Fostering long-term resilience through a dynamic approach to ESG risk management: *Key learnings & actions for business*

- → **Target audience:** Sustainability officers, risk managers, strategic planning and business resiliency professionals
- → **Sector relevance:** Multi-sector
- → **Risk focus:** Multiple sustainability risks (climate, nature, social); integrated risk management

How can businesses use enhanced risk assessments to create climate, nature, and equity solutions that promote sustainability and boost performance across operations and value chains?

Dynamic Risk Assessment provides companies with insights into the complexity and connectivity of risks; how risks interact and combine; and key areas of intervention and risk and opportunity management to deliver long-term performance.

Foreword

In 2023 WBCSD, together with KPMG and using their Dynamic Risk Assessment (DRA) methodology and software, conducted an assessment of the of the key risks and opportunities in the food retail sector and across the food supply chain that will impact business' ability to embed nature into business practices and decision-making.

DRA extends traditional risk management approaches beyond assessment of the severity and likelihood of individual, isolated risks to a more sophisticated analysis that assesses how multiple risks and factors connect; form clusters that interact; trigger and influence each other; and amplify impacts. It also provides critical insights into where and why companies should most effectively intervene and prioritise actions.

By understanding the dynamics of networks of risks, companies are more strongly placed to implement and finance coherent, integrated corporate strategies, risk management approaches and operational responses that drive commercial, cost-effective and sustainable business performance.

This insight note profiles key learnings and themes from the enhanced risk assessment that may inform sustainable business strategies in other sectors and for other risk types.

It highlights the value to business performance, strategy and resilience of business experts discussing the connectedness and combined impacts of risks – even if risk management capabilities are not mature or available data are limited.

Why assess networks of risks?

The global nature, complexity and inter-dependency of businesses, operating models, value chains and economies mean that risks are themselves interconnected and challenging to manage.

→ Risks do not occur in isolation;

→ Each risk is part of a wider network of connected risks that interact and influence each other;

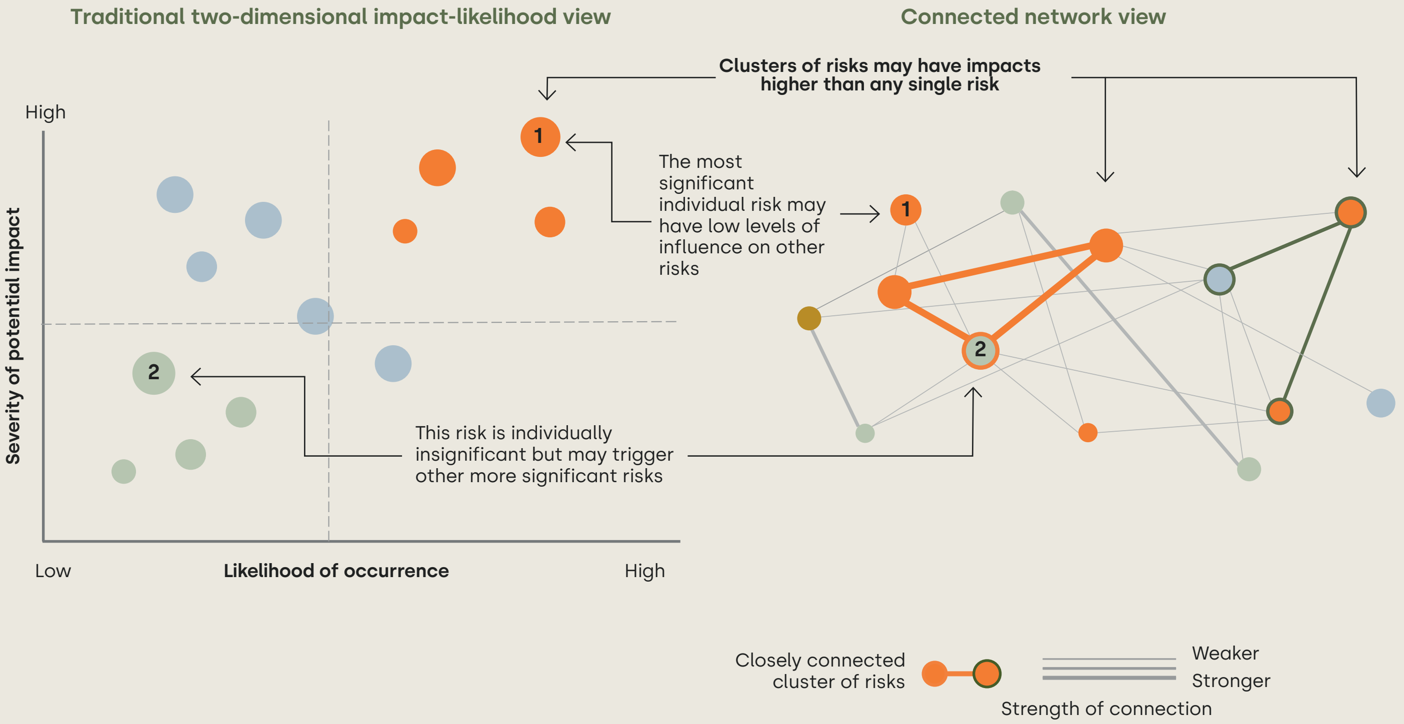
→ Within the network, 'clusters' of more closely connected risks can combine and trigger each other, with their collective, aggregated impact potentially exceeding the impact of any individual risk.

Benefits to business of adopting a Dynamic Risk Assessment

→ Understanding the dynamics of the network of risks enables companies to:

- Develop insight on how one risk event can trigger other risk events;
- Assess where impacts of risk events are most likely to be felt;
- Be better prepared for the speed at which risk events may be triggered and the impacts felt;
- Deliver more effective mitigation and business adaptation strategies;
- Determine where and how businesses should intervene to most effectively drive positive outcomes;
- Move beyond traditional risk likelihood and severity approaches to build more resilient and effective business models and strategies.

Figure 1: Considering connections between risks



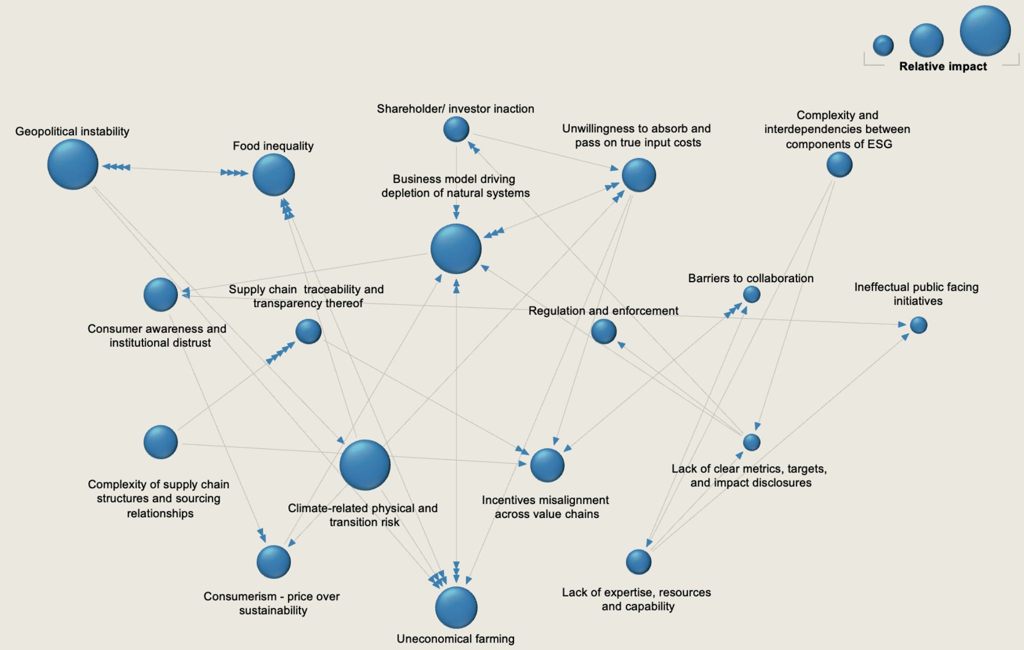
Source: Based on Dynamic Risk Assessment, KPMG, June 2020

Key business actions to shift towards a *dynamic approach to ESG risk management*

The DRA provides risk managers with insights into the network of risks and business factors that require to be addressed. It also highlights key clusters[1] and interactions of risk within the network that influence the triggering of other risks that in combination, could drive levels of impact far in excess of any single risk in isolation.

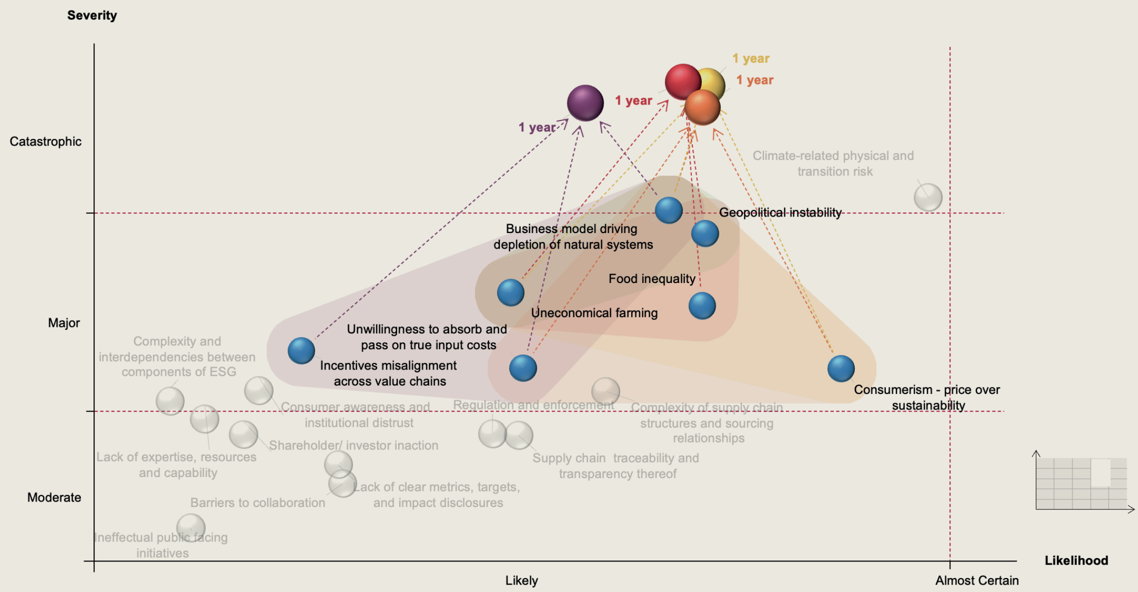
Key areas of business response identified from the DRA assessment of food retailers and suppliers are presented below and mapped to key areas of action that should be considered by risk, sustainability and other business functions (e.g. operations, supply chain, finance) operating in alternative sectors.

Figure 2: Connections and Impact



Source: [Integrating nature: assessing interconnected risks in the food retail ecosystem](), WBCSD & KPMG, 2024

Figure 3: Risk Cluster Velocities



Source: [Integrating nature: assessing interconnected risks in the food retail ecosystem](), WBCSD & KPMG, 2024

1 A cluster is defined as a group of 3 or more risks that all link in both directions and have the strongest connections in the network.

Table 1: Business responses and actions to manage risk interactions and impacts

Areas of business response	Learnings from the DRA	Key areas of action				
		Create a culture for change	Use DRA to inform transition goals and vision for transformation	Integrate enhanced ESG-risk assessment into enterprise risk management	Build upon climate related risk management approaches	Drive company-wide involvement
Business model change is a pre-requisite to deliver long term sustainable performance	Three out of four of the most expected clusters of risks include concerns that the business model is not fit for purpose for long term viability and will undermine sustainable business performance. Focusing on mitigating the risk associated with misaligned business models is the most effective intervention point to driving positive sustainable outcomes. By addressing this risk, it will support mitigation of every other risk at the lowest cost and with the greatest return on investment.	X	X	X	X	X
Integrate true value and costs into business plans and operations	In combination with business model misalignment, the analysis identified that failure to absorb and pass on true value and costs coupled with price-centric rather than sustainability-focused consumer behaviours, can drive risk severities far beyond the severity of any single risk.	X		X	X	X
Have a robust and effective climate management strategy	Climate-related risks act as amplifiers and accelerators of other risks – e.g. supply chain performance, infrastructure integrity, geopolitical tensions, anti-globalization threats. Implementation of robust climate solutions will critically support and enable the management and response to other risk types. Companies should look to build scalable solutions to address climate exposures that can be leveraged to simultaneously reduce exposure to nature-based and societal-related risks.	X	X	X	X	
Self-Interests and geopolitical tensions undermine sustainable transition	Fragmented and geopolitically insular approaches to setting policy are achieving the opposite to what is intended and increasing the risk of global system failures and unsustainable outcomes. Climate change, business transition and sustainable performance are global challenges that cannot be resolved without collaborative and geopolitically aligned focus and action.	X	X			X

Details of key areas of action *for business*

1. Create a culture for change

Use DRA insights to engage and motivate leaders and team members across organisations about the impacts and dependencies that the business has on climate, nature and equity and the opportunities inherent in these systems.

→ Conduct Board and Senior Management engagement sessions to:

- Build a common understanding of climate, nature and equity-related topics;
- Build awareness of the dynamics of groups of risks and how these need to be addressed to deliver sustainable business outcomes;
- Assess the potential for value creation and business opportunity and to set vision on value management across the business;
- Motivate and drive the evolution of business models required to set and to respond to nature, climate and equity imperatives;
- Review how performance management and processes address sustainability-related factors and the requirements to embed these in business processes and management. Build a transition-driven business transformation roadmap (covering, culture, leadership, resource management, operational change, digital & technology needs, controls and processes etc.) and link transition planning to wider business transformation. Leverage materials such the **Integrated Performance Management Framework**, **Transition Plan Taskforce toolkit** and **Case Studies** and WBCSD's resources to **embed ESG into decision-making**.

→ Invest in education and training to upskill stakeholders and decision-makers to consider dependencies and impacts on a range of capitals and to embed true value as a key business metric and performance measure.

Leverage WBCSD's **Board & Director** and **Assurance & Internal Control** resources and **Net-Zero, Nature Positive & Equity Self-Assessment & Toolkits for C-suites**.

2. Use DRA to inform transition goals and vision for transformation

Use an assessment of networks of risks and interactions to identify areas of strategic focus, business capability needs, prioritization and investment.

- → Enhance conduct of the materiality assessment to reflect dynamics of the risk network and effective areas of business intervention.
- → Build a common understanding of the areas of business transformation prioritized as key to deliver long-term sustainable performance, including, for example:
  - – business model design, internalisation of external impacts and costs, changes to product and service offerings, policy and external stakeholder engagement, data and technology needs and dependencies.
- → Consider the costs of inaction, capability deficiencies or missed business opportunities that could arise from a failure to adapt or respond to climate, nature and equity-related risks.
- → Develop a strategic roadmap that presents the vision of the transformation journey and its measures of success.
- → Review the vulnerability of supply chains and risks to business and operational practices to wider geopolitical risks, including energy security, population migration; market and trade restrictions.

3. Integrate enhanced ESG-risk assessment into enterprise risk management

Applying a network lens to climate, nature and equity risks can help businesses to identify areas of key strategic focus and business opportunity.

- → Review risks and issues identified in your materiality assessment to ensure these are addressed in your risk management approach.
- → Extend likelihood & severity assessments to include DRA analysis of risk interactions and combinations.
- → Consider the interaction and amplification of risks when defining risk appetite and setting risk tolerances and reporting metrics.
- → Engage risk, strategy and finance functions to create narrative of how risk dynamics and interactions are reflected in policy, strategy, business goals and performance reporting.
- → Conduct regular and comprehensive review of the alignment of networks of risks to actions and goals to ensure business performance is relevant and aligned to the evolving business landscape.
- → Use scenario analysis as a tool to build insight on impact and vulnerabilities based on the interactions of risks. Performing sensitivity analysis across a variety of scenarios builds understanding of vulnerabilities (and opportunities) and of the resilience. Leverage the risk assessment approach to drive focus on opportunity and adaptation actions that create (or preserve) value.
- → Leverage WBCSD's resources to embed ESG into decision-making.
- → Assess the maturity of ESG-risks assessment using COSO's and WBCSD's guidance and diagnostic tool produced by WBCSD and COSO.

4. Build upon climate risk management approaches to a wider set of risks and issues

Ensure you have in place a strong approach to managing climate risks and leverage it as a strategic foundation for managing nature, circularity and equity-related risks.

→ Review your approach to climate-risk management against ISSB[2] and transition planning[3] frameworks to identify areas of strength and development.

→ Use climate risk governance, risk appetite and risk management processes as foundations for managing other risk types.

→ Assess the connectivity of key climate risks to other risk types and scenarios under which these will interact. Ensure there are clear risk management and mitigations in place for climate risks and that these consider the risk factors that both influence and are influenced by climate risks.

→ Build awareness of areas where there are specific nature or equity contexts that will influence business responses. For example,

- Where and how operations and value chains impact and depend on nature or equity;
- Scale and locality of impact and influence;
- Access, collection and management of a broader range of data;
- Physical risk or asset valuation/impairment due to social, nature or biodiversity rather than climate factors.

→ Engage with **Integrated Performance Management** and **impact management frameworks** to design and inform integrated ESG-related risk management solutions.

→ See Nature and Equity-related guidance, reporting frameworks and toolkits such as **Taskforce on Nature-related Financial Disclosures**, **Nature Capital Protocol**, **UN Guiding Principles Reporting Framework**, **Social & Human Capital Protocol**, **WBCSD Disclosure & Reporting insight**.

Explore WBCSD's **Climate-related Corporate Performance and Accountability System** (CPAS) to understand climate risks and impacts in the context of wider system change and the needs of financial market participants; to inform integration needs and drivers of system change influence business action.

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2 See **https://www.ifrs.org/groups/international-sustainability-standards-board/**. As of 2024, the IFRS Foundation has taken over management of the progress on companies' climate-related disclosures from the **Task Force on Climate-related Financial Disclosures** (TCFD). The ISSB standards are managed by the IFRS Foundation and the standards - IFRS S1 and IFRS S2 - incorporate the recommendations of the TCFD.

3 For example, The Transition Plan Taskforce **Disclosure Framework** and Glasgow Financial Alliance for Net Zero (GFANZ) **guidance**.

5. Company-wide involvement

Engagement and leadership from across the management team are key to the design and successful transformation of business models and for the delivery of commercial and sustainable performance.

- → Drive focus of colleagues (e.g. finance, people, stakeholder relations, supply chain and strategy) to the creation and preservation of value and activities that challenge, initiate and accelerate change across the value chain.
- → Engage finance, operations and people functions to:
  - assess and prioritise key areas of business impact and transformation required to deliver ESG-focused risk management and transition.
  - identify, develop and invest in the capability needs – e.g. data, skills, people and capacity — essential to deliver business transition and sustain business performance.
- → Work with management and business functions to integrate climate and wider climate, nature and equity goals and performance targets as core measures and objectives of business transformation and position sustainability as central to the design and implement of business model and operational transformation strategies.
- → Engage investor relations and strategy, to review geopolitical risks and formulate strategies to manage these across different horizons – creating agility to respond rapidly and building investor and stakeholder confidence in stable and resilient performance.
- → Work with finance to:
  - Establish methods and metrics for the quantification of risk and financial impact.
  - Develop valuation processes and methods that link sustainability drivers to business relevant variables (Capex, Opex, price, cost of finance, demand/revenue etc.).
  - Explore approaches to assess and to internalise external impacts – e.g. effects on cash flows, access to finance – and consider the areas of business activity that can lead to external impacts.[4]
  - Collaborate to motivate change to cost accounting, financial accounting, corporate valuations, and economic performance approaches to embed true value and non-financial capital.
- → Focus on common good – build internal and external relationships and partnerships and motivate collective actions.

Leverage the resources of WBCSD's **CFO Network** and **Climate-related financial impact guide**.

2 See, for example, **Value Balancing Alliance**, **Capitals Coalition**, **Global Reporting Initiative Standards** and approaches such as **PwC's Total Impact Measurement & Management Framework**.

Relevant resources

1. Assessing interconnected risks in the food retail sector (wbcsd.org)
2. An enhanced assessment of risks impacting the energy system
3. An enhanced assessment of risks impacting the food & agriculture sector
4. Assurance & Internal Control resources
5. Board & Director resources
6. Business for Nature
7. CFO Network
8. Climate-related financial impact guide
9. Corporate Performance and Accountability System
10. Embed ESG into decision-making
11. Future-Proof Business guidance
12. Glasgow Financial Alliance for Net Zero
13. Impact Performance Management
14. Nature Capital Protocol
15. Nature Positive Roadmaps
16. Net-Zero, Nature Positive & Equity Self-Assessment & Toolkits for C-suites
17. Net-Zero, Nature Positive & Equity Self-Assessment & Toolkits for C-suites
18. Social & Human Capital Protocol
19. Taskforce on Climate-related Financial Disclosures
20. Taskforce on Nature-related Financial Disclosures

- Transition Plan Taskforce
- UN Guiding Principles Reporting Framework
- WBCSD Disclosure & Reporting insight
- We Mean Business Coalition

Appendix
Why should this matter to colleagues?

Delivery of ESG-related performance does not lie solely with the sustainability team. Strategic management of sustainability challenges and transition to deliver climate, nature and equity-focused solutions require coordinated, strategic delivery across the C-suite and business functions. Understanding the core responsibilities and delivery requirements of colleagues facilitates engagement and collaboration on the delivery of integrated responses.

Table 2: How insight to risk dynamics has relevance to management

Role	Core ESG-related responsibility	Primary areas of delivery / focus
CEO	→ Deliver ESG ambitions alongside execution of business plans and commercial performance	→ Ensure incorporation of an understanding of the dynamics of networks of risks into management goals, the setting of commercial targets and the climate, nature and equity-related business strategies. → Lead the evolution of business models to respond to nature, climate and equity risks and opportunities.
CSO	→ Establish enterprise sustainability strategy, commitments, targets and supporting policies to inform business transition and to report sustainable performance.	→ Work with risk, strategy and finance to develop a clear narrative of how risk dynamics and interactions are reflected in business strategies, ESG target setting, sustainability reporting and transition plans. → Champion and provide key support programs to design and implement business model and operational transformation strategies aligned to ESG-related risks and opportunities. → Take lead in building collaborations and partnerships to enable coordinated system change and to motivate delivery of sustainability-focus business transition and operational transformation.
COO	→ Identify and deliver key areas of business and operational transformation necessary to integrate climate, nature and equity considerations into business unit strategy and objectives	→ Take lead on programs to design and implement business model and operational transformation strategies aligned to ESG-related risks and opportunities. → Incorporate TPT and GFANZ frameworks to drive transition planning and facilitate transparency of transition journey with investors and regulators.
CRO	→ Integrate climate, nature and equity risk considerations into enterprise risk management framework and business model.	→ Understand the connectedness and interactions between risks to enable strategic targeting of risk management approaches. → Apply scenario analysis and stress testing in business planning and strategy setting to explore ranges of volatility and uncertainty in business drivers to assess potential impacts on sustainability outcomes and levels of performance → Integrate materiality assessment outcomes into the risk register and strategic goals.
CFO	→ Conduct ESG impact financial analysis and forecasting → Incorporate ESG-related data and analysis into reporting and disclosures → Support business transition through capital management and investment	→ Develop valuation processes and methods that link sustainability drivers to business relevant variables (Capex, Opex, price, cost of finance, demand/revenue etc.). → Collaborate with risk and sustainability functions to establish methods and metrics for the quantification of risk and financial impact.
CTO/CDO	→ Develop target state operating model and data architecture to support integration and business transition	→ Develop and invest in the infrastructure—data, skills, and opportunities—that will help inform company actions.
HR/Talent	→ Co-develop upskilling and awareness activities to support integration and transition plan execution and change management → Drive alignment of incentives to sustainability commitments and transition, as appropriate	→ Invest in education and training to upskill stakeholders and decision-makers to consider "True value" across the business. → Conduct Board and Senior Management engagement sessions to build a common understanding of climate, nature and equity topics and to build awareness of the dynamics of groups of risks and how these need to be addressed to deliver sustainable business outcomes.

DISCLAIMER

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Contact

Katia Bonga, Manager, Corporate Performance & Accountability, WBCSD

Gordon Darling, Director, Corporate Performance & Accountability, WBCSD

cp_a@wbcsd.org

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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