

From greening finance to financing a greener future

How banks and broader financial
sector can catalyze a nature-positive
transformation

December 2024



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بنك الإمارات دبي الوطني
Emirates NBD

Foreword

Our civilization depends heavily on natural capital and ecosystem services, which are essential and irreplaceable.

About half of the global Gross Domestic Product (GDP) of US\$44t relies on these services.*

Degradation of nature and biodiversity loss is occurring at a rapid scale. The world is experiencing a sharp decline in species, ecosystems and genetic diversity due to activities such as deforestation, pollution and climate change.

Biodiversity loss poses a material financial risk to the financial services industry. While the Return on Investment (ROI) may be uncertain in short term, delaying action could lead to significant costs. The financial sector must use its influence responsibly by redirecting capital away from activities harmful to biodiversity and toward “nature-positive” initiatives. This shift enables the financial sector to drive both positive environmental outcomes and economic benefits.

This report examines nature-related risks and opportunities, highlights important industry initiatives and frameworks, and provides practical recommendations for the MENA financial services sector for driving positive change.

* “Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy,” World Economic Forum, January 2020.



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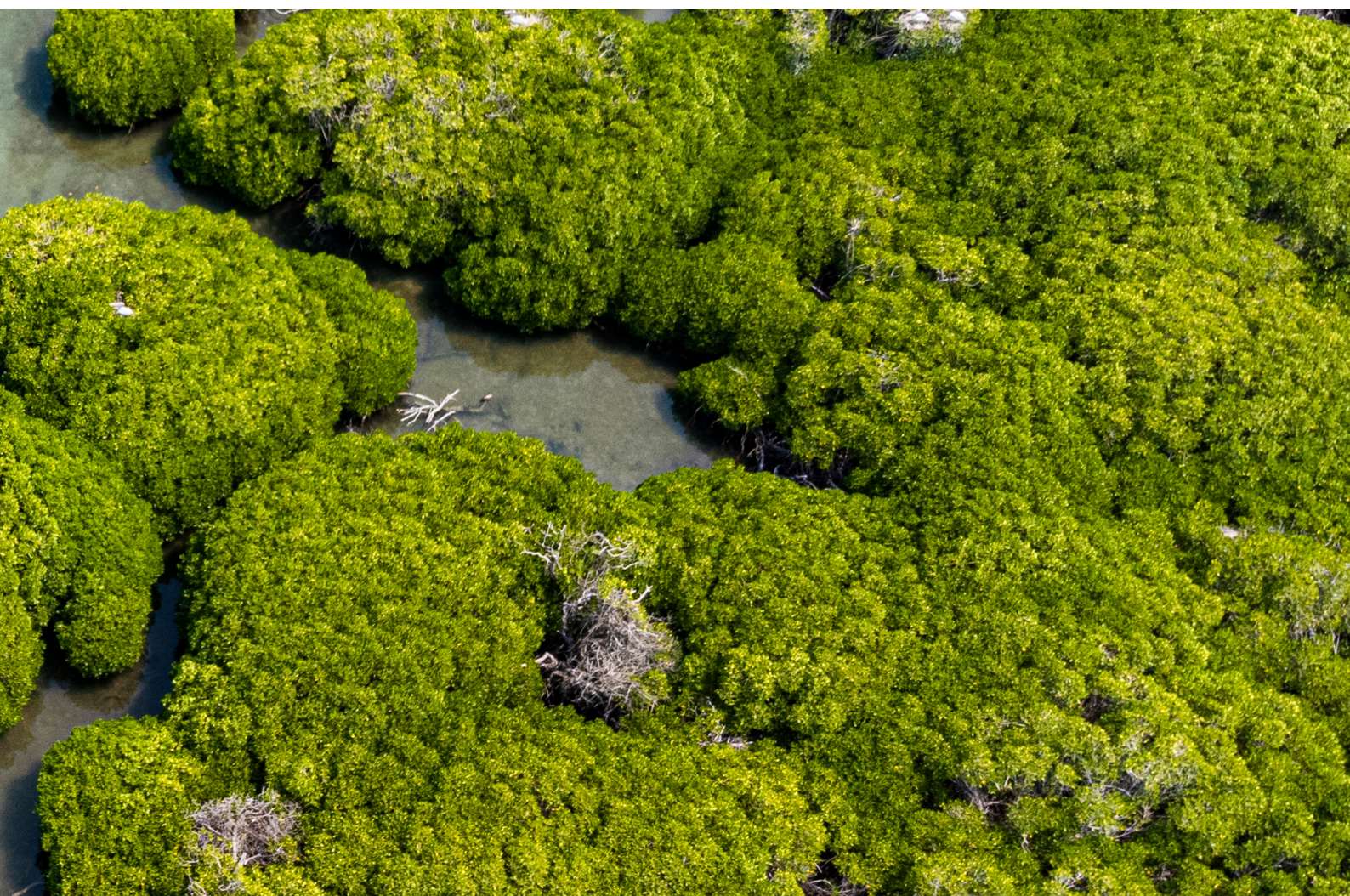
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1

Nature – a foundation for life and capital markets mainstay

Nature and biodiversity represent the vast array of life forms on earth, forming an intricate network that links various organisms and supports their sustenance.

The interconnectedness across nature and biodiversity supports the resilience and sustainability of our planet's ecosystems. These ecosystems have evolved over four billion years, resulting in nearly 10 million species.¹

Over the past decades, natural capital has been facing immense challenges. Consequently, nature-related financing and capital markets have become vital in addressing them. By channeling resources into sustainable projects, they have worked toward promoting environmental conservation and resilience.

Only 19% of earth's species have been documented till date, with new species continually being discovered.² The intrinsic value of such biodiversity and natural systems is closely linked to human survival and economic prosperity. These systems provide vital ecosystem services, such as the provision of food and water, climate regulation, and disease control, all of which are essential to societal wellbeing and economic growth.

The worldwide system, which encompasses food, land, and ocean use, along with its entire supply chains, accounts for approximately US\$10 trillion, or 12% of global GDP, and employs about 40% of the global workforce.³ Multiple sectors rely heavily on nature, including industries such as construction, agriculture, and food and beverages, which contribute around 15% to the global GDP.⁴ Meanwhile, industries with a moderate dependence on nature make up the next 37%. Collectively, the three largest nature-dependent sectors – construction, agriculture and food and beverages – produce nearly US\$8t in Gross Value Added (GVA).⁵

As assessed by the World Economic Forum (WEF), over half the world's total GDP, which amounts to US\$44t of economic value generation, depends on nature and its services. This implies the global economy is potentially at risk due to declining nature and biodiversity.⁶

This report explores the imperative of financing nature conservation and management in the MENA region. It addresses the unique challenges and opportunities in leveraging financial instruments to support biodiversity. Providing strategic insights for financial institutions, their supervisors, and other key stakeholders, it aims to foster a sustainable future for the region.



Nearly half of the Middle East's GDP is highly or moderately dependent on biodiversity.⁷

Despite its arid landscape, the Middle East is home to a remarkable variety of terrestrial and aquatic life. The MENA region's biodiversity stretches across diverse ecosystems, from the vast Sahara Desert and the plains of the Fertile Crescent to the vibrant coral reefs of the Red Sea. More than 30% of the Arab world lies within one of the world's 36 biodiversity hotspots, which encompass deserts, mountains, coasts, wetlands and oases.⁸ Iconic species such as the oryx, dromedary camel, sand cat, peregrine falcon, desert monitor, dugong, green sea turtle and numerous coral reef species thrive in this interconnected network of ecosystems.

Biodiversity in the MENA region is integral to economic growth and sustainability. Sectors like agriculture and fisheries, food and beverages, hospitality and tourism provide essential resources and are key to generating employment. However, the detrimental effects of environmental degradation can severely impact the economic growth prospects of these vital sectors.

For example, the region's seafood market, valued at US\$21b in 2022, could face significant losses.⁹ Similarly, ecotourism, which is estimated to be worth approximately US\$270b, would also suffer greatly.¹⁰ Nearly half of the Middle East's GDP is highly or moderately dependent on biodiversity.¹¹ The decline in environmental health not only threatens the economic stability of these industries but also jeopardizes the livelihoods of those who depend on them. The far-reaching consequences of such degradation underscore the urgent need for sustainable practices to protect these valuable sectors.



2

Declining biodiversity and the growing financing gap

Despite its importance, the state of nature has been declining rapidly.

According to World Wildlife Fund (WWF), over the past five decades, wildlife populations have decreased by an average of 73%.¹²

The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) global assessment on biodiversity and ecosystem services reports that 1.2 million plant and animal species are at risk of extinction.¹³ The rate of extinction is occurring at a pace 1,000 times the natural background rate, a phenomenon which scientists have referred to as the sixth mass extinction of life on Earth.¹⁴

According to the IUCN Red List, a comprehensive record of threatened species, 28% of the 147,500 species evaluated are at the risk of extinction.¹⁵

Biodiversity loss and ecosystem collapse are consistently ranked among the top five threats humanity is expected to face in the next 10 years.¹⁶

Human activities such as deforestation, urbanization and agriculture expansion are the primary drivers of habitat destruction and fragmentation. When natural habitats are destroyed or fragmented, species lose critical shelter and the resources necessary for survival.

This disruption often results in a significant shift in migration patterns and a decline in species populations, which, in some cases, leads to extinction.

The operations of four major value chains: food, energy, infrastructure and fashion; currently drive more than 90% of man-made pressure on biodiversity.¹⁷

In the MENA region, accelerated urbanization and infrastructure expansion are major drivers of habitat destruction and ecosystem fragmentation. The proportion of people living in urban areas has surged from 35% in 1970 to over 65% in 2020.¹⁸ This relentless expansion of cities, industrial zones and transport networks encroaches upon natural landscapes, displacing wildlife, reducing biodiversity and disrupting ecological processes.

Climate change compounds the risks to biodiversity in the MENA region. Rising temperatures and altered precipitation patterns exacerbate water scarcity, placing substantial strain on both terrestrial and aquatic ecosystems. The increased frequency and severity of extreme weather events, including prolonged droughts and intense heatwaves, add stress to the region's flora and fauna.

Future scenario projections indicate that, in a 4°C warming scenario, maximum temperatures could reach 56°C, with an increased frequency and severity of droughts and floods. Coastal habitats are also threatened by sea-level rise, anticipated to reach 0.36 meters with a 1.5°C increase and up to 0.6 meters in a 4°C scenario.¹⁹ These environmental pressures, coupled with intensive freshwater extraction, rapid population growth and accelerated economic development deepen ecological vulnerability across the region. Collectively, these factors indicate severe ecological and economic consequences, posing significant challenges to sustaining biodiversity conservation and resilience in the MENA region.

Changing climatic conditions, rapid urbanization that leads to habitat loss and fragmentation are some of the key factors that are negatively impacting biodiversity in the MENA region.

The State of Finance for Nature 2023 spotlights the existing total global annual finance flows to Nature-based Solutions (NbS) roughly as US\$200b²⁰, one-third of the actual required investment flow till 2030.

The year 2022 marked a significant milestone with the signing of the Kunming-Montreal Global Biodiversity Framework (GBF).²¹

The GBF is a set of 23 biodiversity targets for 2030 that guides international efforts and investments toward a sustainable and biodiverse future. The GBF builds on the Rio targets to limit climate change to 1.5°C, protect 30% of land and sea by 2030 (30x30 target) and reach Land Degradation Neutrality (LDN) by 2030.

This requires an annual NbS investment which is almost triple from the current state to US\$542b by 2030.²²

However, as reported by the State of Finance for Nature 2023, the total global annual finance flows to NbS in 2022 were estimated at roughly US\$200b.²³

Governments are the primary funders of NbS, contributing 82% of the total financial flows, amounting to approximately US\$165b.

Nearly 71% of this funding is directed toward biodiversity and landscape protection, as well as promoting sustainable practices in agriculture, forestry and fishing.

However, despite growing efforts in this direction, at a global level, the mainstream allocation for biodiversity protection within national budgets remains largely insufficient. In 2021, less than 1% of national budgets worldwide were dedicated to safeguarding biodiversity.²⁴ The US, China, Italy, France and Germany together accounted for over 75% of global biodiversity spending.

The private sector contributions to NbS were estimated at US\$35b, making up 18% of the total global finance for NbS. This funding is mainly channeled through mechanisms like biodiversity offsets and credits, as well as sustainable supply chains, which include certified forestry products, organic agricultural goods, certified seafood, and industries such as palm oil, soy and cocoa.

Middle Eastern economies have allocated around 0.2% of their public budgets to nature conservation.²⁵

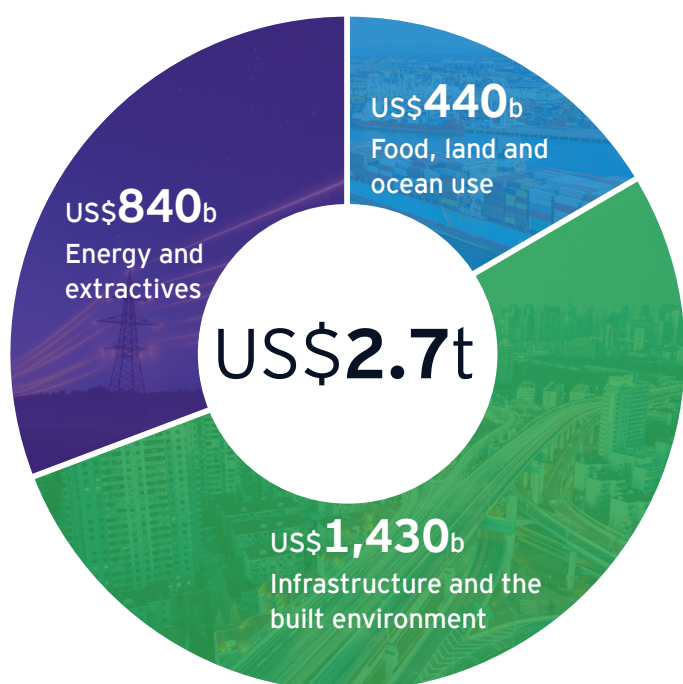


3 Nature – an untapped opportunity for MENA financial sector

The WEF estimates that US\$10t worth of annual business opportunities and 395 million potential jobs can be created by 2030 through transformation across three critical socio-economic systems.²⁶

As the global urgency to address biodiversity loss and climate change intensifies, financial institutions are presented with a significant opportunity: channeling substantial private capital into nature conservation and funding projects that actively maintain, enhance and restore natural ecosystems.

Scale of annualized investment costs 2020-30 across three socio-economic systems



Source: WEF State of Finance for Nature report.

WEF has identified three socio-economic systems that, with US\$2.7t annual investments, can deliver US\$10.1t of annual business opportunities and 395 million jobs by 2030.²⁷

The interplay between social processes and economic activities across all the associated stakeholders defines these three key systems, which are:

01 Food, land and ocean use

The global food, land and ocean use system, representing 12% of global GDP and 40% of employment, faces increasing strain from climate change and unequal outcomes in food security and health.²⁸ To transform, societies must restore ecosystems, adopt sustainable and regenerative agricultural and aquaculture practices, and implement techniques like precision forestry to balance resource needs with environmental sustainability.

02 Infrastructure and the built environment

The built environment, vital to the global economy, threatens 29% of endangered species.²⁹ Key solutions to reduce environmental impact include compact urban development to protect ecosystems, nature-positive infrastructure for energy efficiency, eco-friendly utilities to manage pollution, integrating nature in infrastructure for resilience and nature-positive transport links.

03 Energy and extractive socio-economic system

The extraction, production and manufacturing of energy and materials contributes to 23% of global GDP and 16% of employment. It also poses significant threats to biodiversity.³⁰ To address this, new resource-efficient production models are needed to scale circular practices and reduce the demand for new resources.

Nature-positive extraction practices in metals and minerals that reduce environmental impacts should be supported by sustainable materials supply chains.

While the net-zero transition encourages more sustainable practices, such as the adoption of renewable energy, energy efficiency, circular economy principles, it still requires the necessary resources to be extracted and manufactured.

This shift to sustainable energy sources and the development of new technologies has increased demand for critical minerals such as lithium, cobalt and copper, which puts pressure on natural resources globally. In that effect, resource-intensive sustainable technologies must be managed carefully to facilitate deep decarbonization without harming nature.

Achieving this transition requires raising the necessary capital for these investments which has proven to be challenging, especially for Small- and Medium-sized Enterprises (SMEs) in emerging markets. In these regions, SMEs often struggle to access capital markets and need smaller investments with innovative payback models.

Overcoming these challenges demands innovative approaches to capital investment processes. Key solutions include blended finance, new supply chain models and shared service models, all aimed at reducing transaction costs and mitigating risks.

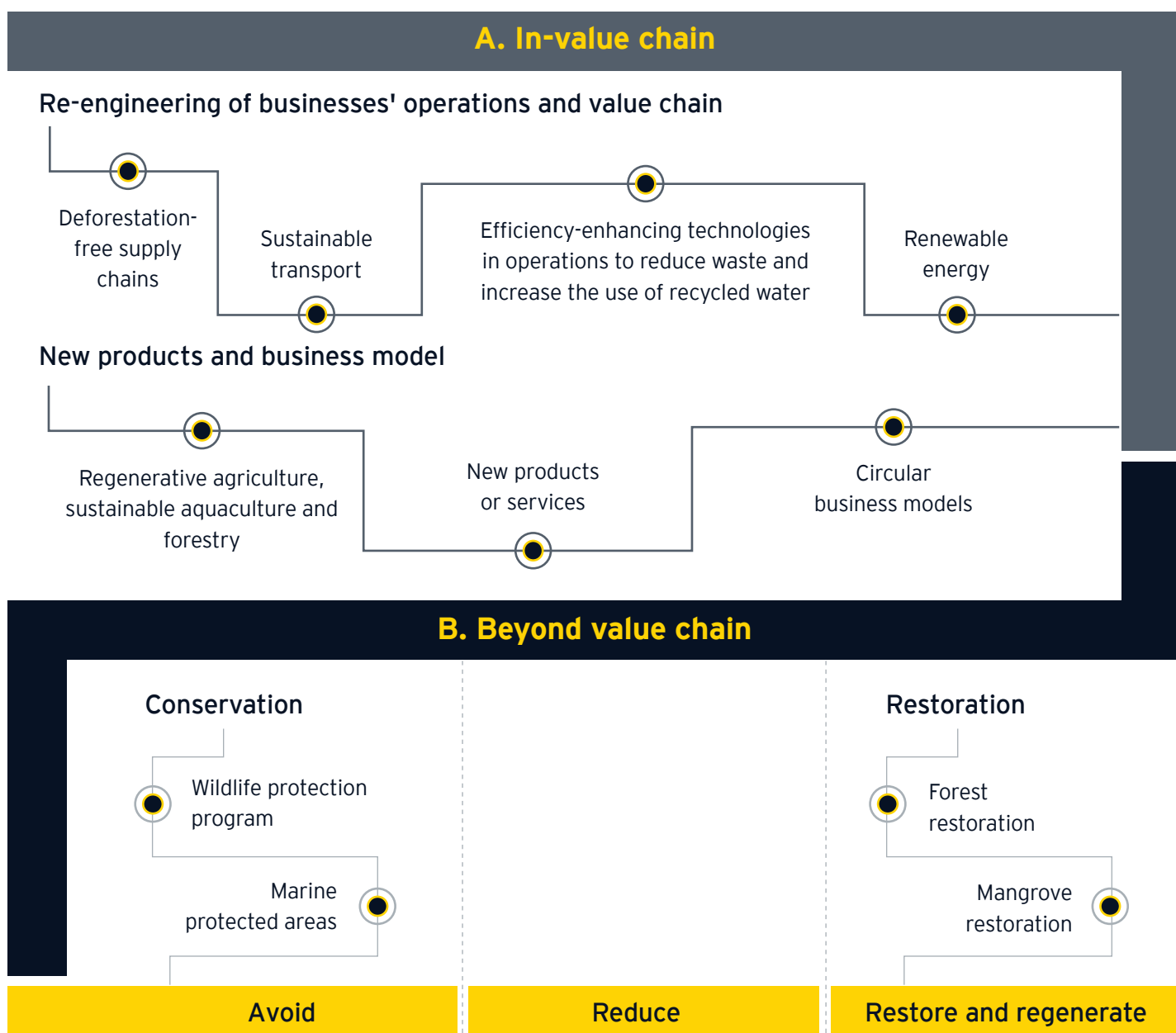


The nature of these investments opens significant lending and investment opportunities for financial institutions. Private financial flows such as biodiversity credits, impact investments or blended finance are crucial to unlock opportunities:³¹

A Financing “in-value chain” opportunities implies transformation of corporate business practices, involving technologies (e.g., low-carbon products, recycling), business models (e.g., regenerative agriculture), and production and consumption practices that avoid and reduce a company’s negative impact on nature.

B Financing “beyond value chain” opportunities implies conservation as well as restoration projects and activities, which include, among others, protecting wildlife, cleaning up coastal and marine areas, or restoring mangroves.

Critical value chains for realizing the transitions in the three socio-economic systems that contribute to nature-positive outcomes



Source: WEF’s “The Future of Nature and Business” report 2020.

Global financial institutions have already started realizing the significant market opportunities presented by investments in nature.³²

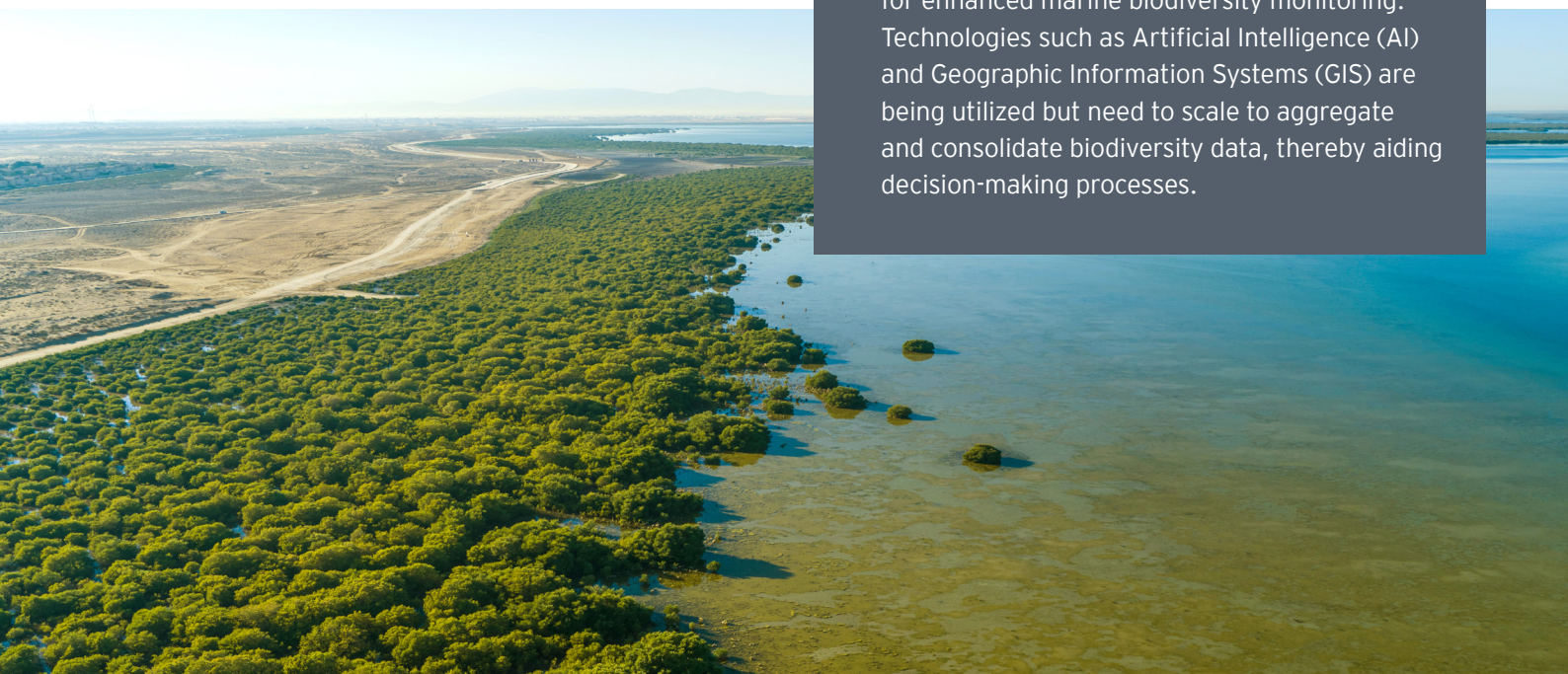
- Over 71 financial institutions, collectively managing more than US\$14t in assets, have joined the Partnership for Biodiversity Accounting Financials (PBAF).³³ This collaboration aims to enhance their capacity for assessing biodiversity impacts and dependencies, while working toward the standardization of assessment methodologies.
- More than 230 institutional investors, representing over US\$30t in assets under management or advisory, have united through the Nature Action 100 initiative.³⁴ This group aims to engage with companies and policymakers on critical nature-related issues.
- Additionally, 34 financial institutions, with more than US\$8t in assets under management, are collaborating through the Finance Sector Deforestation Action (FSDA).³⁵ Their objective is to eliminate deforestation risks linked to agricultural commodities such as cattle, soy, palm oil, pulp and paper, in their investment and lending portfolios, while aiming to increase investments by 2025.

The 2024 United Nations Biodiversity Conference (COP16) highlights

The Conference of the Parties (COP16) to the UN Convention on Biological Diversity (CBD), held in Cali, Colombia, resulted in significant commitments to advance global biodiversity conservation. Key pledges reaffirmed the Kunming-Montreal GBF goals, such as protecting 30% of the world's lands and waters and restoring 30% of degraded ecosystems by 2030.

The discussions highlighted the progress made and limitations faced in nature-related financing such as:

- **Data platforms:** The Taskforce on Nature-related Financial Disclosures (TNFD) has published a roadmap for a Nature Data Public Facility (NDPF) and Finance for Biodiversity (FfB) has launched its biodiversity data platform, both of which are pivotal in enhancing biodiversity data accessibility and usability.
- **Reporting requirements:** The new reporting requirements aim to improve transparency and data quality on corporate operations and supply chains, facilitating better biodiversity management.
- **Data availability:** While substantial data exists for terrestrial and freshwater ecosystems, oceanic data remains limited, indicating a need for enhanced marine biodiversity monitoring. Technologies such as Artificial Intelligence (AI) and Geographic Information Systems (GIS) are being utilized but need to scale to aggregate and consolidate biodiversity data, thereby aiding decision-making processes.



4 Building on nature for strategic advantage

MENA nations are making steady strides incorporating the 2030 UN Sustainable Development Goals (SDGs) agenda into their national policies and strategies.

The MENA region contributes to global biodiversity conservation through its participation in the CBD, a legally binding international treaty focused on conserving biodiversity, promoting its sustainable use and sharing its benefits equitably.



MENA nations are also advancing toward the UN SDGs by integrating the 2030 Agenda for Sustainable Development into their national policies and strategies.

Additionally, the TNFD is gaining traction, with more financial institutions and corporations aligning their reporting practices with its guidelines. This framework helps organizations disclose nature-related risks and opportunities, enabling better management of their impacts on biodiversity and ecosystems.


Supported by strong national leadership, many MENA countries are launching ambitious initiatives focused on conservation and sustainability.



Overview of select national-level biodiversity conservation activities in the MENA region

Country	Description
 UAE ³⁶	<ul style="list-style-type: none"> The National Biodiversity Strategy focuses on integrating biodiversity into all sectors, enhancing knowledge and improving biodiversity status. Committed to achieve 30% coverage of marine and terrestrial areas by 2030. Leading the Global Mangrove Alliance (GMA) and committed to plant 100 million mangroves.
 Kingdom of Saudi Arabia (KSA) ³⁷	<ul style="list-style-type: none"> Launched national-level protected areas system plan in 2024. Committed more than US\$186b to plant 10 billion trees and protect 30% of its land and marine areas by 2030 under the Saudi Green Initiative. Committed to restore 200 million hectares of degraded land and plant 50 billion trees across the Middle East.
 Qatar ³⁸	<ul style="list-style-type: none"> The National Biodiversity Strategy focuses on improving scientific knowledge, raise public awareness and participation in conservation and protection of species and habitats. Conserve and manage more than 25% of the total land area by 2030.
 Bahrain ³⁹	<ul style="list-style-type: none"> The National Biodiversity Strategy focuses on a long-term vision aiming to “strive toward improving resilience of all four ecosystems.” Conserve and effectively manage six existing protected areas.
 Egypt ⁴⁰	<ul style="list-style-type: none"> The National Biodiversity Strategy focuses on restoring ecosystems, promoting sustainable agriculture and expanding the scope of nature reserves. Expand the protected areas to 17% of terrestrial and inland water by 2030.

Biodiversity conservation presents MENA-based financial institutions with more than just a financial opportunity; the benefits it offers extend beyond direct monetary gains. The following are the advantages for institutions engaging in biodiversity conservation efforts:



Transition opportunities for regional growth: Embracing biodiversity opens opportunities for the financial sector to drive sustainable development in the Middle East. This aligns with the UAE's economic diversification efforts, moving away from the reliance on oil and gas for economic growth.

Decarbonization through nature-based solutions: Financing investments in reforestation, mangrove plantations and other ecosystem services can contribute significantly to the region's decarbonization targets. These efforts enhance natural carbon sinks, presenting another opportunity for financial institutions to leverage in their investment strategies.

Enhancing portfolio resilience: By integrating biodiversity considerations into investment strategies, financial institutions can reduce exposure to climate risks. These risks can threaten financial stability, particularly in the region's resource-dependent economies.

Green finance leadership: Biodiversity-focused financing, such as green bonds tied to conservation projects, positions financial institutions as leaders in sustainable finance. This appeals to global investors seeking environmentally responsible investments.

Supporting climate adaptation: Investments in nature-based solutions provide co-benefits for climate adaptation. These include reducing heat islands and preventing desertification, which are crucial for the arid climates of the Middle East. Financial institutions in the UAE can focus on climate adaptation, including ambitious pledges to plant 100 million mangrove trees by 2030, coral reef rehabilitation and restoring desert habitats to safeguard native species.

Alignment with international standards: Embracing biodiversity helps align with global commitments such as the SDGs, the Kunming-Montreal Global Biodiversity Framework and reporting on nature-related risks, as per the recommendations of the TNFD, of which Emirates NBD is an early adopter.

Risk management and compliance: Biodiversity initiatives prepare financial institutions to meet emerging regulatory requirements and Environmental, Social and Governance (ESG) expectations, reducing the risk of regulatory non-compliance.

As the need to address nature and biodiversity grows more urgent, financial institutions must adopt a strategic approach that identifies and mitigates nature-related risks while seizing emerging opportunities. This approach is vital not only for global sustainability but also for the economic resilience of the MENA region. By aligning financial strategies with environmental objectives, institutions can drive meaningful positive outcomes for both nature and businesses.

Depending on their mandate, financial institutions should embrace the following three steps to act on their nature-and biodiversity-related agendas:



Identify nature-related risks and opportunities



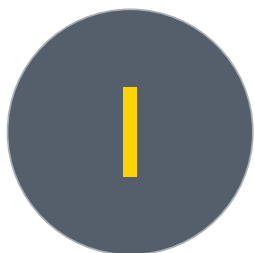
Integrate natural capital valuation across products and services



Align with the TNFD recommendations and prepare for disclosures







Identify nature-related risks and opportunities



A critical challenge in addressing biodiversity loss and its economic impact is the complexity of measuring biodiversity risks. Unlike climate change, which has established indicators like Greenhouse Gas (GHG) emissions, there are no standardized metrics for biodiversity — making it far harder to assess and mitigate the true scale of the crisis.

Nature-related risks and opportunities

As the degradation of natural ecosystems accelerates, nature-related risks are becoming increasingly apparent. The loss of vital ecosystem services – such as pollination, water purification and climate regulation – threatens both human wellbeing and economic stability. These risks are categorized into two primary dimensions: physical and transitional.

A Physical risks: decline in ecosystem services

- **Habitat loss and biodiversity decline:** Urbanization, deforestation and land conversion are contributing to the destruction of habitats, leading to a decline in biodiversity. This reduces ecosystem resilience, making it harder for ecosystems to recover from disturbances.
- **Water scarcity:** The degradation of natural water catchment areas is reducing the availability of clean water. Overuse and pollution are exacerbating the problem, threatening agriculture, industry and basic human needs.
- **Climate and hydrological disruptions:** Altered climate patterns and disruptions in hydrological cycles are driving extreme weather events, including floods and droughts, which can devastate communities and supply chains.

B Transitional risks: misalignment with nature conservation goals

- **Increased regulatory pressure:** Regulatory frameworks are evolving in response to the biodiversity crisis. Initiatives like the CBD and the EU's Biodiversity Strategy for 2030 emphasize the importance of sustainable finance, urging financial institutions to integrate biodiversity risks into their risk management processes.⁴¹ Additionally, the TNFD provides guidelines for disclosing nature-related dependencies, impacts, risks and opportunities, helping institutions align their operations with biodiversity conservation goals.⁴²
- **Cost implications and liabilities:** The introduction of stricter environmental regulations could impose additional costs on businesses, creating potential financial liabilities. Businesses that fail to align with these emerging policies may face regulatory fines, legal actions and increased operational expenses.

- **Investor pressures:** With the growing importance of nature-related risks, investors are becoming more focused on reducing exposure to biodiversity loss. Those who fail to consider nature conservation in their strategies could face the risk of their assets losing value, as market dynamics shift and regulatory transformations occur.

Navigating nature-related risks and opportunities

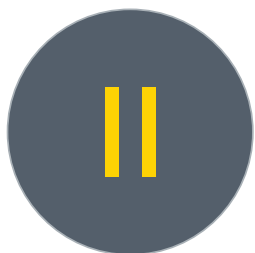
Identifying and addressing nature-related risks are complex challenges but several tools are now available to guide businesses and financial institutions.

The Natural Capital Finance Alliance (NCFA), a global coalition of financial institutions, is at the forefront of pioneering tools and best practices to manage natural capital risks and opportunities. A key initiative is the Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool, developed by the ENCORE Partnership (Global Canopy, UNEP FI, and UNEP-WCMC). ENCORE helps financial institutions to evaluate how the economy is exposed to risks associated with natural capital. This is especially useful for identifying and measuring nature-related risks within investment portfolios. The tool includes a biodiversity module that supports alignment with global conservation goals. It also offers advice for sectors such as agriculture and mining on how to mitigate their environmental footprint.⁴³

As the field develops, new tools are emerging, including WWF's Biodiversity Risk Filter, which helps prioritize actions to address biodiversity risks, and GIST Impact Biodiversity, which evaluates the value of nature. Additionally, the PBAF is working to provide frameworks for assessing and quantifying the impact of investments on biodiversity.⁴⁴

The measurement of natural capital is still in its early stages, with many biodiversity initiatives lacking robust frameworks. To address this, governments and regulatory bodies are introducing standards like the United Nations' System of Environmental Economic Accounting (SEEA) to help countries integrate natural capital into economic decisions.⁴⁵

However, the financial services industry may face significant challenges in navigating the evolving landscape of standards, regulations and disclosure requirements. Achieving positive change demands coordinated efforts across global objectives, national policies, corporate actions, involvement and individual commitments.



Integrate natural capital valuation elements across products and services



Natural ecosystems are highly complex and interconnected. Ignoring these systems in financial assessments can overlook important ecological interactions ultimately leading to a lack of financial stability.



Natural ecosystems are intricate and interconnected. Reducing these systems to monetary values can overlook important ecological interactions which may result in incomplete assessments. Moreover, the often-limited availability of comprehensive financial, environmental and social data complicates the valuation of natural capital. This lack of data makes it challenging to create reliable and consistent valuations. The absence of a universally accepted method for valuing natural capital further complicates the issue, as different approaches can yield vastly different results, hindering effective comparison and utilization of these valuations.⁴⁶

For the financial sector, incorporating the value of natural capital into risk management frameworks is crucial for identifying and mitigating environmental risks, particularly those related with biodiversity loss and ecosystem degradation. Moreover, the valuation of natural capital can unlock new market opportunities, including carbon credits, biodiversity credits and green bonds, thereby fostering financial tools that drive sustainable investment.

There are various methods of valuing natural capital. These range from utilizing the market price of a natural resource, to cost-based methods, revealed preference methods and even stated preference methods.

Brief overview of the most common methods to value natural capital

Type	Method	Description	Advantages	Limitations	Sector application
Market-based	Market-price method	Values natural resources based on their market prices	Simple and based on observable data	Only applicable to resources with established markets	Forestry, fisheries, agriculture, mining
Cost-based	Replacement cost method	Values ecosystem services by the cost of replacing them with human-made alternatives	Practical and tangible	May oversimplify complex ecosystem functions	Water management, coastal protection, air quality
	Avoided cost method	Values ecosystem services by the costs avoided if these services were lost	Useful for policy and cost-benefit analysis	Does not capture non-use values	Disaster risk reduction, water management, health
Revealed preference	Hedonic pricing method	Values environmental attributes by their impact on property prices	Based on actual market behavior	Requires extensive data and complex analysis	Real estate, urban planning, tourism
	Travel cost method	Values recreational sites by the travel expenses incurred by visitors	Reflects actual behavior and willingness to pay	Data-intensive and limited to recreational sites	Recreation, tourism, national parks
Stated preference	Contingent valuation	Values ecosystem services based on people's stated willingness to pay	Can capture non-market values	Subject to biases and hypothetical scenarios	Conservation, biodiversity, cultural heritage
	Choice modeling	Values ecosystem services by presenting people with choices and observing their preferences	Captures trade-offs and preferences	Complex and requires sophisticated analysis	Environmental policy, urban planning, conservation
Valuation transfer	Benefit transfer method	Values ecosystem services by transferring existing valuation estimates from similar contexts	Cost-effective and quick	Less accurate and context-dependent	Environmental policy, conservation

Source: IUCN's "Tools for measuring, modelling, and valuing ecosystem services" 2018 report and Think 20 Japan's "Mainstreaming Natural Capital Valuation" 2029 report

Emerging products and services

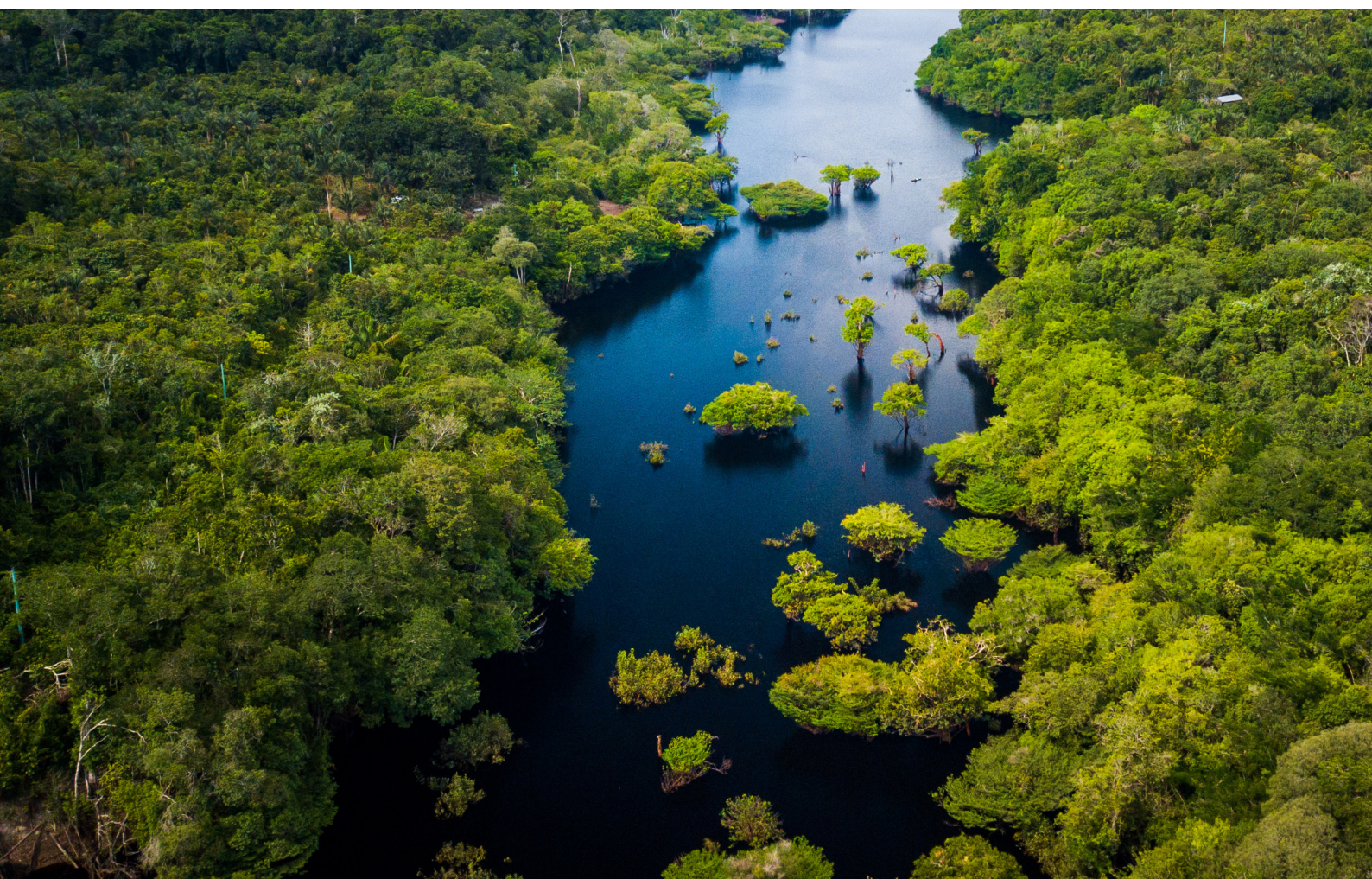
At a global level, various biodiversity and nature-related financing instruments are being discussed and tested in the markets:

- The biodiversity credits market is in its nascent stages, but it presents a compelling tool for financing biodiversity conservation. Biodiversity credits are verifiable, quantifiable and tradable units representing the restoration or preservation of biodiversity over a defined period. They hold promise as a scalable mechanism to increase nature-positive investments.
- Debt-for-nature swaps are gaining traction as a solution for highly indebted countries vulnerable to climate change. This approach allows these nations to exchange debt obligations for investments in nature- and climate-related initiatives.
- Biodiversity bonds are emerging as a new frontier in the fixed-income markets. Institutions like the EU and the World Bank were early issuers of this form of debt, and now corporate entities are following suit. Two types of corporate biodiversity bonds are particularly prominent:
 - The first is the Use of Proceeds (UoP) bond, where the funds raised are specifically allocated to sustainability initiatives.
 - The second type of biodiversity bond gaining popularity among corporate issuers is the Sustainability-linked Bond (SLB). The key feature of SLBs is their inclusion of a mechanism that adjusts the bond's terms, such as interest rates or coupons, based on the company's ability to meet predefined performance objectives within a set timeframe.





Align with the TNFD recommendations and prepare for disclosures



Over 500 organizations, including 129 financial institutions are now registered as the TNFD adopters, representing US\$17.7t in Assets Under Management (AUM) now committed to the TNFD-aligned risk management and corporate reporting. These also include 25% of the world's systemically important banks (GSIBs).⁴⁷



The TNFD provides a comprehensive framework for organizations to report and manage these aspects effectively. The TNFD framework aligns with global policy goals, such as the Kunming-Montreal GBF, promoting consistency in disclosures with international standards and commitments.

Following the release of the TNFD recommendations in September 2023, the adoption of the European Sustainability Reporting Standards (ESRS) and the most recent update to the Global Reporting Initiative (GRI), known as GRI 101: Biodiversity 2024 are supporting the advancement of sustainability reporting. In April 2024, the International Sustainability Standards Board (ISSB) has also announced its decision to commence work on nature-related issues drawing on the recommendations of the TNFD.⁴⁸

The TNFD framework aims to integrate nature-related risks into business and financial decision-making, like how the Task Force on Climate-related Financial Disclosures (TCFD) addresses climate risks.

Its structure comprises four pillars:

Governance

Organizations disclose their governance around nature-related issues, including board oversight and management's role in assessing and managing these issues.

Strategy

Disclosures include the effects of nature-related dependencies, impacts, risks and opportunities on the organization's business model, strategy and financial planning.

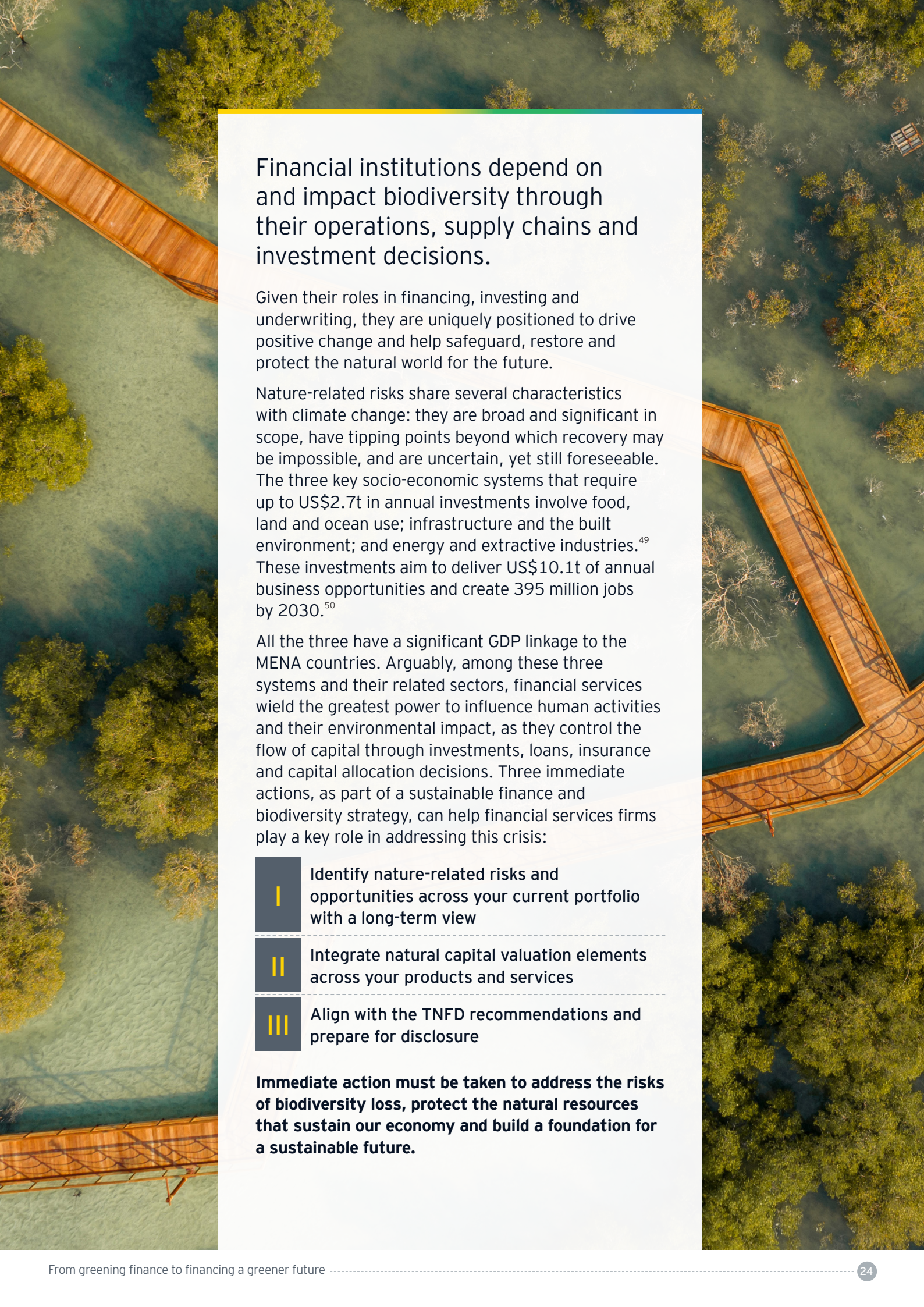
Risk and impact management

Organizations describe their processes for identifying, assessing and managing nature-related risks and impacts.

Metrics and targets

Disclosures cover the metrics and targets used to assess and manage nature-related risks and opportunities.

As financial institutions in the MENA region increasingly recognize the importance of biodiversity and natural capital in their risk management and reporting frameworks, the TNFD provides a critical structure for assessing and disclosing nature-related risks and opportunities.



Financial institutions depend on and impact biodiversity through their operations, supply chains and investment decisions.

Given their roles in financing, investing and underwriting, they are uniquely positioned to drive positive change and help safeguard, restore and protect the natural world for the future.

Nature-related risks share several characteristics with climate change: they are broad and significant in scope, have tipping points beyond which recovery may be impossible, and are uncertain, yet still foreseeable. The three key socio-economic systems that require up to US\$2.7t in annual investments involve food, land and ocean use; infrastructure and the built environment; and energy and extractive industries.⁴⁹ These investments aim to deliver US\$10.1t of annual business opportunities and create 395 million jobs by 2030.⁵⁰

All the three have a significant GDP linkage to the MENA countries. Arguably, among these three systems and their related sectors, financial services wield the greatest power to influence human activities and their environmental impact, as they control the flow of capital through investments, loans, insurance and capital allocation decisions. Three immediate actions, as part of a sustainable finance and biodiversity strategy, can help financial services firms play a key role in addressing this crisis:



Identify nature-related risks and opportunities across your current portfolio with a long-term view



Integrate natural capital valuation elements across your products and services



Align with the TNFD recommendations and prepare for disclosure

Immediate action must be taken to address the risks of biodiversity loss, protect the natural resources that sustain our economy and build a foundation for a sustainable future.

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Notes:

- According to the World Bank classification, the MENA region includes the following countries: United Arab Emirates, Bahrain, Djibouti, Algeria, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Malta, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, and Yemen.
- The MENA financial services sector includes banking, insurance, stock markets, and debt markets in the countries identified under the MENA classification above.

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