Aligning finance for nature and climate: The role of disclosure and reporting frameworks

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APA Webinar #7: Integrated solutions for Nature and Climate Change Adaptation

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FIGURE C

Global risks ranked by severity over the short and long term

"Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period."

Source

World Economic Forum Global Risks Perception Survey 2023-2024.

THE CHALLENGE

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$44
trillion

of global GDP, is moderately or highly dependent on nature - namely over 50% *(WEF)*

$2.7
trillion

annual decline in global GDP could be caused by ecosystem collapse by 2030 *(World Bank)*

$202
million

in losses daily caused by weather, climate or water hazard-related Disasters over the last 50 years *(WMO)*

The market is becoming aware of the materiality of environmental RISKS …

The financial implications of net zero transition

Decarbonising the energy system by 2050 could save trillions

Fed's climate stress test whips up storm for banks

Reuters World Business Markets Sustainability Legal Breakingviews Technology

Climate & Energy | Climate Change

Australian, New Zealand property markets face creeping climate risks

ECB warns banks of capital hit if they fail to tackle climate risk

$10
trillion

in annual business value could be generated by a new nature-positive economy by 2030 (WEF)

…but also on climate and nature-based solutions can be a financial OPPORTUNITY

Forbes

Is It Time To Appoint A Chief Nature Officer?

Bloomberg

Live Now Markets Economics Industries Tech AI Politics Wealth Pursuits Opinion Businessweek Equ

Green
ESG & Investing

HSBC-Backed Natural Capital Funds Raise $650 Million

ESG Funds See 15% Jump

Sustainable Business

NYSE says to co-launch new, environmentally sustainable asset class

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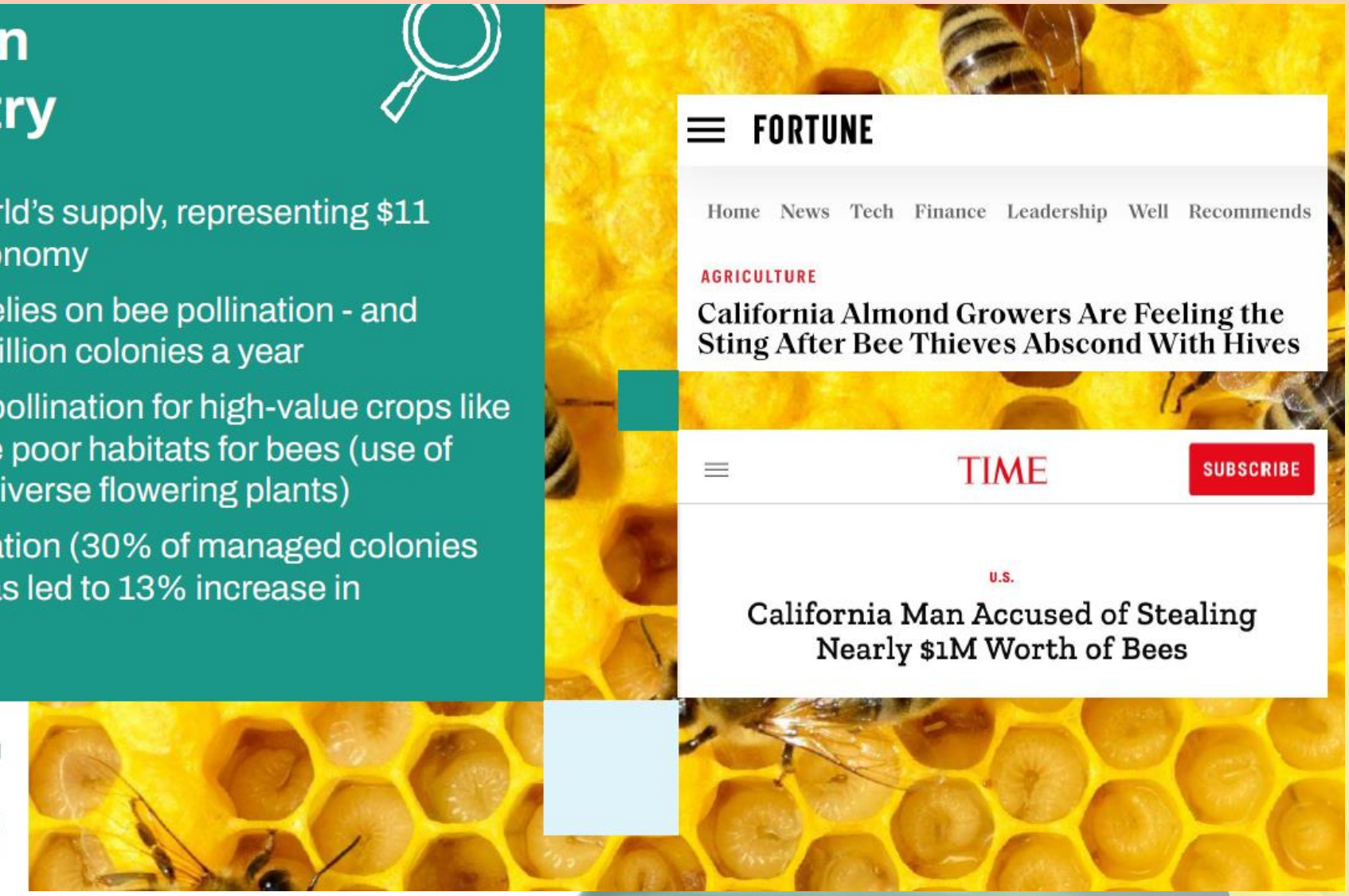
Physical risk

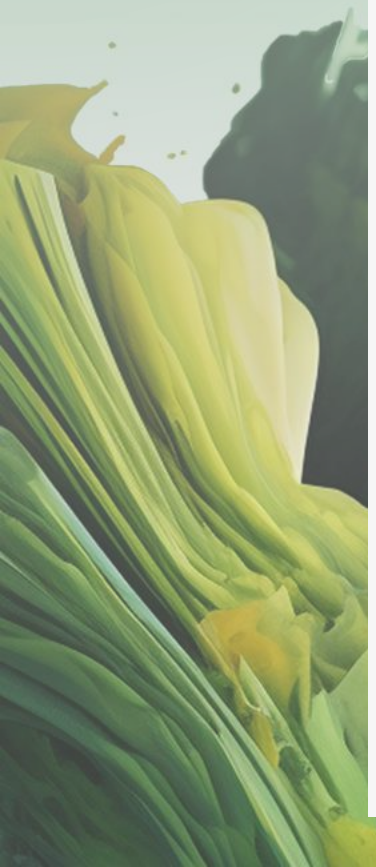
The Californian almond Industry

- Produces 80% of world's supply, representing $11 billion to the local economy
- Almond production relies on bee pollination - and imports approx 1.6 million colonies a year
- Areas reliant on bee pollination for high-value crops like almonds tend to have poor habitats for bees (use of insecticides, lack of diverse flowering plants)
- Decline in bee population (30% of managed colonies are lost each year) has led to 13% increase in production costs



Sources: Almond Board of California | Annual Report 2016; Inside Climate News| California's Almond Trees Rely on Honey Bees and Wild Pollinators, but a Lack of Good Habitat is Making Their Job Harder 2021; The Bee Informed Partnership 2022| Loss and

This opens adaptation opportunities for business

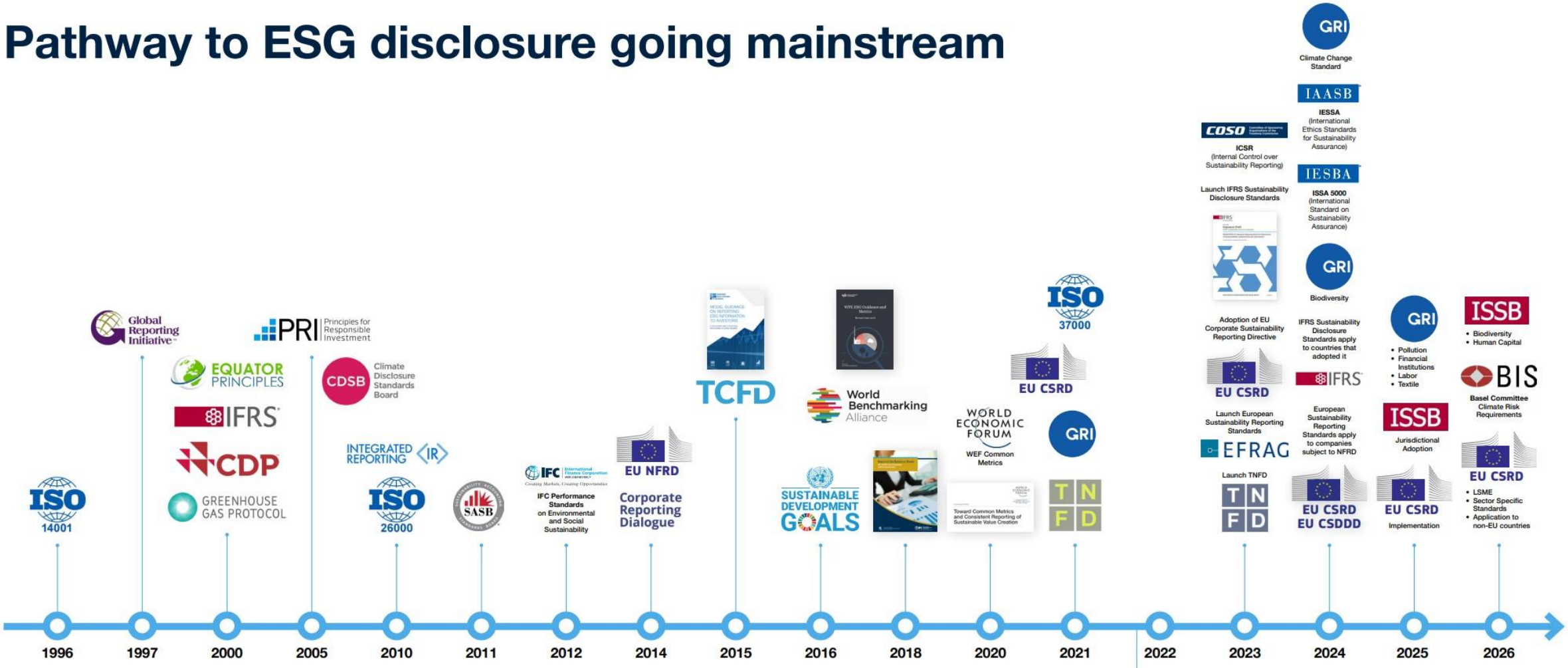


Revenue generation

Cost savings and sustainability

Adaptation solutions		Ecosystem management practices	
Support climate risk-related decision-making and enhance preparedness	Reduce sectoral and geographic vulnerabilities	Implement resource-efficiency practices that contribute to business efficiency and sustainability	Pursue nature-based solutions with mitigation co-benefits that contribute to net-zero goals

Pathway to ESG disclosure going mainstream



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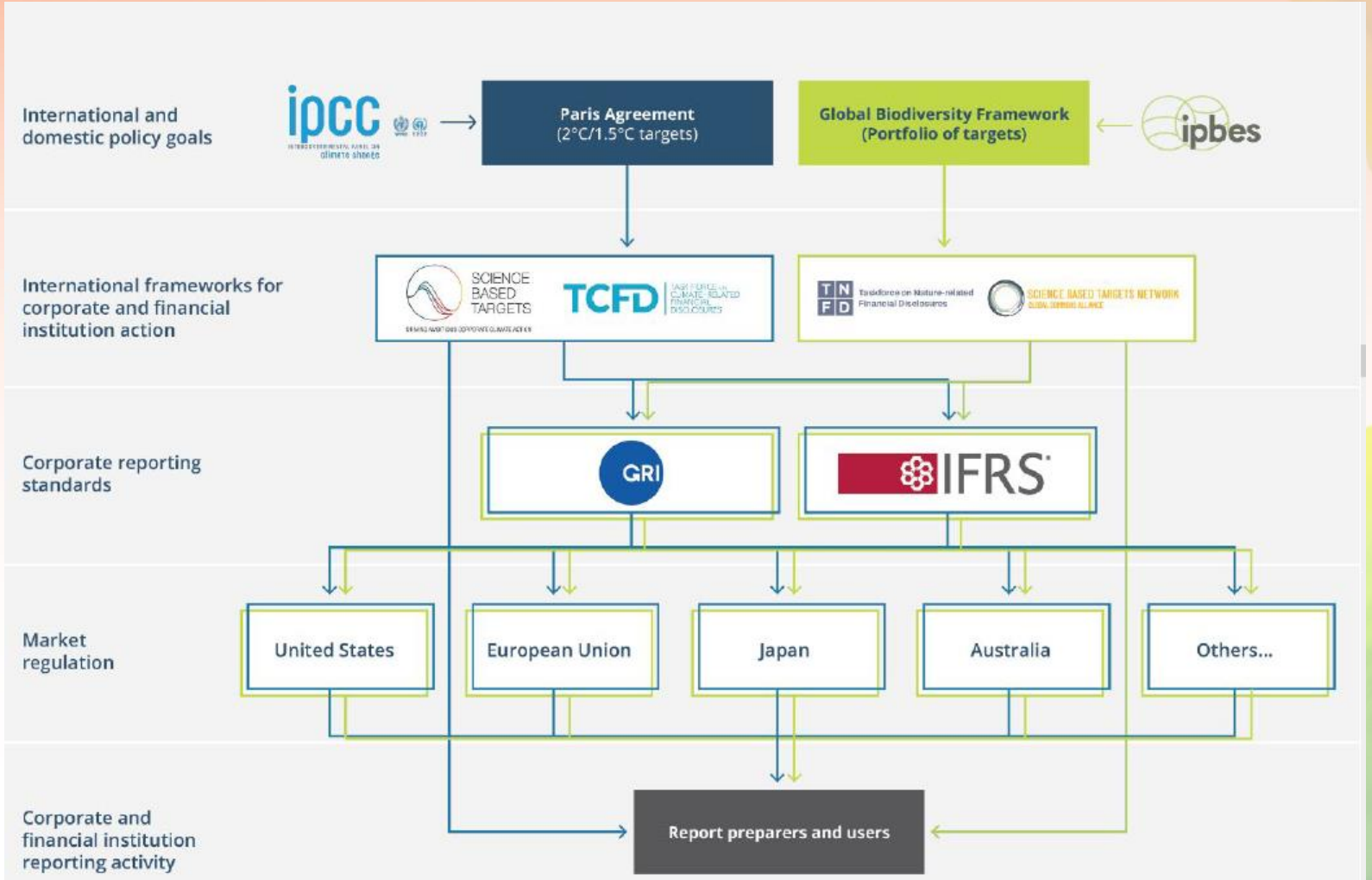
The architecture of nature and climate corporate reporting



The emerging global architecture for nature-related corporate reporting, in parallel with what has emerged for climate-related reporting.

Costa Rica, India, Phillippines…

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TCFD and TNFD disclosure recommendations

TCFD Climate-related Disclosure Recommendations

Governance	Strategy	Risk Management	Metrics & Targets
Disclose the organisation's governance around climate-related risks & opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.	Disclose how the organisation assesses and manages climate-related risks	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
A. Describe the board's oversight of climate-related risks and opportunities.	A. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	A. Describe the organisation's processes for identifying and assessing climate-related risks.	A. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.
B. Describe management's role in assessing and managing climate-related risks and opportunities.	B. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	B. Describe the organisation's processes for managing climate-related risks.	B. Disclose Scope 1, Scope 2 and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	C. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	C. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	C. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Carry-over to TNFD with minimal required change

Adaptation required

Proposed additions

TNFD recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.
Recommended disclosures	**Recommended disclosures**	**Recommended disclosures**	**Recommended disclosures**
A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.	**A.** Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.	**A**(i) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.	**A.** Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.
B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.	**B.** Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.	**A**(ii) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).	**B.** Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.
C. Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.	**C.** Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.	**B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.	**C.** Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.
	D. Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.	**C.** Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.	

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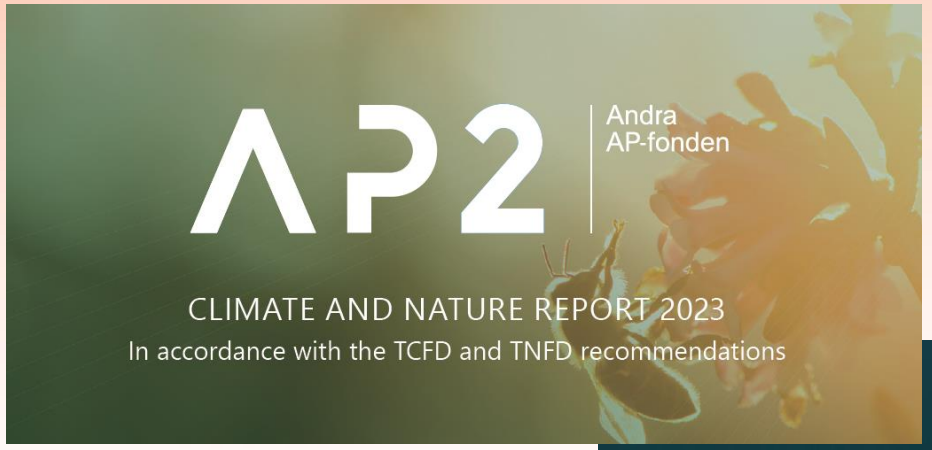
Examples of businesses and financial institutions climate-nature integrated financial disclosures



CASE STUDY

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Botswana: Mainstreaming climate and nature-related financial disclosures in the national stock exchange guidance

BOTSWANA STOCK EXCHANGE
SUSTAINABILITY DISCLOSURE GUIDANCE

4 BSE Recommended Sustainability Disclosures

As noted earlier, there have been growing calls from investors, policymakers and other stakeholders for organisations to provide sustainability-related disclosures with the same rigour as they have traditionally done with financial information. Interested stakeholders are looking for information that is consistent, comparable, reliable and assurable[31] that will assist to inform decisions relating to the reporting organisation's financial prospects and/or its contribution to sustainable development.

To meet these stakeholder expectations, and to assist and encourage Botswana's companies to strengthen their disclosure on sustainability-related impacts, risks and opportunities in alignment with recent and emerging global disclosure standards, this section presents the BSE's Recommended Sustainability Disclosures (Figure 5) designed for application across all sectors.

Building on revising the reporting architecture developed initially by the TCFD, and subsequently incorporated into the IFRS Sustainability Disclosure Standards, the ESRS and the TNFD, the BSE has organised its Recommended Sustainability Disclosures around four pillars: governance, strategy, risk and impact management, and metrics, targets and performance. In developing the associated guidance, provision has also been made for the management and related disclosures in the GRI Sustainability Reporting Standards.

These Recommended Sustainability Disclosures are supported by a set of Suggested Sustainability Metrics (see Figure 6 and Section 5), as well as by proposed Sector-Specific Metrics (Section 5.4).

By reporting meaningfully on the Sustainability Disclosures and Metrics – and integrating these considerations into the organisation's governance, strategy, and performance – we believe reporting organisations in Botswana will be sending a clear signal to shareholders and other stakeholders that it has a sound appreciation of the impacts, risks and opportunities associated with running its business.

Examples of **environmental disclosure metrics** based on GRI, TCFD, TNFD recommended by the Botswana Stock exchange for listed companies.

5.3 Environmental metrics

E1 CLIMATE CHANGE	METRIC	UNIT	FRAMEWORKS	RATIONALE
E1.1 GHG Emissions E1.1a	Absolute gross greenhouse gas emissions expressed as metric tonnes of CO_2-equivalent and measured in accordance with the Greenhouse Gas Protocol for: Scope 1, Scope 2, and Scope 3 emissions. Scope 1 and Scope 2 emissions should be disclosed separately for (i) the consolidated accounting group (the parent and its subsidiaries) and (ii) associates, joint ventures, unconsolidated subsidiaries or affiliates not included in (i).	Metric tonnes of carbon dioxide equivalent (MtCO2e)	IFRS S2 GRI 305:1-3 ESRS E1-7; E1-8; E1-9; ESRS E1-10 SASB 110 TCFD GHG Protocol	GHG emissions cause climate change, which is expected to have increasingly significant economic, environmental, and social impacts. As a result, GHGs are a key focus area for policy, regulatory, market and technology responses to limit rising temperatures. Organisations with emission-intensive business models are likely to face greater risks from the transition to a lower emission economy in terms of increased regulatory requirements and additional capital expenditure. For many organisations, the most significant GHG emissions are found in their supply chains, not in their own operations. Reporting on Scope 3 emissions can assist in identifying potential supply chain risks in terms of exposure to the transition to a lower emission economy. It can also help improve energy efficiency and cost reduction
E1.1b	Scope 3 emissions should include upstream and downstream emissions. The categories of Scope 3 emissions and basis for measurement for information provided by entities in the value chain should be disclosed. Recognising the challenges related to the disclosure of Scope 3 emissions, including data availability, reasons should be provided when Scope 3 emissions or categories of Scope 3 emissions are omitted.	Metric tonnes of carbon dioxide equivalent (MtCO2e)	IFRS S2 GRI 305:1-3 ESRS E1-9	
E1.1c	**Emissions intensity:** GHG emissions intensity for Scope 1, 2 and 3, expressed as metric tonnes of CO_2-equivalent per unit of physical or economic output.	$MtCO_{2e}$ per unit of	GRI 305:1-3 ESRS E1-10	
E3 BIODIVERSITY AND LAND USE	**METRIC**	**UNIT**	**FRAMEWORKS**	**RATIONALE**
E3.1 Biodiversity E3.1a	Number and area of sites owned, leased, or managed in or adjacent to areas of high biodiversity value (Key Biodiversity Areas - KBAs), for operations (if applicable) and full supply chain (if material)	# & hectares (or km^2 if applicable)	GRI 304-1 ESRS-E2-6	Biodiversity loss has critical implications for humanity, from the collapse of food and health systems to the disruption of entire supply chains. A primary driver of biodiversity loss is the growth in demand for land or marine areas and the associated conversion of ecosystems. Current demand for land is indicated in the area of land used in a company's operations and supply chains while the annual change reflects whether there is increasing or decreasing pressure for new conversions of ecosystems.
E3.1b	Area of land used for the production of basic plant, animal or mineral commodities (e.g. the area of land used for forestry, agriculture or mining activities)	Total surface Hectares	GRI 304-2 ESRS-E4-5	
E3.1c	Level of capital and expenditure deployed towards implementation of measures undertaken to manage positive impacts and avoid, minimise, restore/rehabilitate and/or offset negative impacts on biodiversity and ecosystems	BWP, $US or other currency	ESRS-E4-7	
E3.1d	Describe wherever material across the value chain mechanisms aimed at enhancing management of biodiversity and ecosystem impacts (such as policies, targets, certifications, and audits)	Description	GRI 304 ESRS-E4-7	

CASE STUDY

Mexico: Central bank assessing nature risks

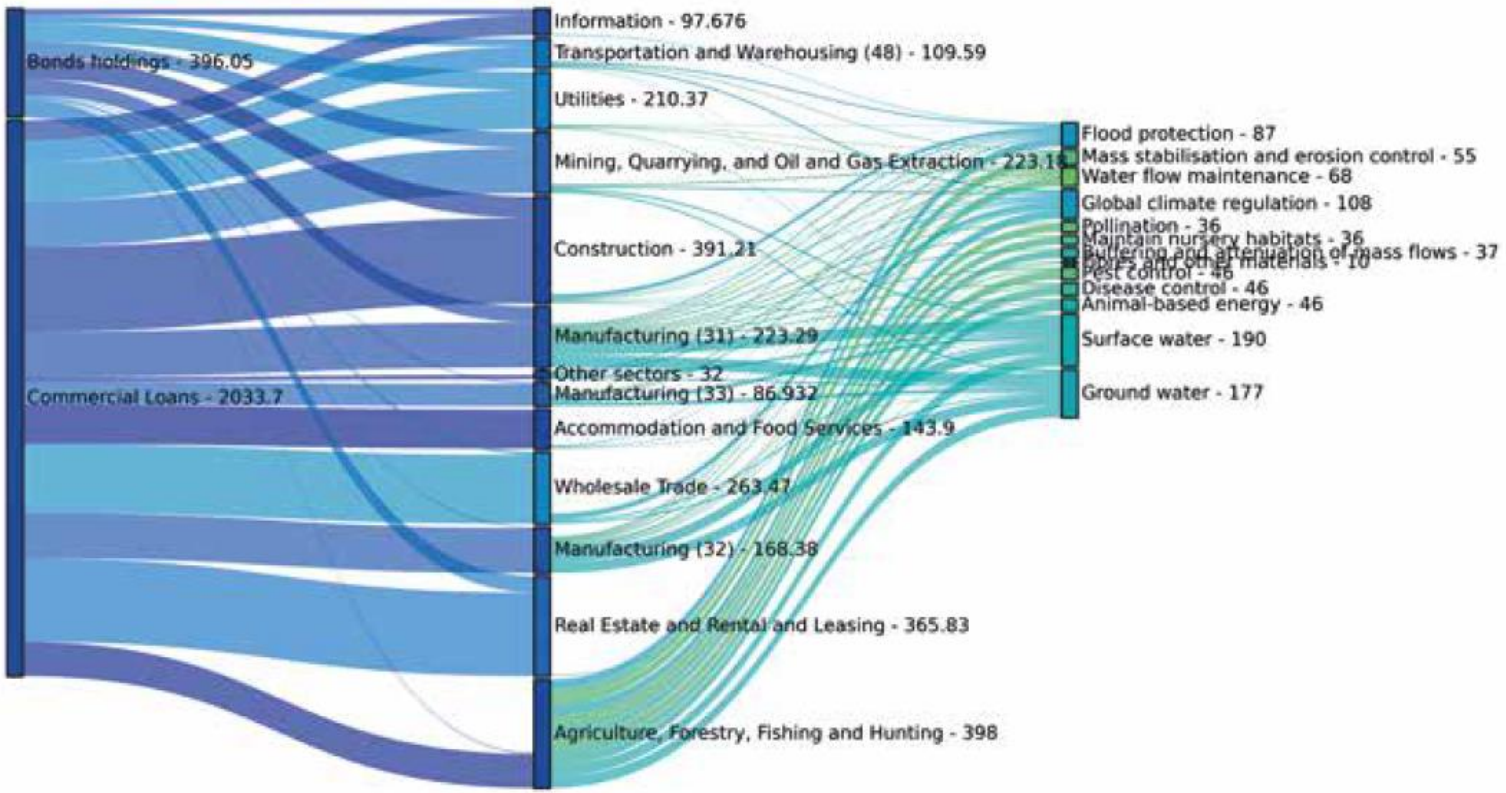
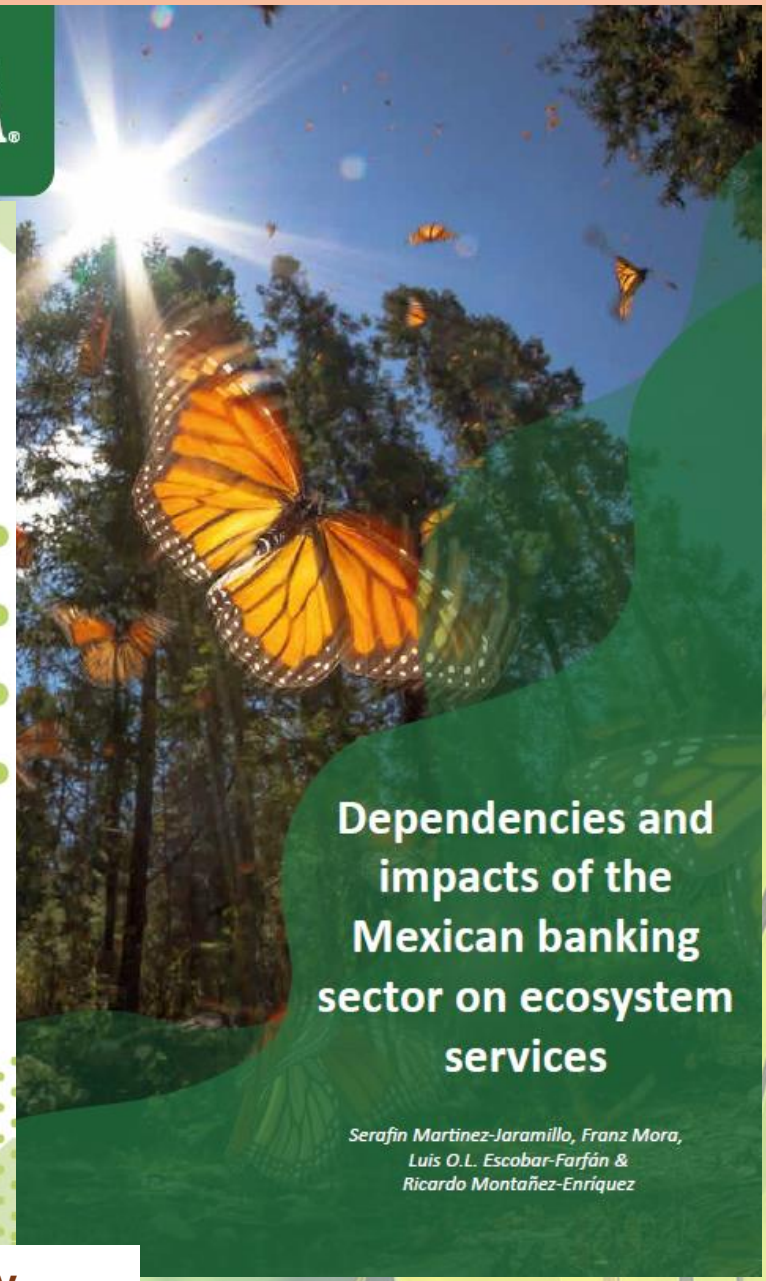


Figure 12: Exposures and Eco-systemic Dependencies of the Mexican Banking Sector.



An important share of the **credit portfolio of banks in Mexico is highly or very highly dependent on nature** and its ecosystem services. As a result, it is subject to **physical risks** arising from biodiversity loss and ecosystems degradation.

BIOFIN National readiness for nature-related disclosures

- BIOFIN is developing studies in **developing countries** to assess their **readiness for nature-related disclosures**
- These studies helped to **assess the country market and institutional readiness**, and inform key actions by governments, regulators and standards bodies to help scale **uptake of nature-related financial disclosures**
- **Existing climate disclosure practices and regulations are often the entry points** for the adoption of nature-related financial disclosures

Key takeaways

- By **adapting to and building resilience to climate change and nature loss, businesses can mitigate risks** to their operations and value chains and avoid economic losses due to environmental impacts

- Businesses can **capitalize on opportunities by investing in climate change adaptation and nature-based solutions**, thereby gaining from increased revenue and cost savings.

- Businesses and financial institutions are starting to **establish adaptation strategies that integrate climate change adaptation alongside nature-aligned actions**

- Businesses and financial institutions are starting to make **comprehensive climate and nature-related financial disclosures:** reporting has the potential to be a strategic lever in driving value creation and ensuring the systems, processes and information are in place to inform decision-making and deliver sustainable outcomes

- Financial regulators in many geographies are already – or will be – **mandating businesses to disclose their climate and nature risks** and associated financial implications and the steps they are taking to manage them.

THANK YOU

For more details, contact

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