

Leveraging the *Roadmap to Nature Positive:*  
*Foundations for the agri-food system*

Examples from the  
agri-food industry:

→ *Olam Agri*





# General introduction

WBCSD and its member companies have now launched the **Roadmap to Nature Positive: Examples from the agri-food industry**. These cases explore how agri-food industry businesses are leveraging WBCSD's **Roadmap to Nature Positive: Foundations for the agri-food system**.

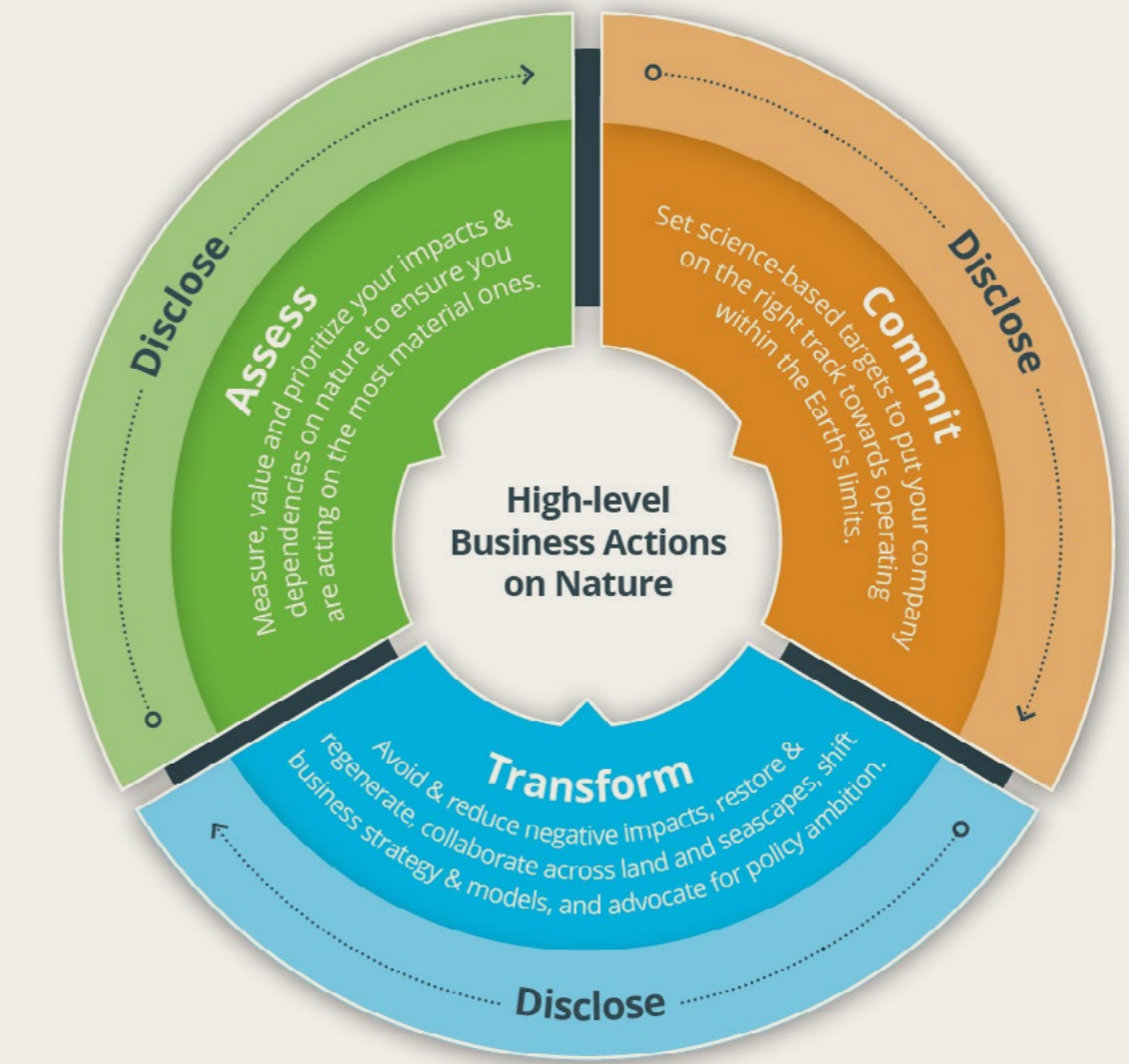
The Roadmap provides companies with a comprehensive step-by-step "how to" guide to taking credible, impactful nature action. It follows the underlying logic of key frameworks including the **High-level Business Actions on Nature** to Assess, Commit, Transform and Disclose (ACT-D), the **Taskforce on Nature-related Financial Disclosure (TNFD) LEAP approach** (Locate, Evaluate, Assess, and Prepare) and the **Science Based Targets Network (SBTN) AR3T** (Avoid, Reduce, Restore & Regenerate, Transform) Action Framework.

These industry examples serve as practical illustrations that bridge the gap between theory and industry practice. Building upon the Roadmap, they aim to show how companies in the agri-food system are navigating their journey to nature action, offering valuable insights into the particular and specific challenges that businesses encounter on this journey.

As each organization confronts a combination of unique and shared hurdles, it is important to openly share these experiences to foster collaboration among peers and support the development of effective solutions.

*It is by making these lessons available and collaborating with peers to develop solutions that it is possible to reach the speed and scale needed to achieve the shared goal of halting and reversing nature loss by 2030.*

Figure 1: ACT-D framework, SBTN



Source: Business for Nature (2022). [High-level Business Actions on Nature](#)

# Agri-food member: *Olam Agri*

**Sector:** Food & agriculture  
**Value chain:** Global agri-business

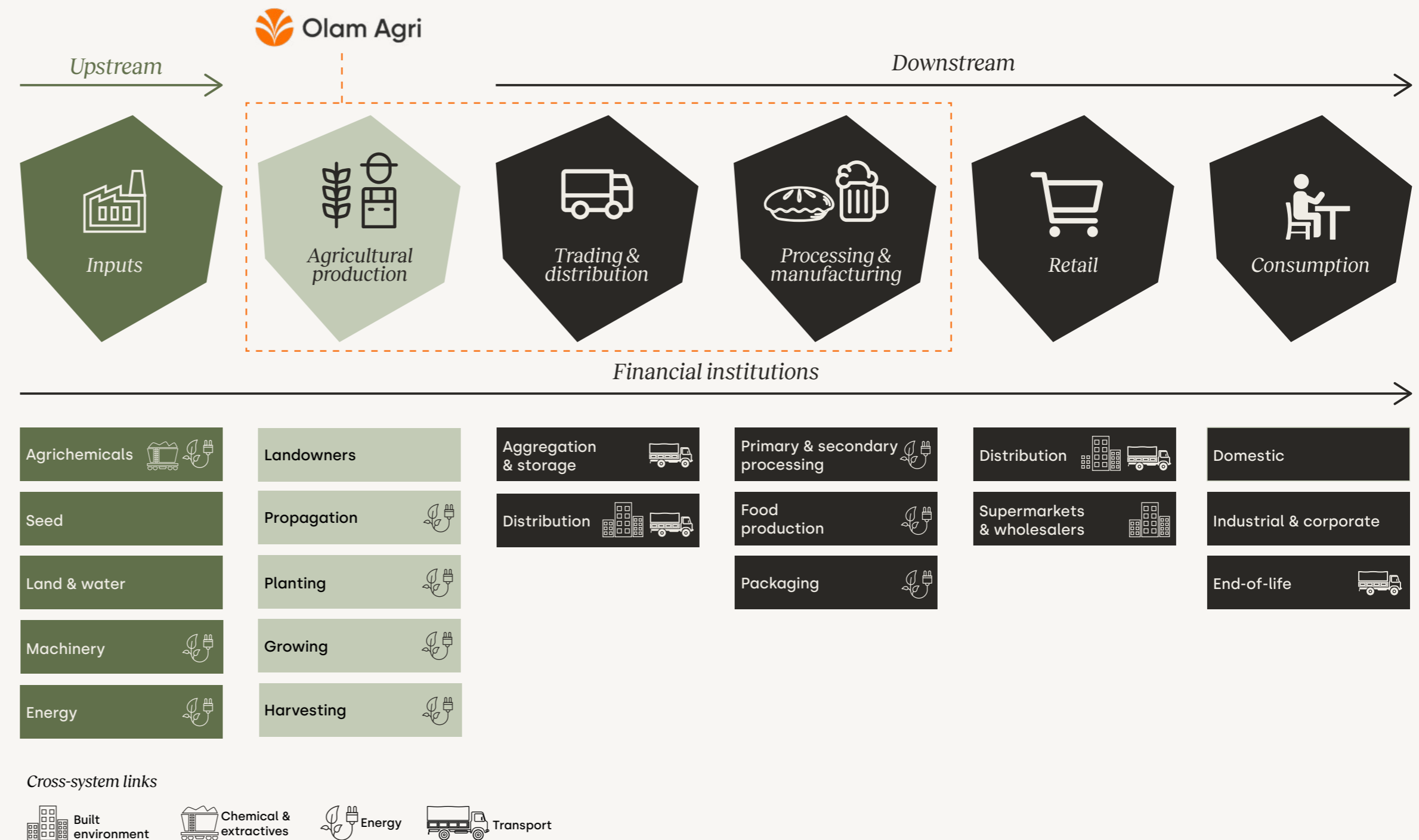
## Company strategy & approach to nature positive

Olam Agri's (hereinafter - Olam) aim is to transform food, feed and fiber for a more sustainable future. Olam aims to meet the world's needs for food and agriculture and to deliver value for stakeholders now and for the long term. The company recognizes that its business is intertwined with major social and ecological shifts taking place worldwide. As such, while its success as a business requires it to respond to the changing demands of customers and markets, it is also shaped by the company's ability to simultaneously deliver environmental and social impact.

Olam has always understood that it plays a major role in terms of land and biodiversity stewardship coupled with ensuring the upholding of the rights of communities. This is also a business benefit, helping ensure the company does not jeopardize its own operations through soil degradation and increasing global temperatures. The health of agricultural land is deeply interconnected with human livelihoods, water security and the climate. **Protecting biodiversity by minimizing the company's impact and safeguarding the natural environment is a business imperative.**

Figure 2: The basic agri-food value chain; Olam represents the production, trading & distribution, processing & manufacturing stages of the value chain

Source: WBCSD (2023). Roadmap to Nature Positive: Foundations for the agri-food system





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Olam has elevated the importance of nature in its sustainability goals to recognize how healthy soils, biodiversity and ecosystems contribute to a resilient climate and better livelihoods for farmers.

- **Goal setting:** A key aspect of the company's strategy lies in embedding nature-positive goals in its overall Sustainability Framework, which envisions impactful outcomes of the business, including prosperous farmers and food systems, thriving communities and regeneration of the living world. This shapes Olam's identification of material areas in the business related to nature and biodiversity. It has taken the fundamental step of mapping biodiversity hotspots requiring priority actions. Following this, the company's interventions help deliver on this strategy in a targeted and measurable way.
- **Priority actions & programs:** Olam's goal is to transform agriculture into an industry that restores the living world. It is building a nature-positive business by transforming operations, value chains and farms by working in partnership with farmers, partners and collaborators. A key focus is enabling regenerative agriculture across the value chains where it operates. The company does this by implementing regenerative farming practices with farmers, working with partners and end-customers throughout the value chain to create market value from regeneratively grown crops.

- **Driving an integrated mindset through multi-capital accounting:** Olam strives to deliver long-term value by embedding natural, social and human capital impacts and dependencies into business strategy and key decision-making analyses and processes. It focuses on natural, social and human capital as conventional accounting and reporting frameworks do not assess them. By being among the first in Singapore to implement multi-capital valuation and accounting, Olam is embedding these considerations into business decision-making.

### *Rationale for the company to start the nature journey:*

#### **To deliver value for the business and for resilient value chains**

Olam sees the use and preservation of natural resources in the places where it operates as fundamental to value chain resilience. By accounting for and impacting elements that are material to its business, Olam has found that this has contributed to access to capital and the creation of long-term value for the company and its stakeholders.

### *Nature frameworks & guidelines the company applies*

- **Global Reporting Initiative (GRI):** Olam has been reporting against the [GRI framework](#) since 2016.
- **Natural capital accounting:** Olam references the [Natural Capital Protocol](#), a framework that enables the identification and measurement of the value that the organization receives from natural capital. This approach enables a holistic understanding of the system in which the company operates, leading to integrated decision-making that benefits diverse stakeholders. Through the Advisory Panel, Olam leads and advocates for a capitals approach in the agriculture sector, while supporting collaborative projects on behalf of the coalition that developed the protocol.
- **Upcoming frameworks:** Olam is among the first Singapore-based companies to signal its intention to begin adopting the recommendations of the [Taskforce on Nature-related Financial Disclosures \(TNFD\)](#) and publishing TNFD-aligned disclosures as part of its annual corporate reporting. It has also begun preparations to align its disclosures with the [International Financial Reporting Standards \(IFRS\) Sustainability Disclosure Standards](#) and is assessing whether [European Sustainability Reporting Standards \(ESRS\)](#) are applicable to any of its European entities and preparing for other jurisdictional requirements, including the [EU Deforestation Regulation](#).

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## Stage 1 in the Roadmap to Nature Positive – Assess

*This section describes how the company assesses nature-related dependencies, impacts, risks and opportunities (DIROs)*

As part of its pilot TNFD project, Olam has started assessing DIROs in line with the TNFD **LEAP approach**.

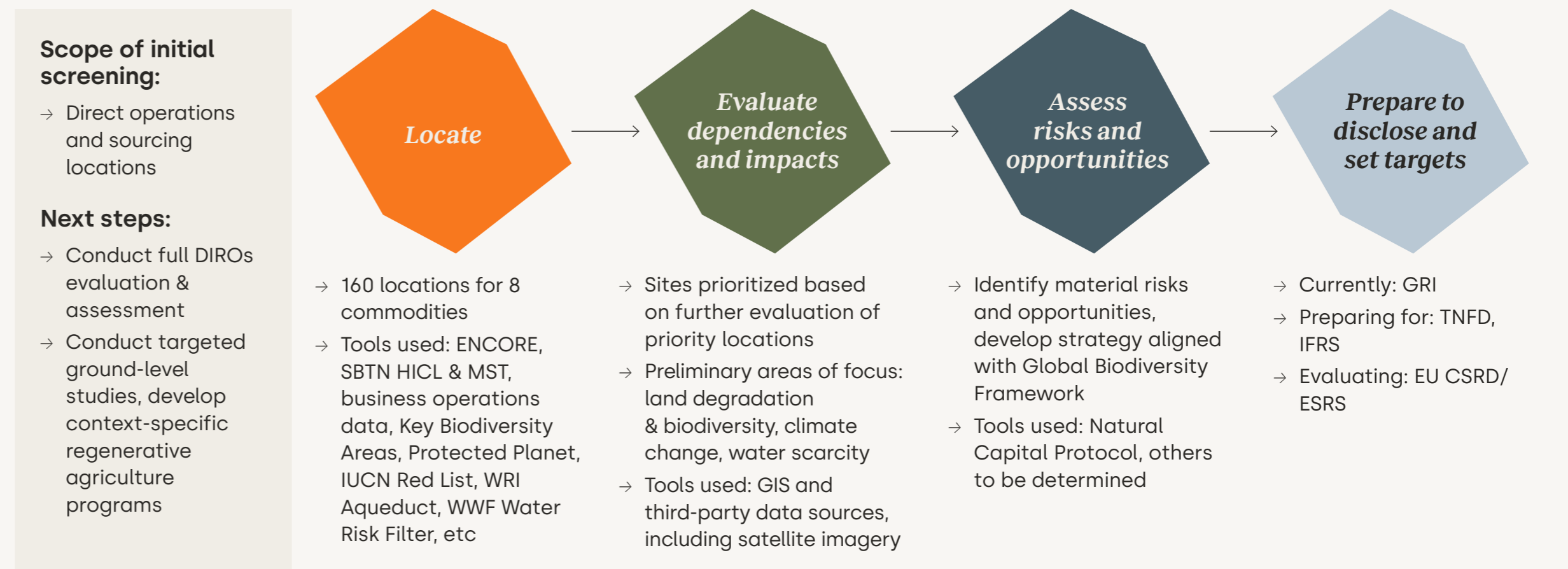
The scope of the analysis includes some 160 locations for 8 commodities: wood, rubber, cotton, rice, wheat, soy, maize and palm oil. Both direct operations and sourcing locations are included in the scope of the analysis.

1. Under the Locate (L) phase, Olam is identifying high-priority locations in accordance with the TNFD framework's definition: locations that are material (based on nature-related impacts and dependencies) or sensitive (areas important for biodiversity, ecosystem integrity, physical water risk, etc.). It identifies material locations based on impacts and dependencies using SBTN's **High Impact Commodity List (HICL)** and **Materiality Screening Tool (MST)**, **Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool** and business operations data. Olam identifies sensitive locations using multiple third-party nature and biodiversity sources, including **IBAT Key Biodiversity Areas**, **Protected Planet**, **IUCN Red List of Threatened Species**, **WRI Aqueduct**, **WWF Water Risk Filter**, etc.

2. As the next steps, under the Evaluate (E) phase, Olam will select up to 25 sites based on priority locations identified under the L phase to evaluate dependencies and impacts on nature, using geographical information systems (GIS) and third-party data sources, including satellite imagery.
3. For the Assess (A) phase, Olam will identify material risks and opportunities and develop strategies to mitigate risks and seize opportunities, in alignment with the **Global Biodiversity Framework's 2030 targets**.

4. For the Prepare (P) phase, the company will identify metrics to track progress against targets and develop a TNFD-aligned report incorporating findings from the L, E and A phases. It will use core metrics (land/freshwater/ocean-use change, pollution, waste management, use of natural resources including freshwater) and additional sector metrics (soil pollution, fertilizer/pesticides, etc.).

Figure 3: Pilot site-based nature risk screening assessment following TNFD "LEAP" stages





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### Scope & locate - preliminary identification of priority areas and biodiversity hotspots

Prior to the issuance of TNFD, Olam started its nature-related risk analysis journey by identifying priority areas to expand its regenerative agriculture efforts. In 2022, the company engaged the consultancy firm Altus Impact to **identify land degradation hotspots in sourcing regions for several commodities in seven countries.**

The analysis harnessed geospatial tools and looked at indicators for climate, biodiversity threats, soil moisture, NDVI (Normalized Difference Vegetation Index), soil organic carbon, fire frequency and canopy cover loss. It identified land degradation hotspots by assessing the trend of each indicator from 2016 to 2021. If any indicator has a statistically significant negative trend in the landscapes, it signals that there is potential land degradation where the company sources the product. A statistically significant positive trend indicates that there is land regeneration.

With this analysis, Olam has identified the areas that are at risk due to land-use practices and areas where soil health is considered to be in danger. Looking ahead, Olam will conduct ground-level studies in identified hotspot areas and develop context-specific regenerative agriculture practices for nature-positive impact.

As a preliminary analysis, Olam assessed dozens of owned or controlled sites across its businesses for biodiversity risk using the **Integrated Biodiversity Assessment Tool (IBAT)-Pro Multisite Reporting tool.** The assessed sites comprise of large and small processing facilities and large warehousing facilities. Olam did not include smaller warehousing spaces and corporate offices in the assessment, except where they overlap with the locations above.

Key reporting metrics from the IBAT:

- **Counts of protected areas and key biodiversity areas (KBAs)** within the selected 10-km radius of operational sites;
- **Counts of critically endangered, endangered and vulnerable IUCN Red List species** that are potentially found within a 50-km radius;
- Scores associated with the **Species Threat Abatement and Restoration (STAR) metric** to allow users to determine the relative opportunities for positive biodiversity action at sites.

Of the 88 sites, Olam found that 41 are within 10 km of a nationally or internationally recognized protected area and 18 sites are within 10 km of a key biodiversity area. There are also 4 considered high risk, 35 considered medium risk and 49 considered very low or extremely low risk when categorized according to the IBAT STAR score.





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### Preliminary identification of dependencies & impacts

While Olam has taken the necessary steps to adopt the recommendations of the TNFD, it is still in the process of pinpointing its material DIROs based on priority locations. Nonetheless, in the interim, the company is actively addressing predefined dependencies and impacts.

#### *Land degradation & soil health*

Olam recognizes that the longstanding extractive model of intensive agriculture comes at a large cost to nature and the climate. One of the biggest challenges facing the industry is the state of the soil. Unsustainable farming practices, including overuse of fertilizers, can deplete soils of minerals and microbes. Restoring long-term soil health and productivity is critical to increasing crop yields and to protecting food security without adding further pressure on the land.

### *Climate change*

Climate risks threaten farmer prosperity and food systems. Farmers are experiencing the negative impacts of climate change and extreme weather on crop yields, income and even human health. At the same time, global food systems account for nearly one-third of total greenhouse gas emissions. A significant amount of these emissions occur in upstream value chains where the company operates.

#### *Water scarcity*

Water availability is a material issue in Olam's supply chains (directly impacting crop yield and quality) and direct operations (affecting its ability to operate facilities with water-dependent processes). These factors ultimately impact farmer livelihoods and natural ecosystems. In particular, the company recognizes that its key businesses of rice and cotton are highly water-intensive. Furthermore, climate change will likely exacerbate water stress, which will affect different locations in context-specific ways.





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## Stages 2 & 3 in the Roadmap to Nature Positive – Commit & Transform

*This section illustrates how the company, after identifying the material DIROs, is setting or planning to set its commitments, implementing practical and concrete actions and/or improving its nature-related strategy*

### Commitments

Olam runs extensive internal research with business leaders regarding relevant material areas that underpin its specific goals and targets. This process has informed its key nature-related goal to **advance regenerative agriculture in its direct supply chains and its own farms by 2030**. This will set the company on the path to delivering transformation at a global scale, while bolstering access to food, nutrition and necessities.

Olam Group is a signatory of the **Science Based Targets initiative (SBTi)**, with approved targets (<2°C) since 2019 to reach net-zero emissions by 2050. It also supports the **Agriculture Sector Roadmap to 1.5°C** to address commodity-driven deforestation and ecosystem conversion.

### Action on nature

Measures that support these commitments include advancing regenerative agriculture, building climate resilience for farmers, implementing water stewardship and protecting biodiversity and natural ecosystems where Olam operates and sources agricultural products.

### Regenerative agriculture

Shifting to regenerative agriculture is central to Olam's sustainability strategy and is key to protecting the resilience of its agricultural value chains and reducing the impact of agriculture on the natural environment. At Olam, regenerative agriculture starts with soil health. The company is building a nature-positive business by transforming operations, value chains and farms by working in partnership with farmers, partners and collaborators.

It does this by equipping farmers with the training to adopt good agricultural practices that protect soil health and biodiversity while using less water in the process. These valuable skills and resources enable farmers to farm sustainably, unlocking a range of benefits. Healthy soil enhances the yields and nutritional capacity of agricultural products, improving farmer incomes in the long run.

### Agroforestry, conservation and reforestation

Beyond the farm, Olam is also assessing deforestation and water risks in the areas where it works to mitigate the impact of agriculture on nature and biodiversity. Various businesses across Olam have invested in increasing tree cover on and around farms and in farming landscapes as well as natural ecosystem conservation/ reforestation efforts. These efforts help carbon removal from the atmosphere and may support ecosystem services such as climate mitigation, pollination, soil health and water retention and pest management.

### Business case: Creating business value from sustainable or regenerative crops

Building on its influence in key commodity value chains, Olam works with farmers and partners to establish market-driven structures and incentives that serve as a catalyst in facilitating farmers' transition to sustainability. On farms, the company enables farmers to grow crops more sustainably by integrating them into cooperatives, granting them greater leverage to access vital services, exchange knowledge and collaborate on joint marketing activities. The company works with global partners and certification bodies to help farmers achieve sustainability certification. Finally, it makes the connection between demand from potential customers and new markets for sustainably grown products. By sharing the added value of sustainably grown products with farmers, Olam aims to improve farm economics by accelerating the adoption of farming practices that can drive yield improvements or cost reduction at the farm level.



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## PROJECT EXAMPLE

### ***Sustainable rice cultivation in Thailand and Vietnam***

Rice is a key commodity for Olam's business and India, Thailand and Vietnam are among the top exporting countries of rice. Conventional rice production across Asia is water-intensive, produces high methane emissions (a potent GHG) and involves tens of millions of smallholder farmers. While billions of people depend on rice as a staple food, climate change is compounding the challenges that rice farmers face. Rice farms in the Mekong Delta, spanning Thailand and Vietnam, are particularly vulnerable to rising sea levels. Concurrently, rice farmers in India are increasingly impacted by severe water stress. These challenges underscore the urgent need to safeguard global rice value chains by advancing sustainable agriculture in these countries.

Olam began with the vision of revolutionizing rice cultivation by implementing sustainability standards with farmers in its operating regions. **The Sustainable Rice Platform (SRP)** is a multi-stakeholder initiative that crafted the first global sustainable rice standard incorporating environmental, economic and social indicators for measurable and comparable sustainable rice cultivation. Through capacity building and group management systems, it ensures the credibility and traceability of sustainability claims.

Olam has established partnerships with organizations in these regions to execute sustainable rice cultivation training programs aligned to the SRP standard. These partners vary from international entities like the German development agency (GIZ) and the International Rice Research Institute (IRRI) to local governments. In each area it has launched large-scale sustainable rice projects aimed at training smallholder rice farmers in climate-smart farming practices and boosting the production of sustainable, high-quality rice. This includes assisting farmers in implementing on-farm water use efficiency measures such as the alternate wetting and drying technique.

**As of 2023, Olam and partners had reached over 35,000 farmers under these programs, resulting in reduced GHG emissions and up to a 20% increase in farmer incomes.** The majority of farmers in the program have recorded a verified score increase of more than 50% against the SRP standard criteria. The program has also received the highest sustainability recognition, the Farm Sustainability Assessment Gold Level from the **Sustainable Agriculture Initiative Platform**.

For both Thailand and Vietnam, the company tracked fertilizer use reductions over the course of three years of training on timely application of fertilisers at optimum rates based on calendarized crop cycles and on methods to create customised formulations. Olam used natural capital accounting methods to convert these results into financial terms (based on avoided water pollution and GHG emissions). The results show a **33% reduction** in the estimated natural capital impact of water pollution and GHG emissions associated with synthetic fertilizer use per metric ton of rice in Thailand and a **9% reduction** in Vietnam. For more information about this program and results, see [here](#) (p. 129-130).

In addition to implementing sustainable agriculture measures, Olam has also worked throughout the value chain to generate market value from sustainably grown rice. With farmers now equipped to produce safer, higher-quality rice while enhancing their yields, it has been able to tap into new export markets and establish partnerships that appreciate the value of sustainably grown rice. Consequently, it has been able to transfer this value to farmers, increasing their incomes from sustainable rice in the long term.

For more, please see [video](#) documenting Olam's sustainable rice work in India as part of their participation in the Sustainable Markets Initiative. For further background on nature-positive assessments and approaches in this landscape, see WBCSD's "[deep dive](#)" **on rice production in the Mekong Delta**.

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## Stage 4 in the Roadmap to Nature Positive – Disclose

*This section illustrates how the company is currently disclosing and planning to disclose, including any relevant disclosure requirements it aligns with*

Olam has been consistently disclosing its monitoring efforts and management of nature-related issues (including healthy ecosystems, healthy soils and water stewardship) in its annual reports and additional environmental, social and governance (ESG) disclosures.

Olam, reporting against the GRI framework since 2016, has started preparations to align disclosures with the IFRS Sustainability Disclosure Standards and is assessing whether ESRS standards are applicable to its European entities.

As part of its commitment to be an early adopter of the TNFD, Olam will disclose its nature-related DIROs in line with TNFD recommendations from financial year 2025.

### Datasets/databases & tools

- Frameworks followed: High-level business actions on nature ([ACT-D](#)), TNFD [LEAP](#), [Natural Capital Protocol](#).
- Tools used: SBTN's [High Impact Commodity List](#) and [Materiality Screening Tool](#), [IBAT tool](#), [ENCORE tool](#), [Protected Planet](#), [IUCN Red List of Threatened Species](#), [WRI Aqueduct](#), [WWF Water Risk Filter](#).
- **AtSource**: Olam's proprietary B2B sustainability management system that delivers a differentiated customer proposition through a three-tiered solution, with each level providing increasingly enhanced data, metrics, insights and impact. In this way, customers can upgrade to receive more granular data and insights to better inform and collaborate on more ambitious action plans and programs to act upon their particular areas of sustainability focus.
- **Terrascope**: An enterprise smart carbon measurement and management platform that enables Olam to measure emissions comprehensively and accurately while providing the ability to take action and track progress on its decarbonization.



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## Key challenges & lessons learned

### Investment case for sustainability

One challenge is articulating the investment case for sustainability in a way that accounts for the immediate direct financial impacts for its business and partners while valuing the intangible or longer term social, biodiversity and climate related impacts.

### Access to finance for smallholder farmers

Another challenge is access to finance for the over 500 million smallholder farmers who are fundamental to global food supply chains and few of whom have access to formal banking systems. Even fewer have access to newer opportunities such as premiums for sustainable, low-carbon products or carbon credits if they implement, for example, agroforestry or soil carbon sequestration initiatives.

### Data availability/ traceability

A final challenge Olam faces is complete traceability for all its supply chains in terms of sourcing locations due to the nature of its business in trading agricultural commodities. To overcome this challenge, the company uses traceability and sustainability management platforms including AtSource and Terrascope. Olam is in process of further enhancing its traceability information and controls through better technology.

## Outcomes & benefits

### Regenerative agriculture emerging as business growth area

Olam's regenerative agriculture and nature-based solutions are contributing to its net-zero and nature targets and are emerging as business growth areas, enabling the company to bring a differentiated product to the global markets. The accelerating interest in sustainably grown crops with transparent supply chains will create exciting new growth markets and customers.

For example, its large-scale initiative to scale-up sustainable rice cultivation across Thailand and Vietnam has created new international export markets for farmers, contributing to improved livelihoods. For the end-consumer, Olam's downstream customers such as Nice Rice and Westmill have been able to offer a differentiated product that provides transparency in how the rice was grown and the assurance of a certified sustainable product with a lower environmental footprint.

Another example is in Olam's cotton business where it has worked with farmers in its supply chain to help them adopt regenerative farming practices by providing access to training, technology and financing. In January 2024, it partnered with regenagri to **launch one of the world's largest programs for regenerative cotton**. This program will provide traceable and sustainably grown cotton to downstream customers. It has launched this program in the U.S. and Côte d'Ivoire with the aim of expanding it to Australia and Brazil within the year.





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## Partnerships

To achieve the UN Sustainable Development Goals by 2030 and its own targets, Olam recognizes the need to collaborate within the industry and beyond. Partnerships allow it to share knowledge and gain greater access to financial and non-financial resources.

Olam's partnerships include:

- **COP28 Action Agenda on Regenerative Landscapes:** This flagship initiative is led by the COP28 Presidency, the WBCSD and Boston Consulting Group (BCG) and supported by the UN High Level Climate Champions (HLCC). Olam has joined this initiative to accelerate the transition to regenerative agriculture practices and positively impact the sustainability and resilience of food and agricultural systems.
- **First Movers Coalition for Food:** Olam is among more than 20 corporate and research partners that are part of the World Economic Forum's pioneering First Movers Coalition for Food, supported by the Government of the United Arab Emirates. The initiative will create aggregated market demand for sustainably produced and low-emission agricultural commodities that could amount up to USD \$20 billion in value.

- **Agriculture Sector Roadmap to 1.5°C:** In 2021, alongside 14 global agricultural trading and processing organizations, Olam agreed on a shared roadmap to accelerate actions to halt commodity-linked deforestation and ecosystem conversion in supply chains, including in soy and palm, consistent with a 1.5°C pathway. The company supports initiatives such as the Soy Moratorium and the Roundtable on Responsible Soy (RTRS), which promote sustainable and responsible production, advance systems and controls to map and verify the source of soybeans and engage with farmers to prevent deforestation and conversion based on the definitions outlined in the roadmap.
- **Sustainable Markets Initiative Agribusiness Task Force:** Olam is a member of the Agribusiness Task Force. In December 2023, the **Task Force launched a new blended finance framework** to unlock financing for regenerative agriculture as part of efforts to accelerate and scale regenerative farming globally. This includes exploring implementation projects for proof of concept which Olam is supporting.





# Acknowledgements

## Disclaimer

This document showcases a practical example of a corporate approach to building a nature strategy for the agri-food sector. The primary intention is to offer a real-life case illustrating how an industry player is undertaking their nature journey and implementing the WBCSD *Roadmap to Nature Positive: Foundations for the agri-food system*.

The example does not prescribe a one-size-fits-all approach. Each case depicted is specific to the context of the respective company and may not be directly applicable to all situations. Given the evolving nature of sustainability practices, it is advisable to continuously review and update strategies in line with emerging industry standards, regulatory changes and evolving best practices.

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The document was written by Olam Agri. It represents Olam Agri's perspective and position. It is by no means a disclosure document. The report has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice.

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## About WBCSD

The World Business Council for Sustainable Development (WBCSD) is a global community of over 220 of the world's leading businesses, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Together, we transform the systems we work in to limit the impact of the climate crisis, restore nature and tackle inequality.

We accelerate value chain transformation across key sectors and reshape the financial system to reward sustainable leadership and action through a lower cost of capital. Through the exchange of best practices, improving performance, accessing education, forming partnerships, and shaping the policy agenda, we drive progress in businesses and sharpen the accountability of their performance.

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