

Nurturing Natural Capital

The Middle East
Imperative



**WORLD
GOVERNMENT
SUMMIT 2023**

in collaboration with

 OliverWyman

To Inspire and Enable The Next Generation of Governments

The World Government Summit is a global platform dedicated to shaping the future of governments worldwide. Each year, the Summit sets the agenda for the next generation of governments with a focus on how they can harness innovation and technology to solve universal challenges facing humanity.

The World Government Summit is a knowledge exchange center at the intersection of government, futurism, technology, and innovation. It functions as a thought leadership platform and networking hub for policymakers, experts, and pioneers in human development.

The Summit is a gateway to the future as it functions as the stage for analysis of future trends, concerns, and opportunities facing humanity. It is also an arena to showcase innovations, best practice, and smart solutions to inspire creativity to tackle these future challenges.

القمة WORLD
العالمية GOVERNMENT
للحكومات SUMMIT

القمة WORLD
العالمية GOVERNMENT
للحكومات SUMMIT

القمة WORLD
العالمية GOVERNMENT
للحكومات SUMMIT





Table of Contents

Context	06
The Middle East And Nature: An Evolving Relationship	09

Challenges And Opportunities: The Imperative For a Rigid Framework To Protect Environmental Capital	12
---	-----------

The Taskforce On Nature-Related Financial Disclosures (TNFD) Explained	16
TNFD's Relationship With The Task Force on Climate-Related Financial Disclosure (TCFD)	19
Towards Better Business: Why Disclosure And Transparency Matter	20

Lessons Learned From Climate Change Frameworks And The TNFD Pilot	22
Learnings From Implementing The TCFD	23
Key Learnings From The TNFD Pilot	26
Applying Learnings In A Middle Eastern Context	29

Implementation Of The TNFD Framework In The Region	30
--	-----------

Conclusion	34
------------	-----------

Context

“The consequences of environmental and nature degradation are severe”

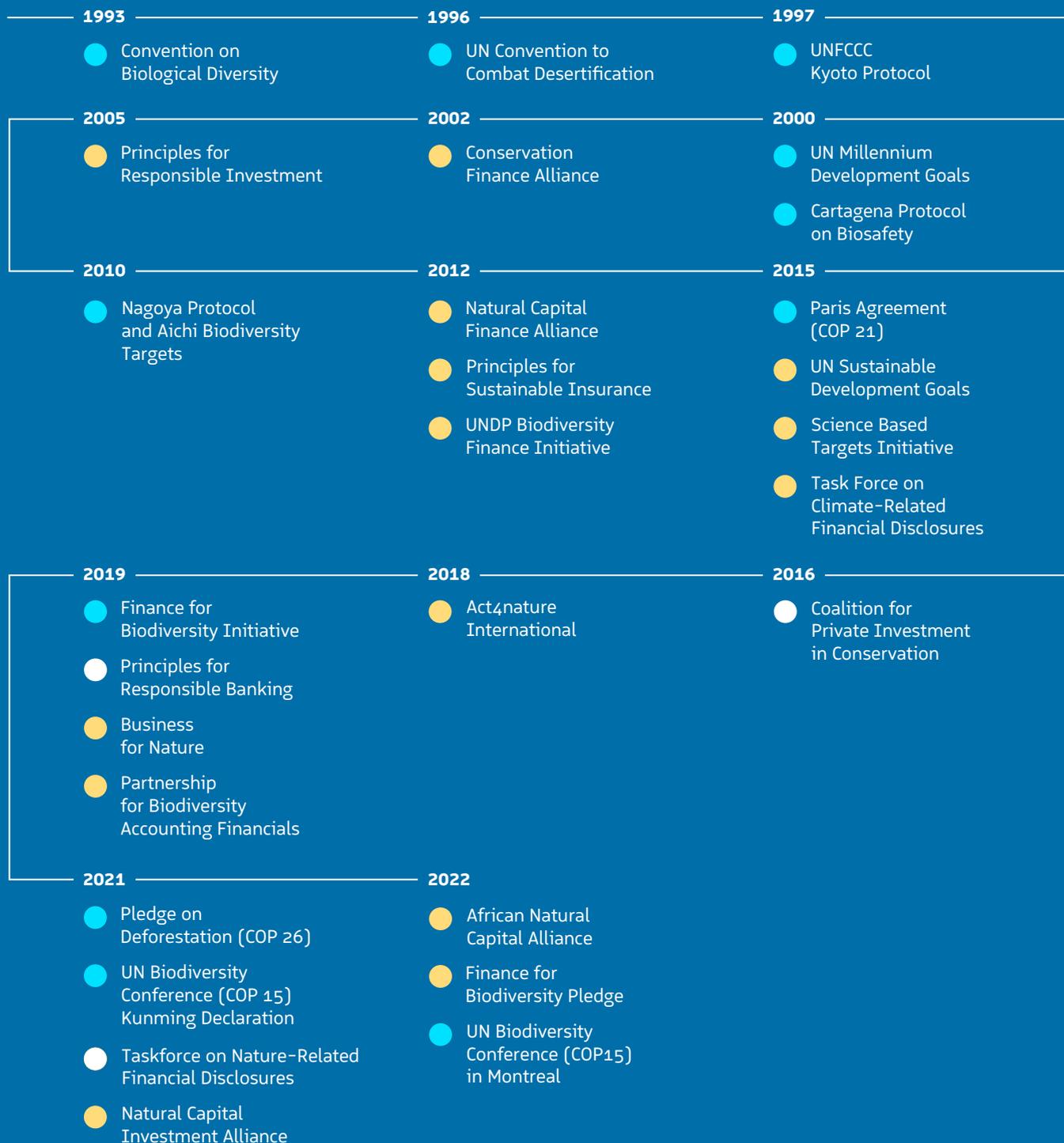




With more than half the world's economic output (an estimated US\$44 trillion) either highly or moderately dependent on the environment, the consequences of environmental and nature degradation are severe.¹ We have already started to see the impact of extreme biodiversity loss, widespread pollution, and overconsumption of natural resources in areas such as societal health, supply chain, and food security – and this is all compounded by the challenges of climate change. These phenomena present a major threat to key industries that are reliant on nature, such as agriculture, food and beverages, and construction. Combined, these industries generate US\$8 trillion in gross value added.²

Since the 1990s, countries and industries alike have entered partnerships and launched initiatives to address the vulnerability of nature-dependent sectors. This has led to a growing interest in disclosure around nature impact, a concept first introduced with the Coalition for Private Investment in Conservation in 2016. The work of this coalition continued with the introduction of the Principles for Responsible Banking in 2019. More recently, we have seen the launch of the Taskforce on Nature-Related Financial Disclosures (TNFD), a development that promises to become a leading global framework.

Figure 1
Selected Nature-Related Initiatives



Type of initiative

- International agreement
- Disclosure/target guidance
- Industry network

Abbreviations:

- TCFD:** Task Force on Climate-Related Financial Disclosures
- TNFD:** Task Force on Nature-Related Financial Disclosures
- PRI:** Principles for Responsible Investment
- PRB:** Principles for Responsible Banking

Source: Marsh McLennan Advantage analysis

As a TNFD forum member, Marsh McLennan is directly involved in shaping the disclosures framework and has undertaken several projects to bolster its development. In May 2022, the company published a position paper titled *Embracing Nature: How Business Can Engage With New Environmental Imperatives*, while the Oliver Wyman Forum explored the subject further in a paper called *Ready Or Not: The Business Case For Nature*. Additionally, in March 2022, CDP and Oliver Wyman also released the *Now For Nature* report.

Oliver Wyman has, furthermore, played a significant role in supporting a number of leading

financial institutions in piloting the TNFD beta frameworkⁱ, testing its suitability and applicability in the African context. Most recently, Oliver Wyman supported FSD Africa in the set-up of the African Natural Capital Alliance (ANCA), a public-facing group aiming to position the financial sector as an enabler for nature-positive economies. Oliver Wyman is a knowledge and execution partner of ANCA. With the deep insight gained from working alongside major institutions to identify and describe their individual nature risks and opportunities, Oliver Wyman is committed to helping regions account for and protect their natural capital.

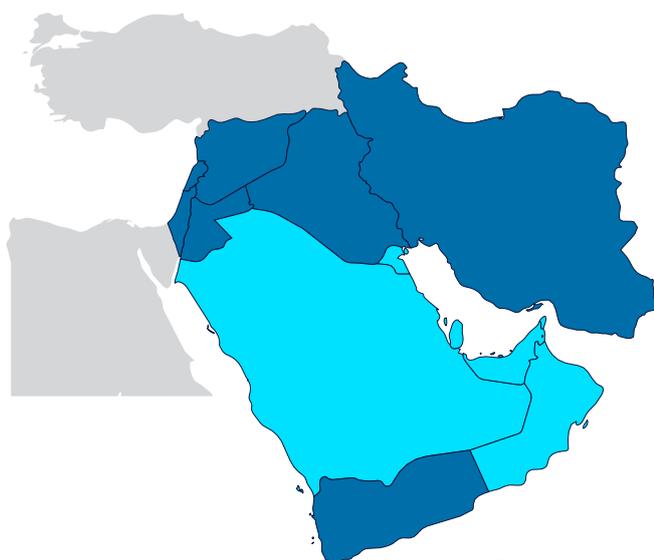
The Middle East And Nature: An Evolving Relationship

The Middle East faces a number of environmental challenges, including scarce water resources and desertification. Governments have responded

by developing multiple environmental policies and regulations, as well as tools to enhance enforcement levels.

This Report Defines The Middle East Region As Including:

Gulf Cooperation Council (GCC):	
United Arab Emirates (UAE)	
Saudi Arabia (KSA)	
Bahrain	
Qatar	
Kuwait	
Oman	
Lebanon	Iran
Palestine	Iraq
Syria	Israel
Yemen	Jordan



Gulf Cooperation Council (GCC) countries have been especially active in this area, and have launched a number of programs which have translated into enhanced environmental performance (Figure 2).

(i) TNFD is currently developing a cross-industry framework for corporates and financial institutions to assess, report, and act on nature-related risks and opportunities.

Figure 2
Examples of Regional Environmental Protection Efforts

	UAE	KSA	Qatar	Kuwait	Bahrain
Population (Million)	10	35.3	2.9	4.3	1.7
Surface area (km ² , thousands)	98.6	2149.7	11.5	17.8	0.8
Environmental Performance Index ⁱ (EPI) 2022 Rank ⁱⁱ	39	109	137	87	90
EPI 10 Year Change	15.9	9.5	-2.3	15.2	5.7
Environmental Protection	Environment Vision 2030	National Environment Strategy 2030	Environmental Sustainability Strategy 2017-2022	New Kuwait 2035	National Environmental Strategy
Biodiversity	National Biodiversity Strategy and Action Plan 2014-2021	National Environment Strategy 2030, Saudi Green Initiative	National Biodiversity Strategy and Action Plan 2015-2025	National Biodiversity Strategy and Action Plan 2011-2020	National Biodiversity Strategy and Action Plan 2016-2021
Water Resource Management	Water Security Strategy 2036	National Water Strategy 2030	Water Strategy 2030	National Adaption Plan 2019-2030	National Water Strategy 2030

(i) The index provides a data-driven summary of the state of sustainability using 40 performance indicators across 11 categories, covering biodiversity, water management, environmental health, and climate change

(ii) Rank out of 180 countries

Source: World Bank, Convention for Biological Diversity (CBD), Yale Environmental Performance Index (EPI), KSA Ministry of Environment, Water, and Agriculture (MEWA), Saudi Green Initiative, New Kuwait 2035

While tackling nature-related issues at a high level, GCC countries are also targeting specific ecosystems.

The UAE: Recognizing The Importance Of Mangroves

Mangroves are ecologically significant for several reasons: in addition to protecting shorelines and improving water quality, they provide nursery grounds for terrestrial and aquatic species, sequester and store atmospheric carbon, and create opportunities for recreation and tourism.

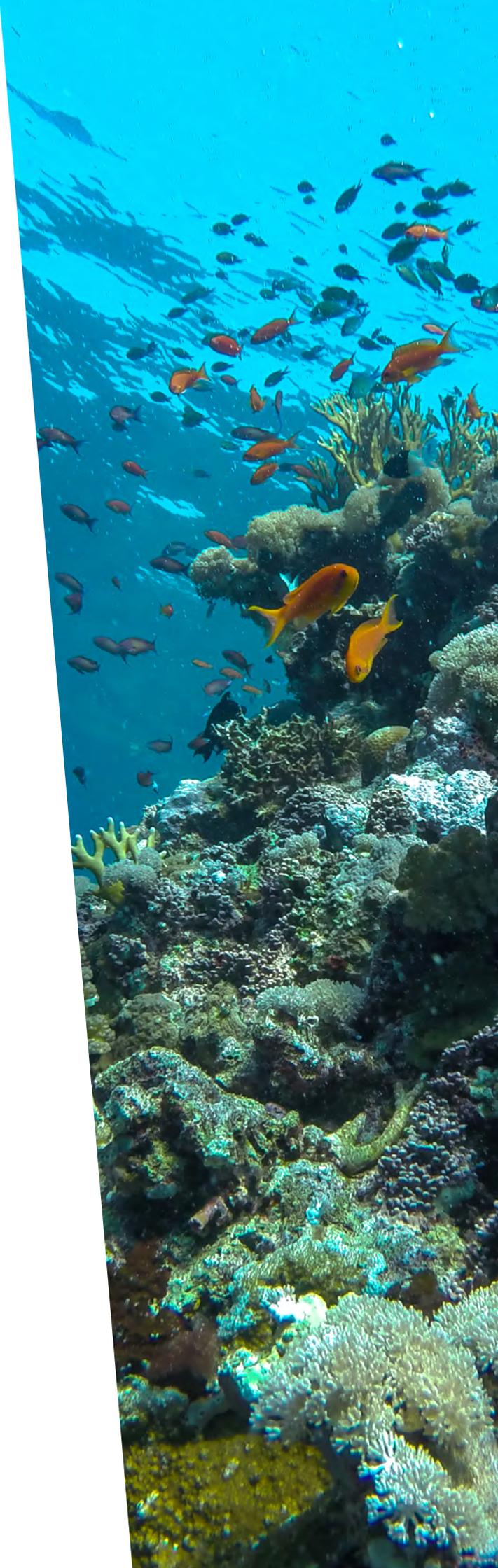
The UAE has taken significant measures to protect and restore the species, with the result that Abu Dhabi has the oldest known mangrove

restoration and afforestation initiatives in the world. These have proved highly successful: according to the Food and Agriculture Organization of the United Nations (FAO), 22% of the world’s mangroves have been lost over the past 30 years,³ while UAE mangroves have doubled during this time. The country now hosts 48% of the mangroves in the Gulf region⁴ and it has announced a nationwide plan to plant 100 million mangroves by 2030.⁵

KSA: Conserving Endemic Red Sea Corals⁶

Saudi Arabia is leading conservation efforts of Red Sea corals, and to this end addresses marine life protection in its updated environmental regulations, providing for increased measures to protect corals and deter violations. Moreover, Saudi Arabia's giga-projects along the Red Sea Coast include the protection and restoration of coral reefs. Saudi Arabia also addressed the subject at the 2020 G20 Summit when it launched the Coral Research & Development Accelerator Platform (CORDAP), a project which fast-tracks research and development solutions targeting coral conservation. In June 2021, the country announced that Shushah Island, located in the Red Sea, is set to become the site of one of the world's largest coral reef restoration projects. This initiative aims to showcase innovative technologies and strategies targeting coral restoration, which can be exported to the rest of the world.

The purpose of this paper is to demonstrate how the TNFD and its approach would benefit the region while enabling the private sector to support and accelerate the impact of government policies.



Challenges And Opportunities

The Imperative For a Rigorous
Framework To Protect
Environmental Capital



According to the United Nations Environment Programme (UNEP), the world's ecosystems have declined in size and condition on average by 47% globally, relative to their earliest estimated states. This translates into a degradation of ecosystem services (i.e., regulating services such as water purification, provisioning services such as food, supporting services such as nutrient cycling, and cultural services such as natural heritage), representing an annual loss of at least US\$479 billion per year.⁷

In the Middle East, there is compelling evidence that environmental degradation can cause business losses in sectors that rely on natural capital, such as agriculture, fisheries and aquaculture, tourism, and seawater desalination (Figure 3). With 40-50% of the Middle East's Gross Domestic Product (GDP) highly or moderately dependent on the environment,⁸ the protection of limited resources, endemic vegetation, and wildlife is crucial in terms of long-term sustainability. It is therefore vital that Middle Eastern countries protect their natural and environmental capital.

Figure 3
Examples of Nature Systemic Risks in the Region

Sector	Examples
Agriculture	<p>The Middle East is home to 12 of the world’s 17 most water-stressed countries. Climate-related water scarcity will cost Middle Eastern countries up to 14% of their GDP by 2050,⁹ which is significantly attributable to water-related impacts on agriculture.</p> <p>Between 70–90% of the Arabian Peninsula is under threat of desertification,⁴⁹ making the area unsuitable for agriculture and affecting up to 143 million people. High levels of internal displacement are expected as a result of this trend.</p>
Fisheries and aquaculture	<p>GCC countries are concentrating efforts to develop a robust aquaculture sector as they shift from oil-based economies. Aquaculture production in the Middle East has increased five-fold over the past 20 years,¹¹ and shrimp is projected to be the fastest-growing seafood in the region. Saudi Arabia is planning a sector GDP contribution of up to US\$4 billion by 2030.¹²</p> <p>The Middle East seafood market was valued at US\$21.28 billion in 2022, and is projected to reach US\$24 billion in 2028. Marine and coastal pollution can have detrimental effects on both fishing and aquaculture, leading to large financial losses and threats to food security.</p>
Tourism	<p>The tourism sector in the Middle East contributes 8.9% towards the total economy, translating into a US\$270 billion contribution towards GDP.⁴³ The sector is experiencing unprecedented growth as GCC countries increasingly turn towards tourism as a strategic lever for the diversification of their oil-based economies, with Oman seeing more than 10% of its total GDP coming from tourism, for example.⁴⁴</p> <p>Ecotourism has become one of the fastest-growing tourism segments in the GCC. Market size is projected to increase from US\$519 million in 2021 to US\$652 million in 2028.⁴⁵</p> <p>Countries in the Middle East are building on their natural assets to attract tourists. Saudi Arabia is seeking to showcase the pristine ecosystems of the Red Sea coast, with a number of tourist attractions under development in this area. The UAE, meanwhile, has launched a plan to position the Emirates as a leading global ecotourism destination.</p> <p>Environmental degradation will result in the loss of natural assets that are central to the development of the tourism industry, with significant consequences. For example, Saudi Arabia’s investment in coastal tourism projects has the potential to contribute US\$1.2 billion to annual GDP (as per Oliver Wyman’s analysis). Protecting and restoring ecosystems will support the long-term materialization of economic returns.</p>
Desalination	<p>Investment in desalination projects across the Middle East and North Africa has increased substantially in recent years and currently accounts for 48% of global desalination projects. Further investments of up to US\$100 billion have been planned for the next five years.¹⁶</p> <p>GCC countries are especially reliant on desalination to solve water-scarcity issues and satisfy demand for municipal, irrigation, and drinking water.</p> <p>The quality of seawater and the level of pollution impacts desalination processes, particularly in terms of process utilization and cost structures. This is because microplastics, present in the water as a result of subpar waste management, can block the membranes that are used in the process. The process employed to adapt membranes to remove microplastics leads to additional costs, impacting current desalination methods.</p>

While the private sector is a vital part of Middle Eastern society, its contribution in the area of addressing nature-related loss has, to date, been minimal. However, the private sector's work towards solving challenges related to climate change — through actions such as net-zero strategies and compensations and offsets — shows that, with the right frameworks and enablers in place, such contributions are possible. They are also, arguably, necessary. For example, financial institutions can play a critical role in preventing the continued loss of nature at its current scale and pace by shifting capital away from nature-negative outcomes towards nature-positive ones.

Prior to taking any such action, the private sector must understand how natural ecosystems affect their assets, operations, value chains, and stakeholders. These complex interactions must then be converted into simple, one-dimensional metrics. No formula exists to do this; hence the importance of developing science-based frameworks to help companies assess, report, and act on nature-related risks and opportunities. Ultimately, this will help private-sector companies to meet their nature-related goals.

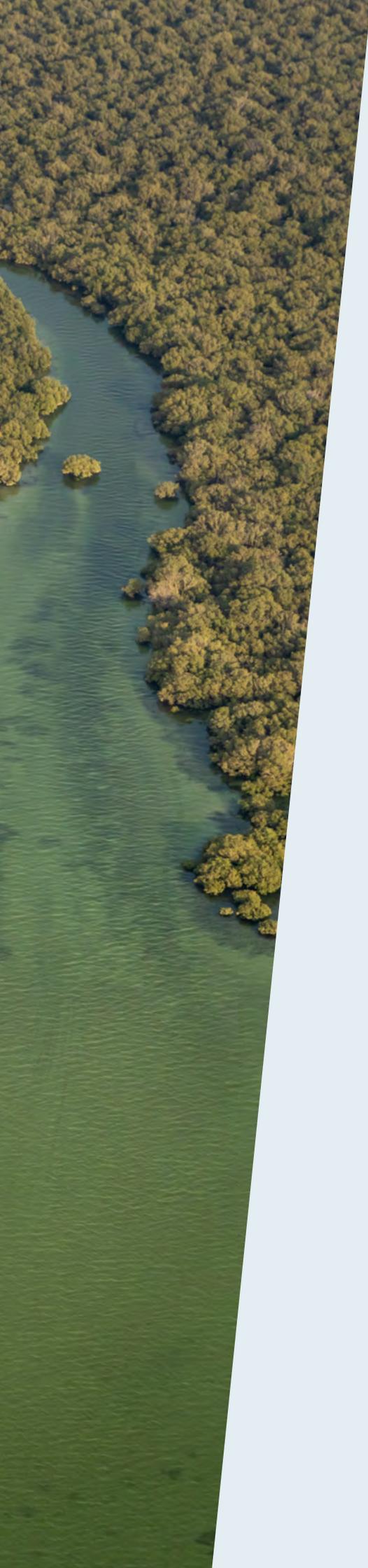
“It is vital to base environmental action on a comprehensive understanding of the private sector’s impact and dependency on nature”



The Taskforce On Nature-Related Financial Disclosures

(TNFD) Explained





The TNFD was established in 2021 in response to the growing appreciation for the need to factor nature, and not only climate, into financial and business decisions. The TNFD is developing a risk management and disclosure framework that guides institutions to report and act on evolving nature-related risks. This will support a shift in global financial flows from nature-negative to nature-positive outcomes.

The Taskforce is headed by co-chairs David Craig and Elizabeth Mrema, and comprises 40 individual taskforce members. These members represent financial institutions, corporates, and market service providers with assets valued at more than US\$20 trillion.¹⁷

The Taskforce is supported by:

The TNFD Forum

A consultative grouping of more than 750 institutional supporters, including some of the world's largest banks, insurers, asset managers, asset owners, and other financial services institutions

The TNFD Knowledge Partners

A group of 18 leading scientific organizations and standard-setting bodies

TNFD Consultation Groups

Informal groups based in select countries and regions to expand outreach and engagement

The TNFD Stewardship Council

This represents the founders and funders of the TNFD

The TNFD Secretariat

This manages and coordinates the Taskforce, the TNFD Forum, and all TNFD knowledge partners

The TNFD released the third version of its beta framework for market consultation in November 2022, ahead of world leaders' adoption of the Global Biodiversity Framework at the United Nations Convention on Biological Diversity (COP15) in Montreal in December 2022. This latest iteration of the framework is built on previous versions released in March 2022 and June 2022. The next version of the beta framework (version 0.4) will be released in March 2023, with the full version 1.0 framework planned for release in September 2023.

The beta framework represents a major step forward for nature-positive business action. It outlines global biodiversity goals, setting clear targets and establishing a foundation for coherent metrics for 'nature-positive' portfolios. It further defines 'fundamental concepts for understanding

nature'; a taxonomy that ensures consistency in the understanding and articulation of impacts within the four nature 'realms' (land, ocean, freshwater, and atmosphere). As part of this, the framework introduces the LEAP process (see figure 10), which encourages companies to **Locate** their interfaces with nature, **Evaluate** their dependencies and impacts, **Assess** their risks and opportunities, and **Prepare** to address nature-related risks and opportunities.

Figure 4
Core Components Of The TNFD Framework



Source: The Taskforce on Nature-Related Financial Disclosures

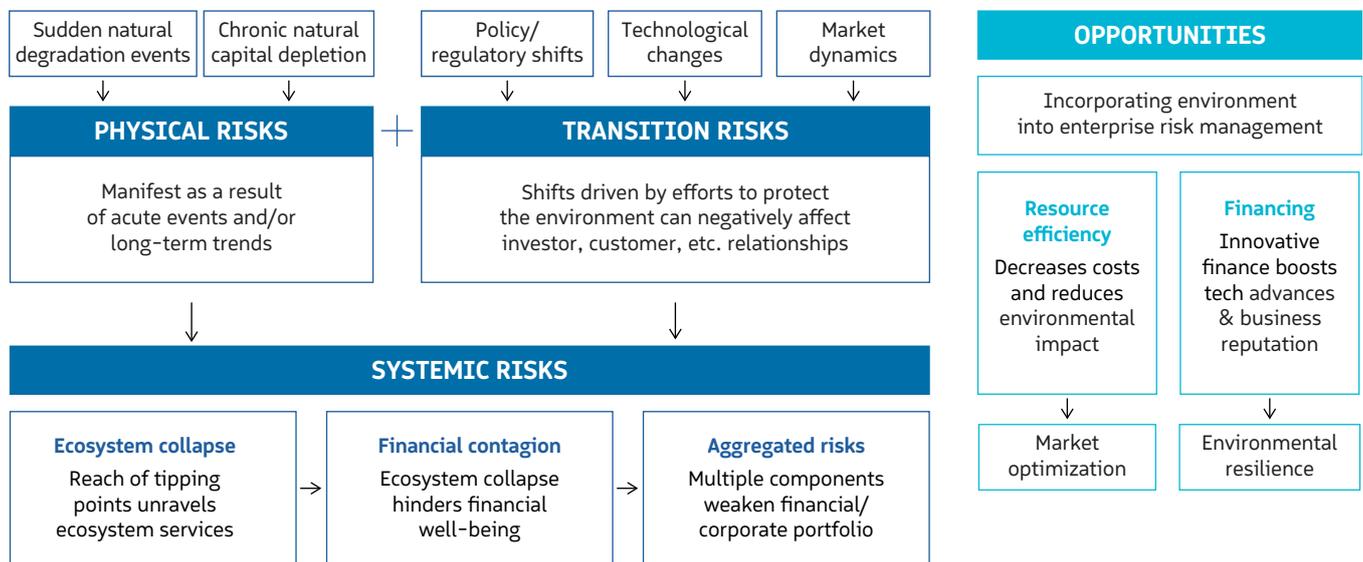
Following the publication of the draft framework, players within the financial and public sector have been called to take the first steps towards integrating biodiversity into financial decision-making and strategies. Moreover, they have been urged to assess risks, decrease investments that have negative nature impacts, increase the amount of dedicated finance for nature-positive outcomes, and report on biodiversity risks, financing, and opportunities.

TNFD's Relationship With The Task Force on Climate-Related Financial Disclosure (TCFD)

Rather than trying to develop an entirely new framework, the TNFD aims to build on existing frameworks to create one that can be easily integrated into familiar and accepted standards. Crucially, these include the TCFD. Like the TCFD, the TNFD also structures disclosure recommendations

into four pillars: governance, strategy, risk management, and metrics and targets. The TNFD also aligns with the TCFD's basic risk taxonomy. Its definitions of physical and transition risks are a case in point.

Figure 5
TNFD Classification Of Risks And Opportunities



Source: Marsh McLennan Advantage analysis

A further similarity is the multi-sector taskforce approach to developing guidelines that have been adopted by both bodies.

Despite these similarities, the TNFD differs from the TCFD in several important dimensions, such as the scope of issues concerned and the complexity of analysis. The TCFD focuses on metrics around climate emissions, whereas the TNFD covers a broader range of issues and risk drivers, including biodiversity, deforestation, pollution, water scarcity, and land and sea use.

The TNFD making allowance for the enormous complexity of analysis is important because the interdependencies and tensions between risks make scenario analysis and risk management of nature-related issues especially difficult. Location is also paramount in the TNFD — nature-related issues require site-specific analysis in order to gain an accurate understanding of the interface with nature.

Towards Better Business Practices: Why Disclosure And Transparency Matter

Disclosure incentivizes organizations to assess and manage risks manifesting from their interaction with nature that may be highly material but that they may previously have overlooked. These could be physical risks; for instance the risk that water pollution poses to a food and beverage manufacturer, or the impact that a large scale construction project could have on local biodiversity. They could also be transition risks, for instance new regulations to protect certain marine species from depletion, or changes in consumer demand for intensive farming outputs.

The TNFD emphasizes the need for transparency in assessing risk — specifically pertaining to risk related to nature-related issues — to support informed, efficient decisions regarding capital allocation.

Through Oliver Wyman's global work they have seen that strong financial disclosure enables transparency and accountability. At the same time, it creates an enabling environment for the development of policies and tools aimed at establishing nature-positive societies and economies.

By engaging with the TNFD, governments distinguish themselves as global leaders that advocate for transparency and accountability. They may, furthermore, open the door for increased business and development opportunities within the region, as disclosure is valued by global markets and investors alike. This is because disclosure mitigates reputational risks and potential financial costs, while also highlighting potential system risks within the region. By adopting and applying the TNFD framework, governments and organizations can ensure investor confidence, and potentially attract financing at more attractive terms in the longer-term.

Governments may also capture additional value through carbon tax savings and sustainability-related long-term operational expenditure savings.

An environment that promotes transparency and accountability may also lead to a more inclusive and accessible economy. This would ensure a focus on economic development, while also facilitating social development (for instance, pollution significantly affects health).

Environmental, Social, Governance (ESG)-related financial disclosures are increasing globally, as illustrated by the widespread adoption of the Taskforce on Climate-Related Financial Disclosures.¹⁸

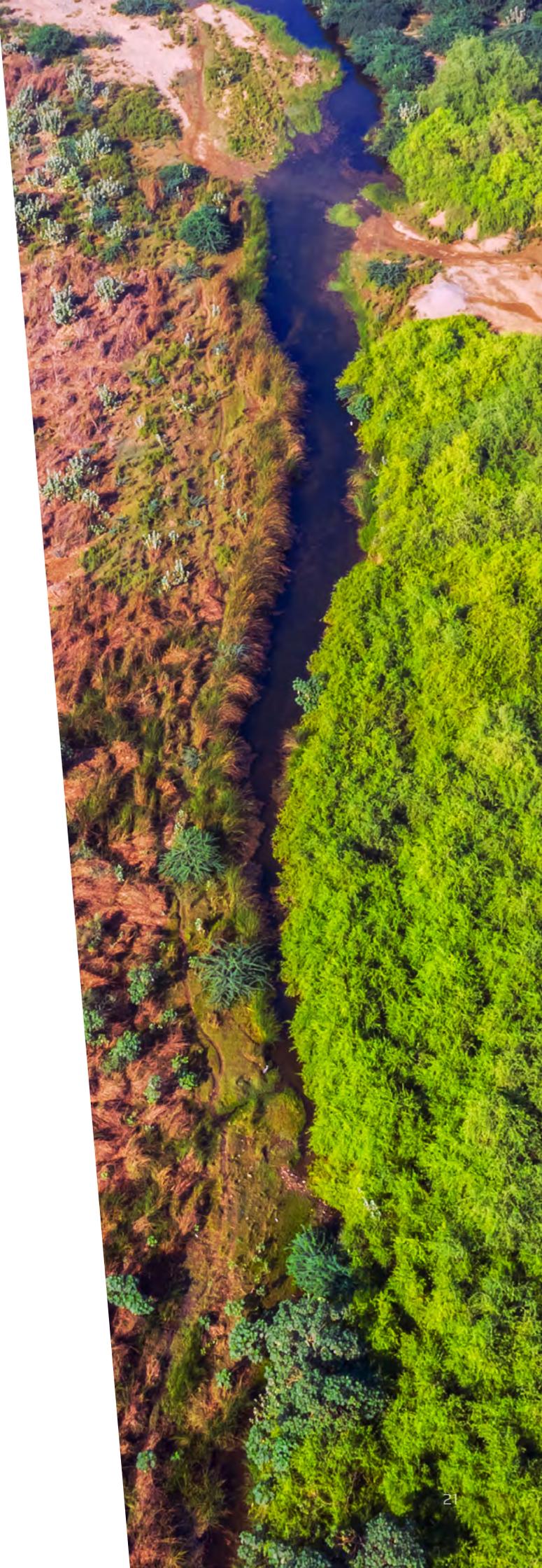
Levels of disclosure have significantly increased worldwide over the past three years. In particular, the average level of disclosure across the 11 recommended disclosures for European companies stood at 60% for the fiscal year 2021, growing 23 percentage points since the fiscal year 2019. This figure stands at 36% for Asia Pacific companies (an increase of 11 percentage points) and 29% for North America companies; an increase of 12 percentage points, and 25% for the Middle East and Africa region; an increase of 9 percentage points.¹⁹

In another positive development, in January 2021, the United Kingdom became the first major country to mandate climate-related financial disclosures for large organizations that are aligned to the TCFD. The British Government has since expanded this requirement to more sectors of the economy.

These global trends indicate that ESG-related financial disclosures will soon become more widely adopted. Just as the TCFD has become the predominant global framework for integrating

climate into corporate disclosure standards, Oliver Wyman expects that the TNFD will become the predominant framework for integrating nature. This assumption is supported by the fact that the TNFD is both scientifically rigorous and easy for companies and financial institutions to adopt, thanks to the combination of a market-led approach and input from leading science and data bodies. To accelerate this integration, the TNFD has adopted an open innovation approach that encourages market participants to support development of the framework. The hope is that this approach will provide a source of constructive feedback, and allow for steady improvements in the relevance, usability, and effectiveness of the TNFD.

As detailed later in this report, early engagement with the TNFD is helping leading financial institutions and companies in their journey towards more nature-positive practices. Financial institutions play an important role in producing nature-positive outcomes, and have an early opportunity to assess how the emerging framework may impact their strategy, governance, risk management, and reporting. Financial institutions and companies can also capture significant financial savings by managing reputational and legal risks, and can get ahead of the curve of future regulatory mandated disclosures by engaging with the TNFD.



Lessons Learned From Climate Change Frameworks And The TNFD Pilot





Learnings From Implementing The TCFD

Although the TCFD is still under development, a number of important lessons have already been learned, as shown during the implementation of the framework by South Africa-based financial services provider FirstRand group.

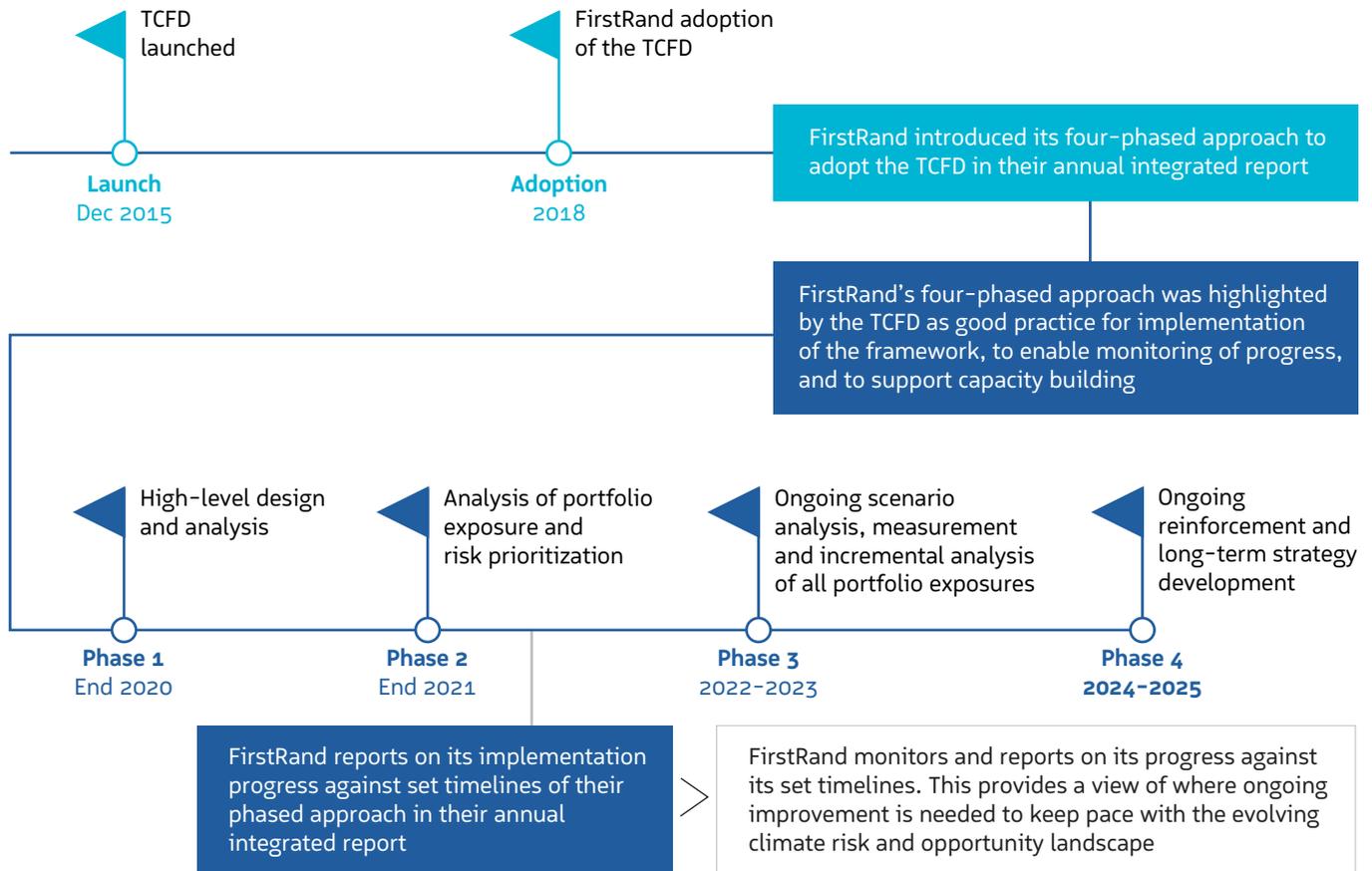
This financial services group offers a universal set of transactional, lending, investment, and insurance products and services. It used an iterative process to adopt the TCFD. FirstRand's first step was to create a clear adoption roadmap with a strong focus on the continual improvement of disclosures across reporting cycles. The roadmap consisted of a four-phased approach:

1. A high-level design and analysis of the framework to be implemented
2. An analysis of portfolio exposures and risk prioritization
3. Ongoing scenario analysis, measurement, and incremental analysis of all portfolio exposures
4. Ongoing reinforcement and long-term strategy development (Figure 6).

Figure 6

FirstRand Iterative Process To Progress On TCFD Alignment

FirstRand is a financial institution with a portfolio of integrated financial services businesses, operating across Africa and globally.



Sources: FirstRand Annual Integrated Report 2020; FirstRand Annual Integrated Report 2021; FirstRand Climate-Related Financial Disclosures Report 2021; FirstRand Report to Society 2018; TCFD Good Practice Handbook Second Edition 2021

Within each phase, FirstRand undertook a series of actions aligned with TCFD’s four-pillar structure (Figure 7):

1. Governance
2. Strategy
3. Risk Management
4. Metrics and Targets

The FirstRand case study demonstrates a pragmatic approach to adopting and integrating new financial disclosures by following a phased approach aligned to the pillar structure of the TCFD. Because the TNFD has the same structure as the TCFD, institutions and companies can draw learnings from TCFD implementations to inform TNFD adoption strategies.

Figure 7
Summary TCFD Adoption Roadmap

	PHASE 1	PHASE 2	PHASE 3	PHASE 4
GOVERNANCE	<p>Establish specialist committees</p> <p>Integrate into board governance</p> <p>Build capacity</p>	<p>Cascade to segment committees</p> <p>Define roles and responsibilities</p> <p>Develop policies</p>	<p>Measure progress</p> <p>Audit climate change management processes</p>	<p>External assurance of climate-related finance disclosure</p>
STRATEGY	<p>Elevate climate change as strategic risk and opportunity</p> <p>Engage with stakeholders and establish partnerships</p> <p>Benchmark peers and analyze gaps</p>	<p>Define strategic objectives</p> <p>Assess risks in priority portfolios</p> <p>Embed climate considerations into pricing and performance</p> <p>Integrate climate change into investment and insurance activities</p> <p>Build capacity</p>	<p>Define metrics and targets</p> <p>Align origination strategies</p> <p>Link performance and remuneration</p> <p>Comply with reporting requirements</p>	<p>Assess alignment with desired climate outcomes</p>
RISK MANAGEMENT	<p>Identify climate scenarios</p> <p>Develop transition risk impact measurement methodology</p> <p>Identify key processes</p>	<p>Operationalize risk management processes</p> <p>Incorporate climate risk into environmental and social risk assessment (ESRA)</p> <p>Develop risk prioritization and heat mapping</p>	<p>Enhance data, systems and reporting</p> <p>Improve climate assessment within ESRA due diligence process</p> <p>Model the impact of the transition to a low-carbon economy</p>	<p>Embed climate considerations into business processes, risk management and reporting</p> <p>Ongoing awareness and capacity building</p>
METRICS AND TARGETS	<p>Publish policies on fossil fuel financing, set science-based targets, and disclose carbon footprint</p>	<p>Publish policies on energy financing, assess portfolio carbon emissions, and define impact metrics</p>	<p>Review policies and assess emissions</p>	<p>Set sectoral metrics and targets, consider decarbonization targets</p>

Source: Marsh McLennan Advantage analysis of FirstRand Climate-Related Financial Disclosures Report 2022

Key Learnings From The TNFD Pilot

Taking the first step can be as simple as conducting a first cut assessment of an institution's biggest nature impacts and dependencies – this allows firms to hold a mirror to their activities, potentially catalyzing a mindset shift that may see the organization start to consider nature risks and opportunities more formally when making business decisions.

In line with its goal to assist companies on their nature journeys, Oliver Wyman has developed best-in-class toolkits aligned to the beta

TNFD framework. Using these toolkits, six pilot financial institutions in Africa assessed their nature impacts and dependencies with an eye to advancing their ability to minimize nature-related risks and capture new nature-related opportunities.

The feedback received from the pilot financial institutions has helped to ensure that an African voice is included in what is likely to become the global standard on nature for financial institutions.

Some clear learnings have emerged from these engagements:

Tone Is Set From The Top

Although biodiversity loss is one of the top global risks,²⁰ nature has yet to become a mainstream consideration across many industrial sectors, and particularly the financial sector. Corporate leaders, management, policy makers, and regulators are called upon to act boldly, providing risk and business teams with a mandate to assess nature-related risks and opportunities.

Financial institutions may be moved to accelerate investment and the allocation of resources if nature-related opportunities are clearly articulated and quantified. The benefits of such action must be highlighted. For example, nature-positive solutions will have the potential to generate US\$10 trillion in business opportunities, while also creating 395 million new jobs.²¹

Benefits Of Addressing Nature And Climate Together

While many institutions and companies have undertaken to address climate risks, nature has been lower priority. This is primarily because of resource constraints. However, the pilot shows that there are clear advantages to integrating nature and climate as far as possible. The African pilot program confirmed that the nature-related risks facing several real economy sectors — meaning non-financial elements of the economy — are very material and, indeed, comparable to climate-related risks. For example, nature-related risks may result in a 20% decrease in profits in the agriculture sector, while climate-related risks in the extractives sector may lead to a 25% decrease in profits.²²

Several feedback loops exist between nature loss and a changing climate, and these are of grave concern. For example, climate change is expected to be a leading driver of nature loss, while protecting the natural environment plays a vital role in mitigating climate change and adapting to its impacts. The interlinked challenges of environmental degradation and the climate crisis may lead us to cross dangerous tipping points, with potentially devastating consequences. The establishment of a nature-positive economy and nature-based solutions are therefore essential for the transition to net-zero.

One leading African financial services group participating in the pilot has created a model of how both issues may be addressed simultaneously, by developing terms of reference for a new nature

and biodiversity committee to work alongside a climate committee. Both bodies report to the group risk committee.

Figure 8 How Nature Loss And Climate Change Reinforce Each Other



Nature loss intensifies climate change risks

Deforestation releases carbon dioxide into the atmosphere, reduces global carbon sequestration capacity, and worsens the impact of extreme weather events such as flooding and heat waves.

Biodiversity loss, especially of plant and soil organisms, catalyzes desertification, reducing surface moisture and global carbon sequestration capacity.

The destruction of mangrove forests, wetlands, and other habitats caused by economic activities increases the impact of coastal flooding generated by climate change.

The loss of coral reefs exposes many coastlines to higher risk of sea surge flooding and erosion.



Climate change accelerates nature loss

Increasing incidence of extreme weather events such as droughts and wildfires compound forest loss and desertification.

Global warming reduces biodiversity, for example by altering habitats, increasing disease spread, and accelerating ocean acidification.

Sea level rise increases the vulnerability of coastal ecosystems to storm surges and flooding, accelerates coastal erosion and sedimentation runoff, and causes soil salinization.

The increasing concentration of carbon dioxide in the oceans and rising water temperatures result in coral reefs dying off.

Source: Arctic Institute, Climate Policy Initiative, Intergovernmental Panel on Climate Change, Millennium Ecosystem Assessment, World Wide Fund for Nature, European Sustainable Phosphorus Platform, US Environmental Protection Agency

Why End-to-End Assessment Is A Critical Step

The vision informing TNFD is a data-driven one, relying on an array of up-to-date client, supply chain, and geospatial data. Financial institutions can complete valuable nature-related assessments even if data gaps exist — as they inevitably do, both in Africa and around the world.

African institutions participating in the pilot addressed this challenge by developing a baseline view of nature-related risks, based on their understanding of how a typical sector or asset class interfaces with nature. Using this baseline

view, financial institutions then tailored the assessment to their context by considering, among other factors, portfolio exposures, high-level locations, and basic geo-spatial datasets.

Tools and platforms such as ENCORE and the UNEP Finance for Nature Hub may also be used to mine extremely valuable baseline nature information pertaining to the impacts and dependencies for the sectors most materially exposed to nature-related risk.

Disclosure Is Important, But Is Only One Tool In An Institution's Nature Toolkit

Although the pilot focused on nature-related financial disclosures, participating institutions also developed nature capability roadmaps. These roadmaps help in the implementation of more than 80 unique nature-related capabilities, spanning governance, strategy, risk management, metrics and targets, and data and analytics.

The pilots have highlighted several priority activities that governments may wish to address as they commence their nature-related financial disclosure journey:

Integrating Nature Into Existing Policies And Guidance

For example, integrating nature into the climate-related risk management guidance

Developing Policy Roadmaps

Taking learnings from climate-related policy roadmaps to draft nature-related policy roadmaps

Accelerating Knowledge And Capacity Building

Training and capacity building on nature-related risk management in the financial system

Increasing Participation In Nature-Based Solutions

Accelerating public sector participation in developing nature-based solutions; for example, providing funding mechanisms and scaling solutions like carbon markets

Developing Metrics And Targets

Drawing on the output of the CBD Global Biodiversity Framework to support ministries of environment and financial regulators to measure and track progress (the CBD is the UN Convention on Biological Diversity)

Advancing Natural Capital Accounting

Developing natural capital accounting principles and updating taxonomies

Coordinating A Multilateral Position

Drafting and ensuring consensus in the region around responses to the development of international standards and frameworks

“Nature capability roadmaps will help governments implement more than 80 unique nature-related capabilities”

Applying Learnings In A Middle Eastern Context

The Middle East recently embraced these principles when, in 2020, Saudi Arabia hosted the G20 platform. The country adopted a multilateral approach, known as the Circular Carbon Economy (CCE), to develop a joint framework towards reaching net-zero emissions, while ensuring socio-economic development.

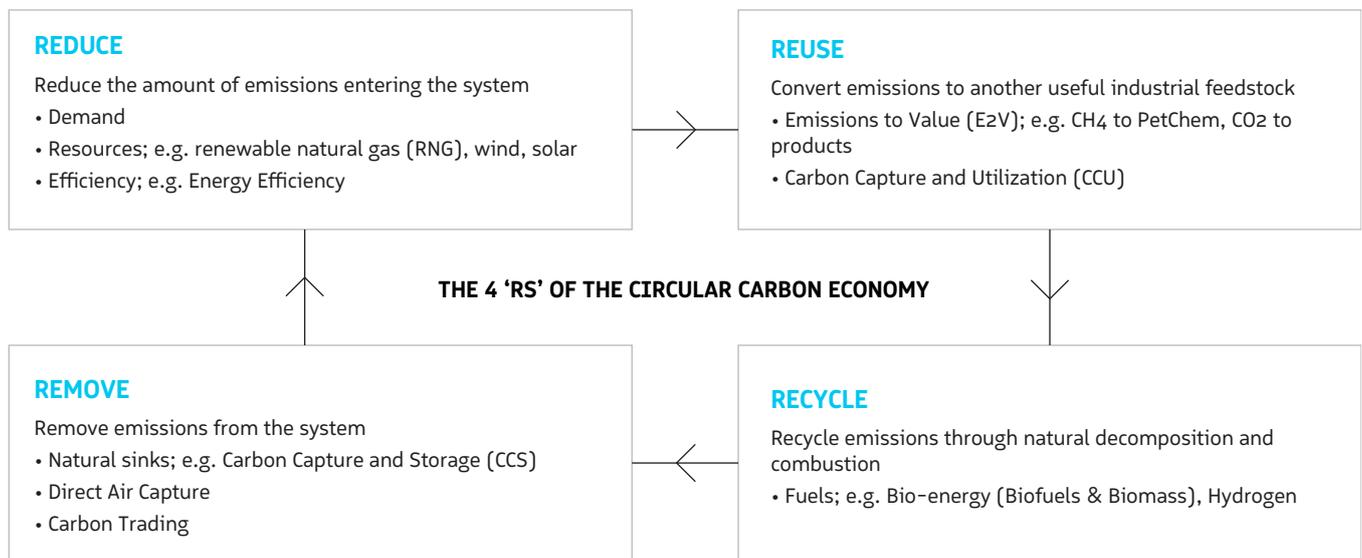
The CCE framework, the development of which was supported by Oliver Wyman, introduced the 4 'Rs' for carbon management (reduce, reuse, remove, recycle) (Figure 9) in order to offer a more comprehensive scope for managing resource utilization than Circular Economy principles, whereby emissions are addressed and the remove component is introduced. This was widely shared globally and across the Middle East.

The successful rollout of the CCE framework is namely due to its inherent design as an inclusive and pragmatic approach, which enables its

application across countries and industries. It also gained quick momentum thanks to its adoption by the top leadership in Saudi Arabia, its endorsement by G20 leaders, and its implementation by corporate champions in the region – which sets an example for others.

Aramco, Saudi Arabia's public petroleum and natural gas company and one of the largest companies in the world, has integrated the Circular Carbon Economy framework into its core modes of operation. For example, Aramco has employed a carbon capture methodology within its underground reservoirs to reduce CO₂ emissions. The company has also integrated big data and AI to monitor energy consumption and optimize operations (by, for example, increasing oil well productivity and improving crude oil recovery methods), resulting in a substantial reduction in emissions. Thanks to these methods, Aramco is one of the least carbon intensive upstream players in the industry.

Figure 9
The 4 'Rs' Of The Circular Carbon Economy (CCE)



Source: Oliver Wyman analysis

Implementation Of The TNFD Framework In The Region



A number of ambitious transformation projects have been planned for the Middle East. These will have a significant impact on socio-economic development; however, large capital investments are needed for these to come to fruition. The TNFD can play a role here by increasing sustainable financing opportunities and attracting the required capital.

Currently, only three entities from the region (AMEA Power, Global Energy and Environmental Services, and Rabigh Refining & Petrochemical Company) are members of the TNFD Forum. There is a clear opportunity for the Middle East region to become more involved and take the initial steps towards developing and implementing TNFD. This would allow the region to ensure challenges specific to the Middle East are reflected and factored into the final version of the framework.

However, even if the region chooses not to increase its involvement at this stage, it is crucial that stakeholders develop a model for implementing TNFD and harnessing its impact.

This can happen only with the support of governments, and with the appropriate regulatory environment. It is vital that government, and government-owned entities, set an example, create awareness, and drive momentum for the private sector's involvement. This requires a robust approach such as the LEAP framework, which is laid out in Figure 10, and below.

The framework includes **Locating** the interface with nature by identifying the environments/ ecosystems the country is most dependent on, as well as which sectors interface most frequently with nature in these locations. The next step is to **Evaluate** dependencies and impact by conducting appropriate assessments while identifying the dependency of industries and activities on local ecosystem/nature and societal activities. Then there's the matter of **Assessing** material risks and opportunities and establishing a mitigation plan to identify and qualify the main risks and key factors to be addressed by TNFD. The final stage in the LEAP framework is to **Prepare** to respond and report by defining a strategy, allocating resources to address these risks, and preparing local disclosure actions for reporting and presentation.

Only if governments take such proactive measures will countries be able to define and act on relevant environmental and natural risks. As part of their show of support, governments should establish pilot projects, on a limited scale, to test and refine frameworks and identify data gaps. This can be achieved by focusing on a limited scope (such as an industrial zone or specific sector) and providing the requisite support to these pilots. Without such support, the private sector's ability to contribute and participate will be lowered significantly.

Further support may come in the form of national champions or government-owned entities being appointed to spearhead initiatives and take part in the design and implementation of TNFD. By following this strategy, the region may be able to ensure that TNFD incorporates a Middle Eastern view. Furthermore, it lays the foundation for the establishment of a suitable platform for engaging the private sector.

National Sovereign Funds (SWF) invested in critical sectors of the region's countries need to set similar disclosures for their portfolio companies, and include their own national targets to protect nature and the environment. They also should seek to learn from portfolio companies abroad, so that best practice can be deployed in the region.

Overall, public entities and SWF have a critical role to play in building momentum for the adoption of TNFD. Building on Oliver Wyman's experience, entities should concentrate on financial regulation, national policy making, and disclosure, allowing for the creation of an enabling environment that encourages piloting, while also ensuring the integration of nature and carbon policies.

The time for action is now, and TNFD offers an exciting way forward for the region to engage meaningfully with the topic.

Figure 10

The TNFD’s Revised Risk And Opportunity Assessment Approach (LEAP)



 **LOCATE**
Interface With Nature

1. Environments and/or ecosystems on which the country is dependent
2. Locations essential for the country
3. The sectors that are most interfacing with nature in these locations

 **EVALUATE**
Dependencies And Impact

1. Conduct required impact assessments
2. Dependency of industries and activities on local ecosystems/nature

 **ASSESS**
Risks And Opportunities

1. Risk assessment to identify and qualify main risks
2. Mitigation plan to minimize risks and capitalize on opportunities
3. Key aspects to be covered through TNFD

 **PREPARE**
To Respond And Report

1. Strategy and resource allocation to address risks
2. Local disclosure actions for reporting and presentation

Source: TNFD’s LEAP Nature Risk Assessment Approach

Conclusion

While it is heartening to see that several Middle Eastern governments are incorporating considerations around nature in updated policies, input from the private sector (and financial institutions) would amplify their efforts.

Fortunately, the implementation of the TNFD through pilot programs in Africa provides a useful blueprint, and several key learnings have emerged out of these trial projects. These include the necessity of a visible show of support for the issue from leadership teams; allowing experience and insights gleaned from addressing climate risks to inform the approach to nature; developing a comprehensive nature-related assessment; and considering tools beyond disclosure. Participation in public-private partnerships and grassroots initiatives may be a sound place to start.

Guided by the principles put forward by the TNFD, the private sector can — and surely will — become a formidable force in the fight for nature.



About

Oliver Wyman

Oliver Wyman is a global leader in management consulting. With offices in more than 70 cities across 30 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm has more than 6,000 professionals around the world who work with clients to optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is a business of Marsh McLennan [NYSE: MMC].

For more information, visit oliverwyman.com.
Follow Oliver Wyman on Twitter [@OliverWyman](https://twitter.com/OliverWyman).





References

- 1 World Economic Forum. (2020, January 19). Half of World's GDP Moderately or Highly Dependent on Nature, Says New Report. Retrieved from www.weforum.org
- 2 UNEP, WEF, ELD, Vivid Economics. (2021, May 27). State of Finance for Nature. Retrieved from UNEP.org
- 3 Global Mangrove Alliance. (2022). The State of the World's Mangroves 2022. Retrieved from www.mangrovealliance.org
- 4 Almahasheer, H. (2018, January 18). Spatial coverage of mangrove communities in the Arabian Gulf. Environmental Monitoring and Assessment.
- 5 UAE Minister of Climate Change and Environment. (2021). COP26. Glasgow, Scotland. Retrieved from www.thenationalnews.com
- 6 Arab News. (2021, June 23). Saudi Arabia's NEOM and KAUST partner to create the world's largest coral garden in the Red Sea. Arab News. Retrieved from arabnews.com
- 7 UNEP. (2020). Beyond 'Business as Usual': Biodiversity Targets and Finance
- 8 World Economic Forum; PwC. (2020). Nature Risk Rising: Why the Crisis Engulfing.
- 9 World Bank. (2018). Beyond Scarcity: Water Security in the Middle East and North Africa. MENA Development Report. Washington, DC.
- 10 Malek, C. (2018, October 17). Desertification an imminent threat, creating unstable grounds for development. Retrieved from Arab News
- 11 World Bank. (n.d.). Aquaculture production (metric tons) - Middle East & North Africa. Retrieved from data.worldbank.org
- 12 Mordor Intelligence. (n.d.). Middle East Seafood Market - Size, Share, COVID-19 Impact & Forecasts up to 2028. Retrieved from www.mordorintelligence.com
- 13 WTTC. (2021). Middle East Travel & Tourism sector set to recover by over a quarter this year. Retrieved from wttc.org
- 14 Mandal, V., & Hasbani, K. U. (2022, July 29). Sustainable Tourism in the Middle East. Retrieved from aesg.com
- 15 Coherent Market Insights. (2021, October). GCC Ecotourism Market Analysis. Retrieved from www.coherentmarketinsights.com
- 16 Trade Arabia. (2022, March 17). Mena desal projects' investments to hit \$4.3bln by year-end. Zawya. Retrieved December 15, 2022, from www.zawya.com
- 17 About TNFD. (n.d.). Retrieved from tnfd.global
- 18 TCFD. (2022). 2022 TCFD Status Report: Task Force on Climate-Related Financial Disclosures. Retrieved from fsb.org
- 19 Ibid.
- 20 World Economic Forum. (2022). Global Risk Report 2022. Retrieved from weforum.org
- 21 World Economic Forum. (2020, July 14). 395 Million New Jobs by 2030 if Businesses Prioritize Nature, Says World Economic Forum. Retrieved from weforum.org
- 22 FSD Africa. (2022). Nature and financial institutions in Africa: A first assessment of opportunities and risks. Retrieved from fsdafrica.org

Authors

Johnny Ayoub

Partner

Johnny.Ayoub@oliverwyman.com

Arnaud Delamare

Partner

Arnaud.Delamare@oliverwyman.com

Sandra Villars

Senior Advisor

Sandra.Villars@oliverwyman.com

Nathalie Antoun

Principal

Nathalie.Antoun@oliverwyman.com

The authors would like to thank Alexia Boulos and Schalk Burger for their contribution to this report.



WORLD GOVERNMENT SUMMIT



@WorldGovSummit



#WorldGovSummit

Join the conversation
worldgovernmentsummit.org