (Scopes 1–3, biodiversity interfaces)

These material topics underpin the priorities, targets, and actions set out in TTE's Climate and Nature Transition Plan, ensuring strategic alignment with both investor expectations and ecological imperatives.

1.3 Scope and Boundary of the Plan

This Transition Plan applies to **Talawakelle Tea Estates PLC's entire operational footprint and strategically relevant value chain components**, in alignment with IFRS S2 and TNFD scope guidance. It defines the physical and organizational boundaries for both climate- and nature-related risks, impacts, dependencies, and opportunities addressed under the Plan.

Operational Scope

The Plan covers:

- **All owned and managed tea estates and factories** located in Sri Lanka's Central and Uva highlands, including subdivisions with certified management units under Rainforest Alliance and ISO standards.

- **Associated micro-hydro power generation units, energy systems, water infrastructure**, and estate-level services that contribute materially to emissions or interact with ecosystems.

These operations represent the core boundary for Scopes 1 and 2 GHG emissions, biodiversity dependencies, and site-level adaptation interventions.

Value Chain Scope

The Plan also includes relevant elements of the **upstream and downstream value chain** where TTE has:

- **Significant Scope 3 emissions** (e.g., purchased fertilizers and packaging, outbound logistics, green-leaf outgrowers, employee commuting)
- **Nature-related dependencies or impacts** (e.g., outgrower landscape conversion risks, input sourcing from nature-sensitive regions)

While full traceability of Scope 3 emissions and nature interfaces is still evolving, TTE prioritizes **Tier 1 suppliers and direct partnerships** for transition actions and stakeholder engagement. Materiality filters and feasibility assessments determine the coverage approach, in line with TNFD's location-based scoping guidance and IFRS S2 para 16(b).

Geographic Boundary

Geographic coverage includes:

- All **TTE-owned land holdings** (plantations, forests, buffer zones)
- **Priority restoration zones** identified through internal ecosystem interface mapping
- **Hydrological catchments** affecting estate water use and natural flows (e.g., Kelani and Walawe basin zones)
- Select **outgrower landscapes** within key sourcing regions

In cases where site-specific data is limited, the company uses **proxy metrics and landscape-level scenario data** to inform transition planning, while progressively enhancing granularity.

Scope Evolution and Expansion

The scope of this Transition Plan will be updated every three years or upon material change in:

- Regulatory requirements (e.g., biodiversity due diligence laws)
- Expansion into new landscapes or sourcing geographies
- Data availability (e.g., from biodiversity baseline assessments or Scope 3 mapping tools)
- Stakeholder expectations and materiality reassessments

This ensures the Plan remains relevant, responsive, and aligned with evolving best practices across the climate and nature disclosure ecosystem.

1.4 Guiding Principles

Talawakelle Tea Estates PLC's Climate and Nature Transition Plan is underpinned by a clear set of principles that ensure the company's pathway to 2050 is not only credible and science-aligned but also grounded in its values as a purpose-driven agribusiness. These principles reflect emerging global expectations for high-quality transition plans as defined by the **Transition Plan Taskforce (TPT)**, **TNFD**, and **SBTN**.

Ambition

TTE's transition plan reflects the urgency and scale of response needed to address the twin global crises of climate change and biodiversity loss. The company sets **clear, time-bound, science-based targets** that align with:

- The **Paris Agreement** (1.5°C pathway)
- The **Kunming-Montreal Global Biodiversity Framework** (halt and reverse nature loss by 2030)
- **SBTi and SBTN methodologies**, including FLAG and water targets
- The company's internal **ReGen 2030 Agenda**, which aspires to build resilient, regenerative landscapes that deliver climate, nature, and community value

Ambition is demonstrated not only through the scope of targets, but by embedding climate and nature considerations across all levels of business planning, operations, and investment decisions.

Action

The transition is anchored in **real-economy changes** not offsetting alone. TTE prioritizes direct interventions across its estates, supply chain, and operating model, including:

- Low-emission and renewable energy systems (e.g., micro-hydro, biomass)
- Climate-smart replanting and biodiversity corridor restoration
- Fertilizer use optimization and nutrient circularity
- Nature-positive outgrower models and agroecological practices
- Integrated water management and watershed regeneration

All actions are sequenced, resourced, and linked to measurable KPIs, with clear implementation milestones through 2025, 2030, 2040, and 2050.

Accountability

TTE embeds strong governance and performance accountability mechanisms into the transition process:

- Oversight is provided by the **ESEG Steering Committee** and **Board Audit Committee**, both of which receive periodic progress updates.
- Executive and operational managers are assigned with transition-related roles, responsibilities, and KPIs including those linked to climate and water performance.
- Progress is monitored through a centralized **Sustainability Dashboard**, and results are disclosed through integrated annual reporting, aligned to **IFRS S2**, **TNFD**, and **GRI** standards.
- Transition plan progress is subject to **independent assurance** where applicable (e.g., GHG inventories, ecosystem restoration verification, SBTi status updates).

By operationalizing these three core principles **Ambition**, **Action**, and **Accountability** TTE ensures that its transition plan is robust, transparent, and credible in the eyes of investors, stakeholders, and future generations.

1.5 Alignment with Global Frameworks

Talawakelle Tea Estates PLC's Transition Plan is designed to meet the evolving expectations of capital markets, regulators, and sustainability frameworks, ensuring coherence and interoperability across climate and nature disclosures. It draws from and aligns with the world's most respected standards and voluntary guidance, enabling consistency, comparability, and long-term credibility.

Disclosure and Regulatory Alignment

Framework / Standard	TTE Alignment Approach
IFRS S1 and S2	Climate-first sustainability-related financial disclosures (SLFRS adoption from FY 2023/24)
GRI Standards	GRI-aligned ESG metrics, materiality mapping, and stakeholder disclosure
TNFD v1.0	Nature-related risk and opportunity identification and LEAP-based disclosures
TPT Disclosure Framework	Structure and credibility of climate transition plan (Ambition–Action–Accountability)
SBTi (incl. FLAG)	Net Zero by 2050 with verified interim targets and FLAG sector commitment
SBTN (Science-Based Targets for Nature)	Targets for freshwater, ecosystems, and biodiversity uplift; use of mitigation hierarchy
Kunming-Montreal GBF	Alignment with 2030 targets to halt and reverse biodiversity loss and support restoration
CEO Water Mandate / CDP Water	Water disclosure and Net Positive Water commitment pathways
GFANZ Nature in NZTP Guidance	Integration of nature-related levers into climate transition planning
Integrated Reporting Framework (<IR>)	Value creation lens connecting natural capital, strategy, and outcomes

Interoperability and Integration

The structure of this Transition Plan is deliberately designed to:

- Reflect **TPT’s five-part disclosure architecture** and TNFD’s adaptation of those same pillars (Foundations, Implementation, Engagement, Metrics & Targets, Governance)
- Serve as a **unified climate–nature roadmap** for operational planning, financing, and communication
- Align climate and nature targets to **avoid trade-offs and maximize co-benefits**, particularly across:
 - Reforestation and soil carbon sequestration
 - Sustainable water management and biodiversity conservation
 - Scope 3 emissions reduction and nature-based solutions

Assurance and Reporting Pathway

TTE commits to strengthening the credibility of its disclosures through:

- Independent assurance of GHG data and restoration verification
- Transparent and comparable reporting aligned to **ISSB, TNFD, and GRI** indicators
- Phased expansion to include **external assurance of nature-related targets** in future reporting cycles

This strong alignment with global frameworks provides investors and stakeholders with confidence that TTE’s Climate and Nature Transition Plan is both **technically sound and globally relevant**, positioning the company as a regional model for high-integrity sustainability leadership.

2.1 GHG Inventory and Baseline

Talawakelle Tea Estates PLC has established a comprehensive greenhouse gas (GHG) inventory across its operations and material value chain categories, providing a science-aligned foundation for its Net Zero transition by 2050. The GHG inventory aligns with the **GHG Protocol Corporate Standard, ISO 14064-1:2018**, and TTE’s **SLFRS/IFRS S2 climate disclosure requirements**.

Inventory Scope and Coverage

TTE’s GHG inventory covers **Scopes 1, 2, and 3**, including emissions from owned estates, manufacturing operations, transport, input materials, and relevant downstream activities. Emissions are disaggregated across:

Scope	Coverage
Scope 1	Direct emissions from estate fuel use (diesel), factory combustion (biomass boilers, backup diesel), and company vehicles

Scope 2	Indirect emissions from purchased electricity (CEB supply); calculated using the location-based method
Scope 3	Includes: <ul style="list-style-type: none"> • Upstream inputs (fertilizer, packaging, transport) • Employee commuting and travel • Downstream logistics and buyer activities • Land-use change and leaching-related FLAG emissions

The inventory boundary follows **operational control** and includes **consolidated entities only**. There are **no non-consolidated entities** relevant to the GHG baseline as of the reporting period.

Baseline Year and Methodology

The **baseline year is FY 2021/22**, chosen to reflect stable post-pandemic operations and data availability across estates and factories. Emissions are calculated using:

- **Activity data** (fuel/electricity consumption, kg of fertilizer applied, distance travelled, material usage)
- **Emission factors** from the IPCC 2006 Guidelines (and GWP-100 values from **IPCC AR5** in line with SLSEA 2022) and verified national sources
- Estimation techniques for Scope 3 where primary data is unavailable (e.g., using life-cycle averages per category)

Where material, land-sector emissions (e.g., from fertilizer N₂O leaching) are reported separately under **FLAG accounting guidance**.

GHG Inventory Summary – FY 2022/23 Baseline

Scope	tCO ₂ e	% of Total	Key Drivers
Scope 1	8999	30%	Diesel for estate operations, biomass boilers
Scope 2	2205	7.4%	Grid electricity from CEB
Scope 3	18,578	62.3%	Fertilizer emissions, packaging, downstream transport
Total	29,782	100%	–

TTE plans to update its GHG inventory annually and review its **baseline in 2026** to reflect any structural changes, improved Scope 3 data, and emission factor updates.

2.2 Net Zero Commitment and SBTi Target Pathway

TTE has made a formal commitment to reach **net zero greenhouse gas emissions across its full value chain by 2050**, in line with the global 1.5°C target. This commitment is backed by **science-based targets** that are independently validated by the **Science Based Targets initiative (SBTi)**, including the **Forest, Land and Agriculture (FLAG)** pathway for the tea sector.

SBTi-Validated Targets (FY2021/22 Baseline)

Target Type	Scope	Target
Near-Term Target (2030)	Scope 1 & 2	≥ 50% absolute reduction by 2030 from FY2021/22 baseline
	Scope 3 (Relevant)	Engagement with suppliers and buyers to align with low-carbon expectations
FLAG Sector Commitment	Scope 3 – FLAG	Full compliance with SBTi FLAG standard (N ₂ O and land-related emissions)
Long-Term Target (2050)	Scope 1, 2, and 3	≥ 90% absolute reduction; residual <10% neutralized with high-integrity carbon removals

The company's **Net Zero by 2050** ambition is aligned with **SBTi's Corporate Net Zero Standard** and applies across operational and material value chain emissions, including difficult-to-abate areas such as logistics and fertilizer emissions.

FLAG Sector Alignment

TTE's land-sector emissions (primarily from fertilizer use, leaching, and runoff) are governed by the **SBTi FLAG guidance**. Actions include:

- Adoption of slow-release and organic fertilizers
- Reduction in synthetic N application rates
- Soil carbon enhancement via cover cropping and mulching
- Inclusion of FLAG emissions in annual GHG inventory and targets

FLAG sector data will be independently reviewed and reported in accordance with the **Land Sector and Removals Guidance** issued by SBTi (2022).

Transition Milestones

To operationalize the Net Zero pathway, TTE has identified the following strategic decarbonization milestones:

Milestone	Target Year	Key Measures
GHG baseline completed	2022	Full Scope 1–3 baseline with FLAG integration
SBTi target validation	2023	Near- and long-term targets verified including FLAG
RE and bioenergy scale-up	2024–2026	Additional hydro, biomass optimization, solar installations
Scope 3 engagement phase	2025	Target setting for logistics, fertilizer suppliers, and major buyers
FLAG emission mitigation	2025–2030	Reduced nitrogen intensity, agroecological transition
Mid-point review	2030	≥50% reduction in Scope 1+2; measurable FLAG progress

Net zero operational emissions	2040	Residuals offset only by high-integrity removals
Full Net Zero achieved	2050	Across Scope 1, 2, and 3 with <10% high-quality removals

TTE's emissions trajectory is consistent with the **1.5°C pathway** and reflects the tea sector's role in advancing **low-emission, nature-positive agriculture**.

2.3 Transition Risks and Financial Impact

As climate policies, markets, technologies, and consumer expectations evolve, TTE faces a range of **transition risks** that could materially affect its operating model, cash flow, and access to key markets. These risks are assessed and disclosed in alignment with **IFRS S2** and the **Transition Plan Taskforce (TPT)** disclosure framework.

TTE's risk exposure has been analysed across **short, medium, and long-term horizons** using scenario analysis aligned to SSP1–1.9 (1.5°C), SSP2–4.5 (likely 2–3°C), and SSP5–8.5 (high emissions >3°C).

Identified Transition Risks

Risk Type	Description	Time Horizon	Potential Impact Area
Carbon Regulation	Introduction of national carbon pricing, Scope 3 audit mandates, or emissions tax	Medium	Increased OpEx; reporting costs; buyer audits
Scope 3 Traceability	Buyer requirements for verified low-emission inputs and logistics traceability	Short–Medium	Reputational risk; sales access
Input Cost Volatility	Increased cost of low-emission fertilizers and transition materials	Short–Medium	Input cost inflation; sourcing risks
Technology Shifts	Obsolescence of inefficient equipment and need for emissions reporting systems	Medium	CapEx reallocation; upgrade requirements
Market Preference Shifts	ESG-sensitive export markets favour verified low-carbon tea	Short–Medium	Revenue risk; certification dependency
Biodiversity and FLAG Auditing	Buyers may require compliance with SBTi-FLAG and ecosystem-related disclosures	Medium–Long	Market access; reputational exposure

Financial Impact Assessment

TTE has assessed transition risks in terms of potential effects on:

Impact Area	Assessment Summary
Cash Flows	Transition risks may increase operating costs, particularly from fertilizer decarbonization, renewable energy CapEx, and audit compliance costs in the short to medium term. In the long term, avoided regulatory penalties and energy savings are expected to balance cost pressures.
Financial Performance	Gross margins may be affected if transition costs are not fully passed through to buyers. However, early mover advantage in low-emission certified tea markets is expected to support pricing power and brand value.
Financial Position	Transition investments are being incorporated into CapEx forecasts and project financing. No material balance sheet stress is expected if implementation follows staged timelines.

Mitigation Strategy

To manage these risks, TTE is:

- Prioritizing early adoption of energy and fertilizer transition technologies
- Embedding transition costs into buyer pricing and certification negotiations
- Engaging proactively with certification schemes (e.g. SBTi-FLAG, Rainforest Alliance)
- Strengthening scenario-linked financial planning and ESG audit readiness

2.4 Decarbonization Levers and Milestones

To achieve its SBTi-validated Net Zero target by 2050, Talawakelle Tea Estates PLC has defined a set of **core decarbonization levers** tailored to its estate operations, manufacturing footprint, and value chain. These are grounded in **real-economy transformations**, not reliance on offsetting, and are sequenced over time through measurable implementation milestones.

Key Decarbonization Levers

Lever	Description	Target Outcomes
1. Renewable Energy Expansion	Scale-up of small hydropower, solar PV, and biomass-to-energy systems across estates and factories	Reduced Scope 1 and 2 emissions; improved energy autonomy
2. Biomass and Boiler Efficiency	Upgrade biomass combustion systems; optimize fuel moisture and loading efficiency	Lower biomass-related CO ₂ e per GJ; reduced Scope 1
3. Electrification of Processes	Replace diesel-powered estate machinery and vehicles with electric alternatives; convert boilers to electric systems	Direct emission reduction in estate operations
4. Fertilizer Optimization and Biochar	Shift to organic/smart fertilizers, improve application precision, introduce biochar and composting systems	Reduced N ₂ O emissions (FLAG); improved soil carbon retention

5. Factory Process Efficiency	Implement smart metering, waste heat recovery, and process redesign to reduce energy consumption per kg made tea	Increased GJ/kg efficiency; lower Scope 2 demand
6. Low-Emission Logistics and Packaging	Engage with transporters and packaging suppliers to reduce life-cycle emissions of tea delivery and export	Reduced Scope 3 transport and material emissions
7. Reforestation and Soil Carbon Enhancement	Agroforestry, slope stabilization, riparian buffer restoration to increase carbon sequestration	Long-term removals under FLAG; ecosystem co-benefits

Implementation Milestones

Milestone	Target Year	Progress Indicator
Commission 100% biomass boiler optimization	2024	All major factories retrofitted with efficient combustion
Expand solar and hydro generation capacity by 20%	2025	RE share of total energy $\geq 35\%$
Pilot electric estate vehicles in two divisions	2025	First e-transport rollout completed
Biochar program introduced in priority estates	2026	10% of estates apply biochar to high-slope fields
Scope 3 supplier engagement for logistics and fertilizer	2026	Traceable low-emission supplier contracts in place
Achieve $\geq 50\%$ Scope 1+2 GHG reduction	2030	Verified inventory vs 2021/22 baseline
100% energy from low-carbon or renewable sources	2040	RE certification or GHG intensity benchmarks met
Net Zero operational emissions achieved	2040	Residuals $< 10\%$ of baseline, offset with removals only
Full Scope 1–3 Net Zero	2050	SBTi Net Zero verified, $< 10\%$ high-quality removals

Integration with Business Operations

Each decarbonization lever is embedded within the companies:

- **CapEx planning** (e.g., hydro upgrades, solar expansion, electrification)
- **Estate replanting and soil management** (e.g., slope cover, nutrient cycles)
- **Procurement policy** (e.g., logistics partners, fertilizer reformulation)
- **ESG dashboard tracking and KPIs**

These actions are reviewed annually by the **ESEG Steering Committee** to ensure alignment with the company's Net Zero trajectory and financial resilience.

2.5 Targets and Performance Pathway

Talawakelle Tea Estates PLC has defined a structured performance pathway with **science-based, time-bound climate targets** that align with global 1.5°C trajectories and the SBTi Net Zero Standard. These targets cover all material emissions sources and reflect phased decarbonization across Scopes 1, 2, and 3, including the Forest, Land, and Agriculture (FLAG) sector.

Climate-Related GHG Emission Reduction Targets

Target Category	Metric	Target	Target Year	Baseline
Scope 1 & 2 Reduction	Absolute tCO ₂ e	≥ 50% reduction	2030	FY 2021/22
Scope 3 Engagement	% of Scope 3 emissions covered by supplier engagement or influence	≥ 67% by value chain emissions	2027	Initiated 2024
FLAG Emissions Reduction	tCO ₂ e from fertilizer and land emissions	Measurable annual decline toward net-zero FLAG	2025–2035+	FLAG baseline FY21/22
Net Zero (Full Value Chain)	Scope 1, 2, 3 combined tCO ₂ e (residuals <10%)	≥ 90% reduction, rest neutralized	2050	FY 2021/22

GHG Intensity Targets (Operational Efficiency)

Metric	Target (2030)	Baseline (2021/22)
GHG emissions per kg of made tea	≥ 50% reduction in intensity	xx tCO ₂ e/kg
GHG emissions per GJ of energy used	≥ 40% reduction via RE and efficiency	xx tCO ₂ e/GJ
% RE share in total energy mix	≥ 50% from solar, hydro, biomass	~30%

Decarbonization Co-Benefit Targets

Complementary Target	Metric	Target Year	Relevance
Soil organic carbon improvement	% increase in SOC in high-risk fields	2030	FLAG, nature nexus
Biochar use coverage	% of estates applying biochar	2026	Soil health, emission reduction
Emission-free energy in factories	% of processing powered by RE	2035	Scope 2 & RE targets
Avoided deforestation (Scope 3 land-use)	Hectares of natural land preserved	Ongoing	FLAG & biodiversity compliance

Review and Adjustment Process

- Targets are reviewed **biennially** based on emission trends, SBTi updates, and stakeholder expectations.
- Adjustments are made where required to reflect:
 - New emission sources or scope changes
 - Enhanced supplier and logistics data
 - FLAG pathway refinement and land-sector modeling
- Target progress is **tracked quarterly** via the internal ESG dashboard and reviewed annually by the Board and ESEG Committee.

2.6 Governance and Climate KPIs

Effective governance is central to Talawakelle Tea Estates PLC's climate transition. The company ensures strong leadership, clear accountability, and robust performance monitoring across all levels of the organization, in line with the **IFRS S2, TPT Disclosure Framework**, and global expectations for credible climate action.

Board-Level Oversight

- The **Board of Directors**, through the **Board Audit Committee (BAC)**, maintains ultimate responsibility for overseeing climate-related strategies, transition risks, and Net Zero progress.
- Climate transition progress is reported to the Board at least **biannually**, with updates on target achievement, risk exposure, and ESG assurance status.

ESEG Steering Committee Leadership

- The **Environmental, Social, and Governance (ESEG) Steering Committee** is the operational oversight body for the implementation of TTE's Climate and Nature Transition Plan.
- It reviews emission trends, approves transition projects, validates KPIs, and tracks cross-functional accountability, reporting directly to the BAC.

Management Roles and Integration

Function	Role in Transition Plan
Chief Operating Officer	Integrates GHG reduction actions into factory operations, transport, and field management
Sustainability & Quality Systems Division	Leads GHG inventory, SBTi/FORCE compliance, and ESG reporting
Engineering Division	Responsible for RE deployment, energy efficiency upgrades, and emission-free systems

Procurement and Supply Chain	Manages Scope 3 supplier engagement and low-emission sourcing
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Climate-Linked KPIs and Incentives

KPI	Description	Linked to Remuneration?
Scope 1+2 reduction (% vs baseline)	Annual percentage reduction in direct and electricity emissions	✓ Yes – Management level
RE share in energy mix (%)	Proportion of total energy from renewable sources	✓ Yes – Engineering
Biochar or agroecological coverage (%)	Share of estates under climate-smart fertilizer strategies	Optional
SBTi/FORCE compliance status	Progress on maintaining science-based targets	✓ Yes – GM/Sustainability
GHG per kg of made tea	Emissions intensity metric for process efficiency monitoring	✓ Yes – Factory management

Climate KPIs are reviewed annually and linked to performance evaluation, particularly for executive and senior operational roles.

Monitoring, Review, and Disclosure

- TTE's climate data is monitored via an integrated **Sustainability Dashboard** combining GHG, energy, and KPI metrics.
- Disclosures are made through the **Integrated Annual Report**, SLFRS-compliant financial sustainability notes, and third-party platforms such as **CDP** and **GRI**.
- **Independent assurance** is conducted annually for GHG Scope 1 and 2, and periodically for Scope 3 and FLAG-related indicators.

3.1 Strategic Ambition and Alignment with the Global Biodiversity Framework (GBF)

TTE is committed to becoming a **Nature Positive business by 2035**, contributing to the global mission to **halt and reverse biodiversity loss by 2030** and restore nature by 2050, in alignment with the **Kunming-Montreal Global Biodiversity Framework (GBF)**.

TTE's Nature Positive Vision

Nature is central to TTE's long-term viability and value creation. The company's plantations are embedded within **biodiversity-rich ecosystems**, including highland forests, riparian corridors, and steep agricultural slopes that host endemic flora and fauna, regulate hydrology, and underpin ecosystem services vital to tea production.

TTE's vision for a Nature Positive future includes:

- **Zero deforestation** across estates and supply chains
- **Restoration of at least 100 hectares** of degraded or sensitive land by 2030
- **Agroecological intensification** that improves soil health, pollinator diversity, and water quality
- Mainstreaming nature into decision-making, operations, and performance management

This ambition is framed around the **three core pillars of a Nature Positive transition**:

1. **Avoid and reduce** negative impacts
2. **Regenerate and restore** ecosystems
3. **Transform systems** for long-term harmony with nature

Alignment with Global Biodiversity Framework (GBF) Targets

TTE's transition plan supports the following priority GBF targets:

GBF Target	Description	TTE Contribution
Target 1	Effective conservation and management of natural ecosystems	Restoration of riparian zones, buffer strips, forest edges
Target 2	Restoration of 30% of degraded ecosystems	100 ha reforestation; soil and slope regeneration
Target 3	30% of land under protection or conservation	Estate conservation areas integrated into biodiversity maps
Target 7	Reduce pollution, including from agrochemicals	Biochar, compost, and fertilizer reform in high-risk plots
Target 8	Minimize climate-nature impact trade-offs	Integrated GHG-biodiversity pathway under ReGen 2030
Target 14	Integrate biodiversity into business planning	Nature KPIs and biodiversity materiality assessments

TTE also contributes to the **High Ambition Coalition for Nature and People** vision, with an emphasis on **inclusive stewardship**, engaging with local communities and external conservation partners.

Nature and Climate Integration under ReGen 2030

Nature transition actions are fully integrated into the company's **ReGen 2030 Agenda**, ensuring that:

- Climate mitigation does not degrade biodiversity
- Restoration contributes to **soil carbon**, water regulation, and slope stability
- Landscape-level synergies are prioritized over fragmented interventions

This unified strategy allows TTE to respond to both **TNFD Strategy B** disclosure expectations and **GFANZ recommendations** on embedding nature into net-zero pathways.

3.2 Nature Interface (LEAP Step 1 – Locate)

In alignment with the **TNFD LEAP approach**, Talawakelle Tea Estates PLC has conducted a location-based scoping of its business footprint to identify where it **interacts with nature**, and where **nature-related dependencies and impacts are most material**.

This spatial scoping forms the foundation of the company’s nature transition planning, target-setting, and risk assessments.

Estate Footprint and Ecosystem Interfaces

TTE’s operations span multiple highland estates and factories across the **Central and Uva provinces of Sri Lanka**, intersecting key natural systems, including:

Natural Interface	Description
Riparian Buffer Zones	Rivers and streams traverse estates; critical for erosion control and water regulation
Steep Slopes and Montane Forests	Estates border natural forest fragments and steep erosion-prone terrain
Biodiversity Corridors	Wildlife pathways run between protected areas and estate-owned land
Catchment and Watershed Zones	Estates lie within the upper Kelani and Walawe basins critical freshwater sources
Soil Biodiversity and Microbiomes	Soil health underpins productivity and is affected by fertilizer and land-use practices

These interfaces host **critical ecosystem services** such as water filtration, soil retention, pollination, and local climate regulation.

Location-Based Prioritization

To focus action, TTE has:

- Mapped **high-impact and high-dependency locations** using internal GIS data and field assessments
- Identified **priority intervention zones** for restoration, pollution prevention, and slope stabilization
- Used spatial overlays of land cover, erosion risk, hydrology, and biodiversity density to guide prioritization

Priority Zone	Ecological Significance	Planned Action
Streamside riparian strips	Habitat and water regulation	20+ ha targeted for restoration by 2026
Estate slopes >30°	High erosion and landslide risk	Slope vegetation, terracing, biochar application
Degraded boundary lands	Buffers with invasive species	Native species reforestation
Outgrower interface areas	Soil and water runoff hotspots	Soil education, buffer incentives

These locations serve as the primary **“hotspots”** for the company’s nature-related risks, dependencies, and opportunities.

Future Enhancements

TTE plans to strengthen spatial mapping using:

- Biodiversity baselining (flora/fauna survey overlays)
- Soil carbon and water retention data layers
- Integration with external conservation maps and KBAs (Key Biodiversity Areas)

This approach ensures alignment with TNFD’s **“Locate” phase** and supports the **SBTN spatialization requirement** for science-based nature targets.

3.3 Nature-Related Dependencies and Impacts (LEAP Step 2 Evaluate)

TTE relies on a range of ecosystem services for the productivity and sustainability of its plantation operations. At the same time, the company’s activities affect the health and resilience of those very ecosystems. In line with the **TNFD LEAP framework**, this section evaluates the most material **nature-related dependencies** and **impacts** across TTE’s operations and value chain.

Key Nature-Related Dependencies

TTE’s core operational activities field cultivation, tea manufacturing, and energy generation depend on the following ecosystem services:

Ecosystem Service	Dependency Description	Business Relevance
Freshwater availability	Rainfall and upstream river flows for irrigation, factory use, and micro-hydro	Essential for daily estate operations
Soil health and retention	Organic matter, structure, and erosion resistance on steep terrain	Influences productivity and slope stability
Pollination and pest control	Wild pollinators, birds, and insects regulating ecosystem balance	Supports tea flowering and reduces chemical use

Microclimate regulation	Vegetative cover stabilizes humidity and temperature on highland slopes	Critical to tea leaf quality and yield
Carbon sequestration	Forest fragments and soil organic carbon mitigate GHG emissions	Supports FLAG emission reductions

TTE's **financial and operational resilience** is therefore tightly coupled to the continued functioning of natural systems.

Key Nature-Related Negative Impacts

Despite adopting sustainable practices, TTE's operations have unavoidable impacts on ecosystems, particularly when land-use intensity or infrastructure development is not managed carefully. The most significant impacts include:

Impact Type	Description	Affected Systems
Soil erosion and runoff	Slope exposure, rainfall intensity, and footpath compaction	Highlands, riparian banks
Nutrient leaching and N₂O release	Nitrogen-based fertilizer uses and rainfall patterns	Soil microbiota, water systems, FLAG GHG
Habitat fragmentation	Historical land conversion and estate infrastructure	Wildlife corridors and forest edges
Water pollution risk	Occasional agrochemical residues entering nearby watercourses	Downstream wetlands and river health
Disturbance to native species	Edge lighting, traffic, and noise near remnant natural habitats	Pollinators, amphibians, small mammals

These impacts vary in intensity across estates and are managed through a **landscape zoning approach** and targeted conservation efforts.

Nature-Climate Nexus

Several dependencies and impacts have a **dual materiality** they affect both climate and nature outcomes. For example:

- **Healthy soils** both retain carbon (climate benefit) and reduce erosion (nature benefit)
- **Riparian buffers** prevent runoff (nature protection) and enhance water storage (climate adaptation)
- **Reforestation** improves biodiversity while contributing to carbon removals under FLAG accounting

TTE's transition plan therefore emphasizes **integrated interventions** that reduce GHG emissions and restore ecosystem functions simultaneously.

3.4 Nature-Related Risks and Opportunities (LEAP Step 3 – Assess)

Based on the company's spatial interface with ecosystems and its nature-related dependencies and impacts, TTE has identified a set of **material nature-related risks and opportunities** that affect its long-term business resilience. This assessment follows **TNFD's LEAP Step 3 guidance**, considering both **financial materiality** (impact on cash flows, financial position, and performance) and **impact materiality** (effect on ecosystems and stakeholders).

Nature-Related Risks

Risk Category	Driver	Time Horizon	Potential Business Impact
Soil degradation	Erosion, nutrient depletion, loss of organic matter	Short–Medium	Reduced yields, replanting costs, slope repair CapEx
Pollinator decline	Habitat loss, pesticide sensitivity, landscape fragmentation	Medium	Reduced productivity, increased dependence on inputs
Riparian degradation	Encroachment, invasive species, runoff and sedimentation	Short–Medium	Regulatory exposure, water access limitations
Water scarcity or flow disruption	Reduced upstream recharge, rainfall variability	Medium–Long	Factory disruptions, estate-level water rationing
Regulatory non-compliance	Biodiversity audit gaps, certification risk (e.g., RA, SBTN FLAG readiness)	Medium	Loss of export market access, reputational damage

Each risk is linked to site-specific exposure and sensitivity and integrated into the company's broader **ESG risk management framework**.

Nature-Related Opportunities

TTE also identifies opportunities to create value through nature-positive actions that enhance ecological integrity, increase stakeholder trust, and access nature-aligned financing.

Opportunity Type	Nature-Linked Driver	Potential Benefit
Ecosystem restoration	Reforestation, slope rehabilitation, riparian zone replanting	Climate resilience, carbon removals, biodiversity uplift
Soil carbon enhancement	Biochar, composting, low-till and mulching practices	Yield stability, FLAG emission reductions, soil health
Nature-based branding	Verified ecosystem services, traceable biodiversity claims	Market differentiation, access to premium buyers
Payment for Ecosystem Services (PES)	Water recharge, carbon sinks, erosion control	Revenue diversification, nature credit monetization
Agroecological intensification	Pollinator corridors, native shade trees, pesticide reduction	Lower input costs, ecosystem co-benefits

TTE is currently exploring **PES schemes and biodiversity-linked certifications** as part of its value-chain engagement strategy.

Link to Financial Resilience

TTE's scenario analysis (see Part IV) shows that proactively addressing nature risks reduces:

- Volatility in production and input costs
- Regulatory and reputational risks linked to certification or compliance failures
- Capital expenditure shocks related to slope failure, water stress, or soil depletion

Meanwhile, nature-positive opportunities may unlock:

- **Green financing mechanisms**
- **ESG investor interest**
- **Market access advantages** in nature-sensitive export regions

3.5 Actions & Implementation Strategy (LEAP Step 4 – Prepare)

TTE has prioritized **site-specific, real-economy actions** to avoid, reduce, and reverse its nature-related impacts while building ecological and business resilience. These interventions are informed by the outcomes of the Locate, Evaluate, and Assess steps of the TNFD LEAP approach and aligned with the **mitigation hierarchy** and **SBTN action framework**.

The implementation strategy covers the entire landscape: core plantation areas, riparian zones, forest edges, and out-grower landscapes.

Nature-Positive Action Framework

Mitigation Level	Priority Action Areas	Target Outcomes
Avoid	<ul style="list-style-type: none"> - Prevent land-use change near high-value habitats - Avoid disturbance of riparian and forest buffer zones 	No net habitat loss; protection of biodiversity corridors
Reduce	<ul style="list-style-type: none"> - Implement soil conservation on high-slope areas - Transition to low-impact fertilizers and inputs - Control runoff and agrochemical drift 	Lower erosion and leaching; improved water quality
Restore	<ul style="list-style-type: none"> - Reforest degraded estate edges - Restore riparian vegetation 	Biodiversity uplift, water retention, landscape connectivity

	- Replant shade trees and pollinator habitats	
Transform	- Embed biodiversity KPIs in estate operations - Shift to nature-based replanting models - Train workers and out-growers in agroecological methods	Systemic transition to regenerative land stewardship

These interventions are sequenced based on location-specific risk levels, cost-benefit analysis, and ecosystem importance.

Nature Transition Implementation Timeline

Action Category	Milestone	Target Year
Landscape mapping & priority zoning	Nature interface and risk overlays for all estates	Completed 2023
Riparian restoration pilot	10 ha restored across 3 high-risk zones	2024
Estate-wide soil conservation rollout	Mulching, terracing, and slope vegetation program	2025
Biochar and compost integration	Organic nutrient program scaled to 40% of area	2026
100 ha restoration target	Full implementation of reforestation and habitat recovery	2030
Nature KPIs embedded into ESG dashboard	Biodiversity metrics tracked quarterly	2025 onward

Stakeholder and Partner Engagement

To ensure effective delivery and shared ownership:

- Local communities are engaged in reforestation and buffer zone protection
- Outgrower support programs incentivize agroecological practices
- Technical partners (e.g., conservation NGOs, academic institutions) support biodiversity monitoring
- TTE is exploring partnerships for **Payment for Ecosystem Services (PES)** or **biodiversity credit pilots**

Integration with Business Planning

Nature actions are integrated into:

- **Replanting plans**, land-use decisions, and CapEx schedules
- **ESG governance and performance management systems**
- The **ReGen 2030 Agenda**, ensuring synergies with climate, water, and social goals

The ESEG Steering Committee oversees delivery, and progress is reviewed annually alongside climate transition metrics.

3.6 Science-Based Targets for Nature (SBTN)

TTE is aligning its nature transition actions with the emerging **Science-Based Targets for Nature (SBTN)** framework to ensure that its efforts are grounded in ecological thresholds, societal needs, and global biodiversity goals. The company follows the **five-step SBTN approach**, integrated with the TNFD LEAP framework, to set credible, measurable, and location-specific nature targets.

SBTN Target Domains and Status

SBTN Domain	Target Theme	Status at TTE	Planned Action
Land	No conversion of natural ecosystems	Zero-deforestation achieved; boundaries monitored	Maintain zoning controls and buffer area surveillance
Freshwater	Water quantity and quality	Net Positive Water commitment adopted	Set quantified withdrawal–replenishment targets by 2025
Biodiversity	Species and ecosystem integrity	Restoration and agroforestry programs underway	Introduce biodiversity uplift targets (flora/fauna)
Climate (FLAG)	Land-sector GHG emissions and removals	FLAG targets validated under SBTi; N ₂ O mitigation initiated	Enhance soil carbon tracking and biochar programs
Nutrients	Pollution from nitrogen runoff	Transitioning to low-impact nutrient inputs	Establish nitrogen intensity targets and runoff limits

(Note: Oceans and marine systems are not applicable to TTE's inland plantation operations.)

Initial Science-Based Nature Targets (Indicative, Draft for Refinement)

Target Area	Target Statement	Target Year	Scope
Habitat Restoration	Restore 100 ha of degraded land, focusing on riparian zones, slopes, and native buffers	2030	Company-owned lands
Soil Organic Carbon (SOC)	Increase SOC by $\geq 15\%$ in high-risk erosion zones	2030	Estates $\geq 30^\circ$ slope

Water Stewardship	Replenish $\geq 110\%$ of freshwater withdrawn annually across all estate operations	2030	All factories/estates
Nitrogen Pollution Reduction	Reduce N fertilizer application rate by $\geq 25\%$ from baseline	2028	FLAG-categorized fields
Pollinator Habitat Connectivity	Establish ≥ 10 km of pollinator-friendly corridors and shade tree cover	2027	Tea field interspaces

Targets are currently being reviewed for SBTN readiness assessment and potential future validation as SBTN pathways mature.

Target Governance and Monitoring

- Targets are overseen by the **ESEG Steering Committee** and linked to **biodiversity KPIs** under the ESG dashboard
- **Progress reviewed annually**, with field audits for restoration, water flow monitoring, and nutrient use tracking
- Where feasible, TTE will explore **external verification or third-party certification** (e.g., ecosystem restoration standards)

Interoperability with TNFD and SBTi

TTE's science-based targets for nature:

- Complement its **Net Zero targets under SBTi** (Scope 1–3 + FLAG)
- Generate data and baselines that support **TNFD reporting**
- Align with the **mitigation hierarchy** and **LEAP Step P2** (target-setting and performance management)

This approach enables TTE to disclose targets consistent with **TNFD “Metrics and Targets C”** and **SBTN’s interim implementation roadmap**.

4.1 Integrated Strategic Planning

TTE embeds its climate and nature transition priorities directly into **core business planning and operational decision-making**, ensuring that sustainability commitments translate into measurable action across the company’s value chain.

The Transition Plan is fully integrated into the following planning frameworks:

- **Annual Business Plans:** Climate mitigation and biodiversity conservation actions are mainstreamed into estate-level and factory-level operational planning, including replanting programs, water management, and fertilizer application.

- **Capital Investment Planning (CapEx):** Allocations are made for renewable energy, slope stabilization, restoration works, and ESG performance systems prioritized based on material risk zones and return-on-resilience.
- **Risk and Scenario-Based Planning:** Climate and nature risks identified under IFRS S2 and TNFD LEAP assessments are incorporated into the company's enterprise risk management and scenario planning tools.
- **ReGen 2030 Agenda:** All climate and biodiversity targets are aligned under the company's integrated regenerative sustainability framework, connecting climate action, nature recovery, water stewardship, and inclusive community development.

This strategic alignment ensures that the transition is not a parallel sustainability initiative, but rather a **core business transformation pathway**, aligned with long-term financial resilience, export market access, and landscape-level regeneration.

4.2 Governance and Accountability

TTE has established a strong governance structure to ensure accountability for its Climate and Nature Transition Plan, aligned with international expectations under **IFRS S2**, **TNFD**, and the **Transition Plan Taskforce (TPT)**. Oversight spans the boardroom to field-level operations, enabling strategic alignment, performance integration, and transparent disclosure.

Governance Structure

Governance Layer	Key Responsibilities
Board of Directors	Holds ultimate responsibility for transition oversight, including risk exposure and strategic direction
Board Audit Committee (BAC)	Reviews SLFRS/IFRS climate and nature disclosures, oversees financial impact assessments, and guides third-party assurance
ESEG Steering Committee	Cross-functional leadership body responsible for implementing the Climate and Nature Transition Plan; meets quarterly and reports to BAC
Operational Leadership	Departmental heads (GM Sustainability, Engineering, Estates, Procurement) translate transition priorities into functional KPIs, budgets, and timelines

The ESEG Steering Committee is the **executive anchor** of the transition, ensuring that climate and biodiversity actions are resourced, sequenced, and tracked across all business units.

Incentivizing Accountability Through KPIs

To reinforce accountability, TTE has introduced **climate- and nature-linked performance indicators** at managerial levels. These KPIs are tied to:

- Scope 1 and 2 GHG reduction performance
- Renewable energy share targets

- Biodiversity restoration progress (e.g., hectares restored, native species planted)
- Water use intensity improvements and replenishment ratios
- Compliance with SBTi and future SBTN alignment

Where material, these KPIs are **linked to incentive systems** for senior managers and operational teams, ensuring that sustainability targets are embedded in performance evaluations.

Internal Review and Escalation

- **Quarterly progress reviews** by the ESEG Committee track implementation against milestones and provide internal reporting to the BAC.
- Material delays, risks, or deviations are escalated to the Board, with corrective actions proposed.
- Climate and biodiversity progress is included in the **Integrated Annual Report**, ensuring alignment with investor and stakeholder expectations.

This governance model provides robust internal controls and leadership visibility, ensuring that the transition plan moves from commitment to execution with integrity and transparency.

4.3 Implementation Roadmap and Milestones

TTE has structured its Climate and Nature Transition Plan around a **phased implementation roadmap** that delivers progress across key time horizons short (2024–2026), medium (2026–2030), and long term (2030–2050). This roadmap ensures a balance between immediate action, investment pacing, and long-term transformation.

Each milestone is directly linked to the company’s science-based targets, nature-positive goals, and operational sustainability priorities under the **ReGen 2030 Agenda**.

Transition Plan Milestones by Phase

Phase	Milestones	Target Period
Phase 1 – Foundation & Pilot	<ul style="list-style-type: none"> - Complete Scope 1–3 GHG inventory - Launch biodiversity baseline and restoration pilots - Initiate solar and biomass efficiency upgrades - Embed ESG KPIs in management scorecards 	2024–2026
Phase 2 – Scale & Integrate	<ul style="list-style-type: none"> - Achieve $\geq 50\%$ Scope 1 & 2 GHG reduction - Restore 100 ha of degraded ecological areas - Expand Net Positive Water interventions - Scale biochar and compost use - Launch biodiversity KPIs across all estates 	2026–2030
Phase 3 – Consolidate & Certify	<ul style="list-style-type: none"> - Reach $\geq 90\%$ GHG reduction (Scopes 1–3) - Attain full FLAG and nature target alignment 	2030–2040

	(SBTi + SBTN readiness) - Demonstrate landscape-scale regeneration - Prepare for third-party nature-related assurance and TNFD disclosures	
Phase 4 – Net Positive & Resilient	- Achieve Net Zero (Scope 1–3) - Maintain Nature Positive status - Operationalize long-term ecosystem finance models (e.g., PES) - Support national and sectoral biodiversity and climate leadership	2040–2050

Alignment with Operational and Financial Planning

- Each milestone is cross-referenced with TTE’s **annual budget cycles**, replanting plans, CapEx forecasting, and ESG reporting timelines.
- Progress is tracked via **quarterly dashboards**, linked to the Sustainability and Quality Systems Division and ESEG Steering Committee.

This phased approach ensures that TTE’s transition is both **technically credible and operationally feasible**, grounded in a realistic view of capital deployment, capacity building, and ecosystem response times.

4.4 Monitoring, Reporting & Assurance (MRV)

TTE maintains a structured and evolving **Measurement, Reporting, and Verification (MRV)** system to ensure the credibility, transparency, and effectiveness of its Climate and Nature Transition Plan. This system is designed to meet the disclosure expectations of **IFRS S2, TNFD, GRI**, and emerging SBTN guidance, while also serving internal management and investor needs.

Monitoring Framework

TTE’s MRV system is centered on a **real-time ESG dashboard** that tracks:

- **GHG emissions** (Scopes 1, 2, and 3) and intensity metrics
- **Nature-related KPIs**, including hectares restored, biodiversity indicators, and soil health
- **Water use and replenishment** under Net Positive Water goals
- **Progress against climate and nature targets**, milestones, and action plans

Data is collected at estate, factory, and divisional levels and aggregated quarterly through the **Sustainability and Quality Systems Division**.

Reporting Channels

Platform	Scope
Integrated Annual Report	IFRS S1/S2 climate and nature-related financial disclosures
GRI-aligned ESG Sections	Material topic-specific performance and management disclosures
CDP Climate and Water	Emissions, risks, targets, and water strategy
SBTi FLAG Reporting	FLAG pathway progress and annual GHG reduction updates
Future TNFD Reporting	LEAP-aligned nature disclosures (starting FY 2024/25)

All reported data undergoes internal review and, where applicable, external verification.

Third-Party Assurance

TTE engages independent assurance providers to review:

- **GHG emissions** – Scope 1 and 2 assured annually (ISO 14064-1:2018)
- **Restoration and nature outcomes** – Pilot-level ecosystem restoration certified (with plans for scaling)
- **Sustainability-related financial disclosures** – Reviewed in line with SLFRS S1/S2 assurance requirements (ISSA 5000 roadmap in progress)

As the company expands its nature metrics, it will explore phased external assurance for:

- Biodiversity uplift
- Water positivity metrics
- Nature-based carbon sequestration

Continuous Improvement

TTE's MRV system is reviewed annually and updated to reflect:

- New frameworks (e.g., TNFD final metrics guidance, SBTN v2.0)
- Advances in monitoring technologies (e.g., satellite restoration tracking)
- Sector-specific standards (e.g., food/agriculture biodiversity disclosures)

This ensures that MRV remains not only compliant, but **decision-useful, scalable, and future-proof**.

4.5 Stakeholder Engagement and Just Transition

TTE views its Climate and Nature Transition Plan not only as an environmental imperative, but as a **social transformation pathway**. The company is committed to ensuring a **Just Transition** one that supports the livelihoods, rights, and resilience of workers, out-growers, local communities, and future generations.

Stakeholder Engagement Approach

TTE engages a wide range of internal and external stakeholders to co-design, implement, and monitor its transition plan, including:

Stakeholder Group	Engagement Focus
Estate workers and communities	Awareness sessions on water, biodiversity, and energy; livelihoods diversification support
Outgrowers and Green Leaf suppliers	Training in low-emission fertilizer use, water-smart practices, and land conservation
Buyers and export partners	Collaboration on emissions traceability, biodiversity claims, and sustainable sourcing protocols
Regulators and certification bodies	Coordination on SLFRS/IFRS S2, Rainforest Alliance, SBTi, and future SBTN disclosures
NGOs and scientific partners	Joint restoration projects, biodiversity assessments, and nature-based solution pilots

These engagements are guided by principles of **free, prior, and informed consent (FPIC)** and long-term mutual benefit.

Just Transition Commitments

TTE applies a Just Transition lens to all material shifts in land use, energy systems, and agricultural practices. The company is committed to:

- **Job protection and upskilling** in renewable energy deployment, biodiversity restoration, and precision agriculture
- **Fair access to transition benefits** such as biochar, compost, and alternative incomes (e.g., nature tourism or PES)
- **Inclusive decision-making** in restoration and land management initiatives
- **Safeguards** to prevent ecosystem recovery actions from displacing vulnerable stakeholders

These commitments are integrated into community engagement plans and reviewed annually by the ESEG Steering Committee.

Sectoral and National Collaboration

TTE contributes actively to:

- The **Plantation Sector Biodiversity and Climate Working Group** (in partnership with LRC, CCD, and Rainforest Alliance)
- National dialogues on the implementation of the **Kunming-Montreal Global Biodiversity Framework (GBF)** and **Sri Lanka's National Adaptation Plan**
- Industry forums on biodiversity disclosures, green finance, and high-integrity carbon and nature credits

By fostering collective action, TTE seeks to contribute to **landscape-level regeneration and policy alignment**, amplifying the impact of its own transition.