GEFI

United Kingdom in the
United Arab Emirates

Nature-Positive Blue-Green Bond & Sukuk Toolkit

Practical Guidance for Nature-Positive Finance in the Gulf, developed by the Global Ethical Finance Initiative (GEFI) in partnership with the British Embassy UAE

This Toolkit has been developed by the Global Ethical Finance Initiative (GEFI) to support Gulf-based issuers, financial institutions, and practitioners in structuring nature-positive blue-green bonds and sukuk, advancing sustainable finance in the Gulf.

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INTENDED USE AND LIMITATIONS

This Toolkit is a practitioner-focused guide for a Gulf-based audience, including issuers, financial institutions, advisers and other market participants. It is intended to support practical applications and, as far as practicable, to align with recognised international market practice for labelled sustainable finance transactions, including relevant capital markets principles and disclosure expectations.

More specifically, it is intended to support informed integration of nature and biodiversity considerations within Gulf sustainable finance, recognising that nature finance remains a comparatively new subject area for many institutions and teams. The Toolkit is not prescriptive. It provides a structured starting point that can be adapted to the issuer, sector, jurisdiction and transaction context, and can complement climate objectives where projects deliver both climate and nature outcomes.

Foreword

The United Kingdom (UK) and the United Arab Emirates (UAE) are bound by a shared conviction: that stewardship of our planet is not a choice reserved for some, but a responsibility carried by all.

For over two centuries, the UAE and the UK have walked a path shaped by cooperation, development, and mutual aspiration. Today, our countries stand as strategic partners in trade, innovation, culture, and climate action, with the UAE being one of the UK's most significant global trading partners.

Since COP28, we have remained committed to championing and supporting initiatives that scale climate and nature finance across the UAE and the wider GCC. This commitment is reflected in the role of our institutions and partners, among them the London Stock Exchange (LSE), whose sustainable finance markets, ESG data solutions, and innovative frameworks, including its Sustainable Bond Market and Voluntary Carbon Market designation, are helping to accelerate the global transition toward a low-carbon, nature-positive future.

Through our collaboration with the Global Ethical Finance Initiative, we are enabling the development of open-source, practitioner-led guidance that is tailored to the realities of regional markets while remaining aligned with international best practice.

The Nature, Blue, Green Bond and Sukuk Toolkit is a key output of this collaboration. It's a practical resource designed to empower issuers and investors and help to scale credible investable nature projects across the region. This Toolkit is designed to support projects that regenerate ecosystems, empower communities, and unlock new models of sustainable growth.

H.E. Edward Hobart

Ambassador of the United Kingdom to the United Arab Emirates

> We fully recognise the challenges that lie ahead. The nature finance agenda is complex, market structures are still developing, and data, methodologies and incentives continue to evolve. But history shows that the UAE and the UK have always risen to the moment — we are confident that as we choose to lead the nature finance agenda together, combining UK expertise with UAE ambition, we can build a model that inspires others and pioneer new pathways where none existed before.

Foreword

Over 50% of global GDP is moderately or highly dependent on nature. It underpins food and water security, strengthens national resilience, reduces exposure to external shocks, and enables the transition towards more sustainable, less resource-intensive economic systems.

Nature is a strategic imperative and the coming years will be decisive for the stability of natural systems. Our responsibility as GEFI, an advocacy and thought leadership body, couldn't be more pressing. It is to help identify, articulate and embed the value of nature firmly within economic and policy decision-making.

Advocacy will be most effective when the changes it champions are both financially viable and investable. Without this alignment, even the most compelling environmental arguments will struggle to mobilise capital at the scale required.

It's increasingly evident that a climate-only approach is insufficient to maintain the 1.5°C pathway or to deliver on the Sustainable Development Goals. The accelerating loss of biodiversity and the degradation of ecosystems create compounding, systemic risks that actively undermine climate mitigation and adaptation efforts.

The toolkit we introduce with the support of the British Embassy in the UAE aims to enable the scaling of credible nature finance across the GCC, through capital market instruments, aligning regional priorities and realities with international standards. While important precedents exist — including DP World's USD 100 million blue bond, the first corporate blue bond in the Middle East and North Africa, and Emirates NBD's world-largest dual-tranche blue-green USD 1 billion bond — the next phase requires moving from individual transactions to a structured and scalable market.

In parallel, the region's sukuk market represents a powerful and as-yet underutilised channel for advancing nature finance. The total global sukuk outstanding is projected to grow from approximately USD 1.03 trillion in 2024 to USD 1.8 trillion by 2029 — nearly double in five years. With Saudi Arabia and the UAE among the leading issuers, this growth trajectory presents a strategic opportunity for the GCC region to direct a meaningful share of future sukuk issuances towards nature-positive investments.

Dame Susan Rice

Chair, Global Ethical Finance Initiative

This toolkit represents the beginning of GEFI's nature finance journey in the region. Our ambition is to help catalyse a comprehensive ecosystem, grounded in strong partnerships, that enables sustained dialogue, practical collaboration, and continuous knowledge exchange across policy, finance, and science.

"Nature is foundational not only to our economies and societies, but increasingly to long-term financial stability and resilience. Continued innovation in financial instruments — including approaches such as blue-green bonds and sukuk — will be important in helping mobilize private capital toward biodiversity, restoration, and water security. Efforts that translate ambition into practical pathways for investment can play a valuable role in advancing nature-positive finance across the GCC and beyond."

H.E. Razan Khalifa Al Mubarak

President, IUCN · Managing Director, Mohamed bin Zayed Species Conservation Fund

"It is time to recognise nature as one of the greatest investment frontiers of the 21st century. According to the World Economic Forum, a nature-positive transition could unlock US$10.1 trillion in annual economic value and create 395 million jobs by 2030. This GEFI toolkit sets out how to make a start and crucially takes into account Sukuk compliance.

The GCC's distinctive combination of expansive inland deserts and extensive coastal and marine ecosystems necessitates innovation in water management, land restoration, and climate resilience. Creating a significant pipeline of nature investment opportunities across the region — from mangrove restoration to eco-desalination plants and vertical farming units — can deliver value creation today and supply chain resilience tomorrow.

The Nature to Capital Markets in the GCC programme, delivered by GEFI, is a timely and positive step. It aligns international frameworks including the Taskforce on Nature-related Financial Disclosures (TNFD) with regional realities, aiming to support financing credible, innovative, and resilient nature projects."

Andrew Mitchell

Founder and Senior Advisor, Global Canopy · Co-Founder and Senior Adviser, TNFD · Founder, Equilibrium Futures

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INTRODUCTION

How to Use This Toolkit

This Toolkit should be used in line with the scope and limitations set out in Intended use and Limitations (front matter). It is designed to be used as a practical workflow, not read end-to-end in a single sitting. Transaction teams should use it to align internal decision-making, project evidence requirements, documentation, external review scope, and post-issuance reporting commitments.

SECTION ONE

Align on Terminology & Logic

Use **Section One** to align on terminology, boundaries, and the logic for why nature and biodiversity outcomes are financially material in Gulf contexts. This section is primarily used to ensure internal consistency in how the instrument is framed, and to avoid mismatched claims across frameworks, disclosures, and reporting.

SECTION TWO

Project-Level Build Guide

Use **Section Two** as the project-level build guide. It sets out what "good" looks like for project eligibility, baselines, key performance indicators (KPIs), measurement, reporting and verification (MRV) design, safeguards, and reporting readiness, and it should be treated as the minimum practical foundation before final issuance commitments are locked in.

SECTION THREE

Translate to Issuance

Use **Section Three** to translate project readiness into issuance execution. It focuses on how the framework, external review scope, listing and disclosure expectations, and reporting commitments should be structured so they remain credible and deliverable over the life of the instrument.

The Toolkit should be applied iteratively. As project pipelines mature and MRV capabilities improve, teams can tighten eligibility definitions, strengthen KPI sets, and increase reporting specificity, while maintaining consistency across the framework, external review, and post-issuance disclosures.

SECTION ONE

Understanding Nature and Biodiversity

A practical starting point for Gulf issuers

1.1 Why Nature and Biodiversity Matter

Nature underpins every aspect of the economy, from energy and infrastructure systems to supply chains and public health. Globally, over half of GDP is considered moderately or highly dependent on functioning ecosystems, yet around one million species now face extinction risk as a direct result of human activity, with marine systems under comparable but less visible pressure.

>50%	$700bn	~1m
of global GDP moderately or highly dependent on functioning ecosystems	annual biodiversity finance gap estimated through 2030	species facing extinction risk from human activity

In Gulf economies, the economic and operational impacts of nature loss are amplified by scarce freshwater resources, energy-intensive desalination, heavy reliance on imported food systems, and a high concentration of coastal and urban infrastructure. These conditions heighten exposure to flooding and coastal hazards, and intensify extreme heat in built environments, affecting tourism, logistics and real estate. In the Gulf specifically, coral and seagrass systems have declined significantly in recent decades, compounding these exposures and eroding the natural buffers that coastal economies rely on.

In this context, decarbonisation alone is not sufficient if environmental degradation continues. Nature loss is financially material, as it can drive cost escalation, disrupt operations, and reduce asset values across infrastructure and supply chains. Long-term stability for capital providers and financial institutions depends on protecting and restoring natural systems that support resilience and reduce exposure to physical risk over the life of portfolios and investments.

These dynamics are driving growing investor and regulatory focus beyond climate risk to include nature-related dependencies, impacts, risks, and opportunities.

Coastal and marine ecosystems (mangroves, seagrass beds, coral reefs) are central to Gulf nature finance opportunity and risk exposure

1.2 The Global Shift Toward Nature Finance

Several major initiatives now shape how markets integrate nature and biodiversity into finance and reporting. Key reference points include the Taskforce on Nature-related Financial Disclosures (TNFD), the Kunming–Montreal Global Biodiversity Framework (GBF), and analytical work such as the Dasgupta Review on the Economics of Biodiversity. These are complemented by practical work by public bodies and market institutions on biodiversity metrics, restoration markets and outcome-based finance.

TNFD is widely recognised as the primary market-led framework for assessing and disclosing nature-related dependencies, impacts, risks and opportunities. Its Recommendations provide a structured approach for translating these issues into practical decisions on governance, risk management, metrics, and investor disclosure across the value chain. The International Sustainability Standards Board (ISSB) has decided to draw on the TNFD framework as it undertakes standard-setting to introduce incremental disclosure requirements on nature-related risks and opportunities, building on IFRS S1.

The framing of nature finance has broadened in recent years, extending beyond traditional restoration and conservation activity. The World Economic Forum has identified investable opportunities across multiple sectors of the nature economy, including infrastructure, water systems, food and agriculture, construction, energy, and technology-enabled monitoring and verification. Analysis by Global Canopy in the Little Book of Nature Business (2026) similarly highlights how nature-related opportunities now extend across real-economy sectors. UNEP's State of Finance for Nature 2026 reinforces both the scale of the financing gap and the breadth of activity required to close it, with direct implications for asset performance, supply chain resilience, resource security and long-term value creation.

This Toolkit adopts that broader perspective as a starting point, while focusing on the subset of nature finance opportunities currently most relevant and actionable for Gulf-based issuers within blue-green bond and sukuk structures. These include coastal and marine ecosystems, water systems, land restoration, agriculture, and nature-positive infrastructure, where clearer pathways exist to define eligible activities, establish baselines, and support measurable and verifiable outcomes within capital markets frameworks. This scope reflects the current focus of the Toolkit, while recognising that nature-positive finance is likely to expand across additional sectors as Gulf market practice matures.

The Kunming–Montreal GBF, agreed under the Convention on Biological Diversity, sets out global goals and targets for halting and reversing biodiversity loss by 2030, including the 30×30 goal under Target 3, which commits signatories to conserving at least 30 per cent of the world's land and ocean by 2030. Within this framework, Target 15 calls on large companies and financial institutions to assess and disclose their risks, impacts and dependencies on nature across operations, supply chains and portfolios. Target 19 calls for at least USD 200 billion per year to be mobilised globally for biodiversity from public and private sources, including increased international finance and the realignment of harmful subsidies. Target 18 includes a complementary commitment to eliminate, phase out, or reform incentives, including subsidies, that are harmful to biodiversity by at least USD 500 billion per year by 2030. The framework encompasses both terrestrial and marine biodiversity loss, though marine and coastal systems have historically attracted less dedicated financing than land-based equivalents, a gap that is directly relevant to Gulf issuers given the region's coastal and ocean dependencies. Issuers are not expected to report against all GBF Targets. Instead, they should select those directly relevant to the ecosystems and activities being financed. Despite these commitments, the biodiversity finance gap is widely estimated at around USD 700 billion per year through 2030, reflecting the shortfall between current finance flows and what is required to halt and reverse nature loss. Current global biodiversity-related finance flows are commonly estimated at roughly USD 150 to 160 billion per year, which helps to contextualise the order-of-magnitude scale of the remaining gap through 2030. This gap framing helps issuers and investors understand why credible nature-positive pipelines, MRV, and reporting discipline matter. In macro terms, an annual gap of this scale is well under 1% of global GDP, yet it remains material relative to current conservation spending.

Reflecting this shift, COP30, the UN climate conference in Belém in 2025, reinforced the centrality of nature within the climate agenda, underscoring that credible climate finance increasingly depends on systematically addressing nature loss and ecosystem degradation. A group of multilateral development banks updated their Common Principles for Tracking Nature Finance and developed the MDB Common Nature Finance Taxonomy. The taxonomy provides a standardised but non-exhaustive basis for classifying nature finance activities and distinguishing nature finance from climate finance in portfolio tracking. Its use as a taxonomy and classification reference is addressed in Section 1.4.

Although nature and biodiversity instruments sit within the broader labelled bond and sukuk market and follow the same core issuance sequence, they typically require a higher evidential standard for outcomes. Early blue bond transactions have helped establish precedents for ocean and water-aligned use of proceeds issuance, including reporting and external review expectations. In practice, this is reflected in granular ecological baselines, specialised monitoring, reporting and verification (MRV) and data inputs, and greater reliance on reviewers with ecological expertise, particularly where biodiversity outcomes are central to the use of proceeds or performance claims.

A further feature of emerging practice is the use of public-private structures to mobilise institutional capital for nature outcomes, with formal governance and outcome accountability. Multilateral development banks and bilateral finance institutions have played a formative role in building these markets by providing technical assistance, concessional capital and guarantees, and their support remains directly relevant to Gulf issuers considering blended structures. Specialist partnerships with NGOs and technical bodies are not mandatory but can be material where ecological expertise, independent verification or long-term stewardship obligations extend beyond conventional project delivery.

For Gulf issuers and their banking partners, this evolving architecture provides both direction and practical tools. TNFD and GBF provide a common language for nature-related risks, dependencies and targets. The International Capital Market Association (ICMA) provides the voluntary labelled market guidance that underpins use-of-proceeds frameworks and recognisable reporting and external review practices. The MDB Common Nature Finance Taxonomy can provide a practical classification basis for project pipelines in areas such as coastal protection, water security, land restoration and nature-based tourism. Taken together, these elements support credible local pathways that link nature and climate objectives to financeable projects and instruments.

The practical implications for project design, baselines, MRV and assurance are set out in Section Two, with translation into bond and sukuk structures set out in Section Three.

1.3 Market Infrastructure and Listing Venues

Alongside the evolution of frameworks and taxonomies, the growth of nature- and biodiversity-themed debt is shaped by market infrastructure and listing venues that support visibility, comparability, and investor access. Across major markets, labelled sustainable debt typically references ICMA Principles and expects clearly defined use of proceeds, management of proceeds, external review, and ongoing reporting. For nature and biodiversity-themed instruments, this increasingly translates into greater emphasis on defensible ecological baselines, outcome KPIs, and allocation and impact reporting that can be maintained over the life of the instrument.

Sustainable debt markets and listing venues are now well established and can help issuers signal alignment with recognised labelled market practice, improve comparability, and anchor post-issuance disclosure expectations. In a listed context, issuers should ensure deliverability, meaning the framework, external review scope, and reporting plan remain internally consistent and capable of being sustained over time (see Section 3.7).

In international markets, the London Stock Exchange (LSE) Sustainable Bond Market provides an established listing segment for labelled instruments aligned with widely used voluntary market standards; the Luxembourg Green Exchange (LGX), as the leading dedicated platform for sustainable bonds globally, offers a complementary route for Gulf issuers targeting European ESG investor bases. In the Gulf, **Nasdaq Dubai** and **Tadawul** provide relevant channels for listed bonds and sukuk, including sustainable debt instruments, and can support regional market signalling and distribution. Together, these venues provide recognised listing routes for Gulf issuers seeking both regional visibility and international investor access, even where nature and biodiversity instruments remain a nascent subset of the sustainable debt market.

1.4 Disclosure Frameworks, Taxonomies and Measurement Approaches

Nature-positive finance in this Toolkit draws on the following complementary building blocks:

BUILDING BLOCK 1 Disclosure and Risk Frameworks

Disclosure and risk frameworks such as TNFD, GRI 101: Biodiversity 2024, ICMA Principles and Guidelines (including the Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines), and relevant regulatory requirements, including MRV obligations. These set out how organisations identify, assess, manage and report nature-related risks and outcomes, and provide the architecture for governance, strategy, risk management, and metrics and targets.

BUILDING BLOCK 2 Target-Setting Methods

Target-setting methods such as the Science Based Targets Network (SBTN), which provides a structured five-step process for companies to set science-based targets on nature across freshwater, land, ocean and biodiversity. These methods are designed to complement disclosure frameworks: TNFD enables organisations to assess and disclose their nature-related dependencies, impacts, risks and opportunities, while SBTN provides the methodology to translate those findings into specific, science-based targets at company and value-chain level.

BUILDING BLOCK 3 **Taxonomies and Classification Systems**

Taxonomies and classification systems such as the MDB Common Nature Finance Taxonomy, the IFC Biodiversity Finance Reference Guide, and the Climate Bonds Initiative (CBI) taxonomy. These identify eligible activities and sectors for nature or, where relevant, climate-aligned finance, and the conditions for eligibility. They are used to classify use of proceeds categories and build nature-positive project pipelines, ensuring that eligible activities can be tagged consistently across portfolios and issuers.

BUILDING BLOCK 4 **Biodiversity Measurement Approaches and Tools**

Biodiversity measurement approaches and tools, including comparative guides prepared for financial institutions, which provide methods, indicators and data sources that allow institutions to assess impacts and dependencies on nature, including for marine and coastal ecosystems that are critical in the Gulf.

This Toolkit uses taxonomies to define what counts as a nature-positive activity in Gulf settings, disclosure frameworks to structure investor and regulatory reporting, and measurement approaches to support the selection and implementation of a concise, verifiable indicator set for project-level MRV.

Other references are used in different jurisdictions, including regional systems such as the ASEAN Taxonomy for Sustainable Finance. These may be relevant for issuers operating across multiple markets. This Toolkit acknowledges their value and aims to remain interoperable in approach, while focusing on the building blocks above to provide a coherent, Gulf-relevant starting point.

Section 2.3 sets out how these building blocks can be applied in practice at project level, including illustrative framework wording, and should be read alongside the reporting schedule and assurance considerations in Sections 2.6 and 2.7.

BOX 1 Label Definitions Used in This Toolkit (ICMA, LSE, and CBI)

ICMA (PRINCIPLES AND THEMATIC GUIDANCE)

ICMA defines global labelled market practice through its principles for Green (GBP), Social (SBP), Sustainability (SBG), and Sustainability-Linked (SLBP) instruments, setting expectations on use of proceeds (where relevant), project evaluation and selection, management of proceeds, and reporting, typically supported by external review. ICMA has also published practitioner guidance for both the sustainable blue economy and nature, describing how ocean- and water-related themes, and nature- and biodiversity-related themes, can be financed within recognised labelled formats and carried through into credible allocation and impact reporting.

LSE / LONDON STOCK EXCHANGE GROUP (LSEG) (LISTING CLASSIFICATIONS AND "BLUE" IN PRACTICE)

LSE's Sustainable Bond Market (SBM) provides a listing segment with defined classifications for labelled debt instruments (including green, social, sustainability, sustainability-linked, and transition), with admission and ongoing disclosure expectations that reference alignment to widely used market standards. Within these classifications, the Exchange also recognises thematic uses of proceeds such as "blue bonds" and Sustainable Development Goal (SDG)-related bonds, rather than treating "blue" as a standalone SBM label definition. In LSEG market materials, "blue bonds" are described as labelled bonds financing ocean- and water-related activities within the blue economy (for example sustainable marine transportation and port infrastructure, alongside ecosystem conservation).

CBI (STANDARD AND CERTIFICATION)

CBI provides the Climate Bonds Standard and Certification Scheme, a voluntary certification approach underpinned by science-based sector criteria and independent, third-party verification by approved verifiers. Certification is used by issuers to demonstrate that eligible use of proceeds aligns with the Climate Bonds taxonomy and, where relevant, is consistent with the ambition of limiting global warming to 1.5°C. In practice, it is most relevant where an issuer wants an additional, recognisable "climate integrity" label alongside an ICMA-aligned framework, particularly for climate mitigation and climate resilience categories.

HOW THIS TOOLKIT USES THE TERMS (NATURE AND BIODIVERSITY FOCUS)

In this Toolkit, "Nature-Positive (Blue-Green) Bonds and Sukuk" is used as practitioner shorthand for instruments financing nature and biodiversity outcomes, including coastal and water-linked ecosystems, through recognised labelled market formats. The Toolkit anchors issuance discipline to ICMA principles and relevant thematic guidance, references LSE/LSEG SBM as a listing classification framework, and uses taxonomies and measurement approaches to define eligibility and evidence outcomes.

1.5 Distinguishing Climate and Nature

While closely connected, climate and nature are not interchangeable. Climate finance focuses on greenhouse gas reduction and adaptation to temperature and weather-related impacts. Nature finance addresses the protection, restoration and sustainable use of ecosystems such as forests, coasts, soils and water systems, which underpin climate stability itself.

Projects often overlap, as in mangrove restoration, which can deliver both carbon sequestration and habitat preservation. Changes in climate are also a major driver of biodiversity loss and ecosystem degradation. For issuers, understanding these two-way dependencies supports clearer articulation of why nature-related investments matter for long-term cash flows, asset values and risk management.

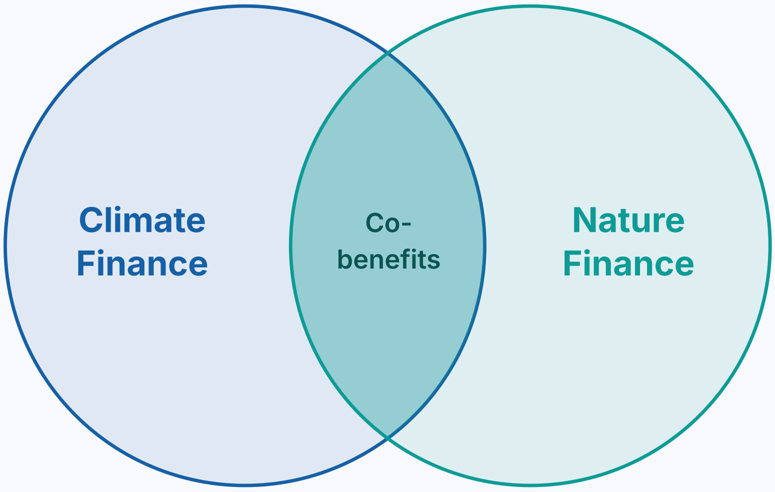
Desertification, soil degradation and wadi system disruption across the Gulf represent both a growing ecological risk and a measurable opportunity for nature-positive restoration finance

In market practice, many labelled instruments that finance nature outcomes do so through blue, green or sustainability-labelled use-of-proceeds structures that also deliver climate mitigation, adaptation or resilience co-benefits. Issuers should therefore be explicit about the primary nature outcomes being targeted and how any climate outcomes are positioned.

This Toolkit helps issuers capture and report both dimensions clearly, using complementary metrics aligned to TNFD-style assessment and relevant GBF Targets. In practice, issuers should keep nature condition indicators primary (for example habitat extent or condition) and report climate metrics (for example blue carbon) and resilience metrics (for example avoided loss) as linked co-benefits where relevant. This makes the linkage explicit and decision-useful for investors, without blurring the basis for eligibility or claims.

FIGURE 1

Climate finance and nature finance: illustrative scope and overlap



CLIMATE OUTCOMES PRIMARY	BOTH	NATURE OUTCOMES PRIMARY
• Utility-scale solar and grid	• Mangrove conservation and restoration (with climate co-benefits)	• Coastal and marine habitat restoration
• Building and district cooling efficiency	• Nature-based coastal protection	• Mangrove conservation for ecosystem condition
• Industrial electrification and efficiency	• Wetland conservation and flood moderation	• Wadi and watershed restoration
• Low-carbon mobility infrastructure	• Urban greening and nature-based cooling	• Protected area management and corridors
• Heat and flood resilience upgrades	• Catchment restoration for coastal resilience	• Arid land rehabilitation and rangelands

1.6 Commercial Relevance for Gulf Issuers

For Gulf economies, nature-related investment is increasingly viewed as both a risk mitigation tool and a source of new growth. Ecosystem stability underpins water and food security as well as a range of strategic sectors, including energy, construction, logistics, tourism, and coastal real estate. Corporate supply chains in these sectors depend on natural assets such as coasts, soils, biodiversity, and landscape quality. When these assets degrade, financial portfolios can be exposed to devaluation through increased physical risk to coastal infrastructure and reduced attractiveness of tourism destinations.

These considerations are particularly acute for real assets in the Gulf, where ports, desalination facilities, coastal housing, tourism zones, and logistics corridors are tightly coupled to local ecosystems. Nature degradation can translate rapidly into higher operating costs, disruption risk, asset impairment, and reduced investor appetite. Conversely, well-designed nature-positive projects can enhance resilience and long-term asset value.

Gulf coastal infrastructure (ports, desalination, tourism zones, coastal real estate) represents concentrated nature-related exposure and investment opportunity

ILLUSTRATIVE REGIONAL EXAMPLES: NATURE OUTCOMES WITH COMMERCIAL RELEVANCE (THESE ARE NOT INTENDED AS PRESCRIPTIVE CASE STUDIES)

United Arab Emirates

Coastal risk and ecotourism. Coastal ecosystem protection, including mangrove conservation and restoration, can support ecotourism revenues while strengthening natural buffers that reduce coastal hazard severity, maintenance requirements, and insurance pressures. UAE climate strategy reporting has cited analysis indicating that around 85 per cent of the population and over 90 per cent of national infrastructure are concentrated in coastal areas, making sea level rise, storm surge, and coastal erosion material concerns for utilities, industrial assets, and coastal real estate.

Kingdom of Saudi Arabia

Regenerative tourism on the Red Sea. Large-scale tourism developments are increasingly positioned as dependent on healthy coastal and marine ecosystems, with nature stewardship integrated into destination design and long-term value propositions. AMAALA Triple Bay has been presented as expected to create up to 50,000 jobs and contribute around SAR 11 billion (approximately USD 3 billion) to Saudi Arabia's GDP once fully operational, linking long-term commercial performance to sustained ecosystem condition. A complementary financing-structure reference point, linked to this theme, is set out in Box 2 in Section 1.10.

Sultanate of Oman

Blue carbon, mangroves, and economic co-benefits. In Oman, large-scale blue carbon initiatives have been presented as commercially structured nature projects, including proposals at the scale of around 100 million mangrove trees across approximately 20,000 hectares. Public reporting has also described carbon proceeds arrangements linked to verified outcomes, alongside wider economic co-benefits, with specific emissions and revenue estimates dependent on methodology, verification, and market conditions.

1.7 Nature-related Risks and Business Relevance

The UK Government has played a prominent role in advancing the international policy and market architecture for nature finance. The UK was instrumental in driving forward the agreement of the Kunming–Montreal Global Biodiversity Framework at COP15 in 2022, and its G7 Presidency in 2021 secured endorsement for the launch of the Taskforce on Nature-related Financial Disclosures (TNFD), to which the UK has contributed £4.8 million in funding since inception. The UK's 2023 Green Finance Strategy set out commitments to raise at least £500 million per year of private finance for nature recovery by 2027 and more than £1 billion by 2030, and to incorporate the TNFD framework into UK policy and legislative architecture. The Environment Act 2021 established legally binding biodiversity targets, and the Financial Services and Markets Act 2023 introduced a requirement for UK financial regulators to have due regard to the Environment Act's nature objectives. In February 2025, the UK published its National Biodiversity Strategy and Action Plan, setting out how it intends to deliver against the GBF targets. These domestic and international commitments provide an important reference point for Gulf issuers and their advisors, particularly where instruments are structured for international investor access or listing on venues such as the LSE Sustainable Bond Market. This Toolkit, developed under the UK Government's Gulf Strategy Fund, draws directly on this evolving architecture to support credible, market-aligned nature finance in the region.

Nature and biodiversity considerations should be framed from the outset in terms of conventional risk and value drivers so that project design is anchored in the realities of assets, cash flows and balance sheets, as well as environmental objectives. Nature-related risks become financially material when they affect the availability, quality and stability of the ecosystem services that support assets, operations and supply chains. In Gulf contexts, these exposures are most visible across water, land and coastal systems, and are reflected in the real asset examples outlined in Section 1.6.

These pressures translate into financial outcomes through several channels:

- Disruption to operations and service delivery where coastal flooding, erosion or water stress affects ports, desalination facilities or tourism infrastructure, leading to lost revenues, contractual penalties and reputational damage.
- Higher operating costs where ecosystem degradation drives up expenditure on water treatment, cooling or pollution control, as seen where declining coastal water quality increases the operational burden on desalination and industrial facilities.
- Additional capital expenditure or asset impairment where infrastructure in exposed shoreline and nearshore locations requires protection or retrofitting as natural buffers such as mangroves and coral reefs degrade and physical risks intensify.

- Rising insurance premiums and, in some cases, reduced availability of cover in high-risk areas, affecting investment decisions and financing terms.
- Cost of capital and market access impacts where investors and lenders perceive higher physical and transition risk, or where issuers are unable to evidence credible nature-related risk management and KPIs.

Conversely, well-designed nature-positive projects can act as infrastructure that reduces these exposures. Restored wetlands, mangroves, riparian buffers and floodplains can moderate flood peaks, protect coastal assets, improve water quality and buffer heat, often at lower life cycle cost than conventional engineered alternatives. In financial terms, this can be reflected as avoided losses, reduced variability in cash flows and more resilient asset values.

For the purposes of this Toolkit, issuers are encouraged to:

Healthy mangrove systems reduce wave energy, trap sediment and buffer coastal assets against storm surge — providing measurable avoided-loss value that can be reflected in project financial models

- Use TNFD-style dependency and impact assessment approaches to identify where assets and projects rely on specific ecosystem functions, and how those functions are changing.
- Map material nature-related risks to specific financial channels in risk registers and, where relevant, into project financial models.
- Design KPIs that capture both nature condition (for example habitat extent, water quality or ecosystem function) and associated business resilience (for example reduced downtime, avoided damage and improved service reliability).
- Ensure nature-related risks and responses are integrated into board-level risk registers and investor disclosures, rather than treated solely as environmental or corporate social responsibility topics.

This framing supports the positioning of Blue-Green Bonds and Sukuk as instruments for managing core strategic and financial risks, not only as vehicles for environmental or reputational benefits.

1.8 GCC Regional Policy Landscape and Institutional Foundations

Gulf governments are embedding nature and biodiversity within national strategies and regulatory frameworks, creating a stronger enabling environment for issuers seeking to integrate nature considerations into project design, data systems and disclosure.

In the UAE, Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects introduces national requirements for the measurement, reporting and verification of greenhouse gas emissions for in-scope entities, alongside provisions relating to climate adaptation planning and the provision of climate data. Although focused on climate, these MRV expectations provide a useful governance and data-discipline anchor that issuers can align with when designing data systems for nature-related projects, particularly in relation to roles, controls, documentation and assurance readiness. At emirate level, Environment Agency Abu Dhabi has strengthened biodiversity policy and expanded protected area and ecosystem restoration initiatives, including through programmes focused on coastal and marine ecosystem restoration and nature-based solutions.

In Saudi Arabia, the Saudi Green Initiative, under the umbrella of Vision 2030, sets overarching targets spanning emissions reduction and expanded land and sea protection, supported by a wide portfolio of national initiatives.

In Oman, Vision 2040 includes an Environment and Natural Resources priority within the Sustainable Environment pillar, positioning ecosystem resilience, coastal protection, water security and the sustainable use of natural resources as strategic priorities for long-term resilience and growth.

Regional partnerships, including through the Gulf Strategy Fund, can support collaboration on reporting, assurance and emerging nature-related market mechanisms. Taken together, these developments indicate strengthening institutional capacity for nature-positive finance in the Gulf and allow issuers to situate Blue-Green Bonds and Sukuk within a policy environment that is increasingly interoperable with market principles and disclosure frameworks. This reduces the need for parallel reporting systems where issuers anchor disclosures in recognised market guidance and align internal governance and data discipline with relevant national requirements. For practical guidance on applying this policy alignment without creating parallel systems, see Section 2.3.

1.9 From Policy Alignment to Nature-Positive Transaction Design

The central challenge for issuers is translating policy alignment into practical financing instruments. This requires clarity on three core aspects of transaction design:

1. What counts as a nature-positive project (eligible activities and metrics).
2. How results are measured and verified (MRV, TNFD-style assessment and related data requirements).
3. How capital is structured (bond or sukuk formats, use of proceeds and impact reporting).

Although the issuance sequence for bonds and sukuk is familiar, nature and biodiversity instruments introduce additional technical and procedural requirements that affect transaction planning and risk management. Where ecological baselines, MRV arrangements, specialist data inputs or independent review are weak or delayed, issuers and lead arrangers face heightened reputational, regulatory and legal risk, particularly if biodiversity outcome claims cannot be independently substantiated. This reinforces the need to align project design, data systems and disclosure commitments before documentation is finalised, particularly given heightened investor and supervisory sensitivity to greenwashing and overstatement risk in nature finance (see Sections 1.10 and 2.7).

Section Two addresses the first two aspects by setting out how to design, measure and report nature-positive projects in a way that is technically credible and aligned with recognised standards. Section Three focuses on the third aspect by explaining how those projects can be incorporated into bond and sukuk structures. Taken together, these sections are intended to help issuers move from policy alignment to transaction execution, using a coherent framework that meets the expectations of both international investors and local regulators.

1.10 Financing Nature Projects

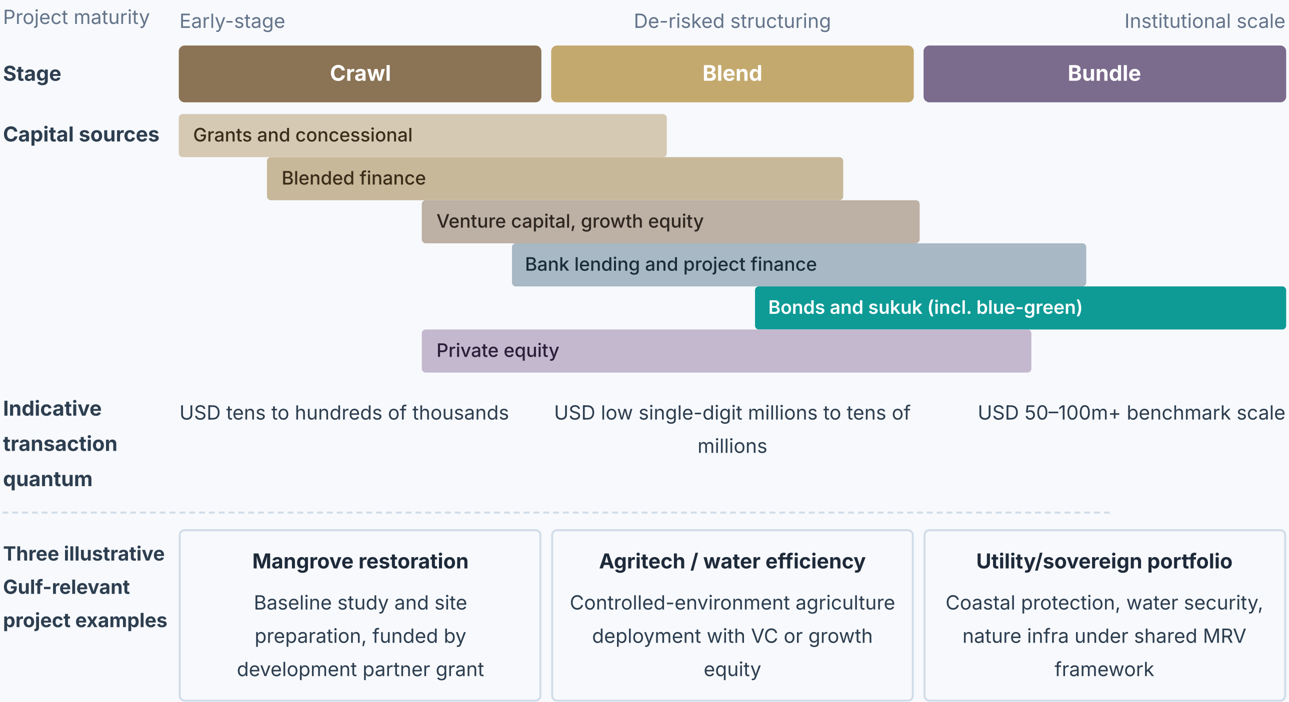
Nature and biodiversity finance becomes credible to capital providers when it is framed in conventional risk and value terms and supported by evidence that outcomes can be delivered and maintained. Building on the transaction design considerations set out in Section 1.9, this section clarifies what "transaction-ready" means in practice and how issuers can move from early project concepts to financeable pipelines, with MRV, governance and disclosure capacity that can be sustained over the life of an instrument. This Toolkit does not suggest that nature is automatically financeable. Instead, it sets out how nature-positive projects can be structured to meet institutional requirements for governance, disclosure and verification so they are suitable for inclusion in issuer frameworks and capital markets instruments.

Moving from policy alignment to transaction execution requires mapping the nature assets being financed, evidencing their condition and trajectory, and building the governance and MRV infrastructure to sustain disclosure

Nature-positive outcomes can be financed through a spectrum of capital, from grants and concessional funding through blended finance, bank lending and project finance, to debt capital markets instruments such as bonds and sukuk, and to private capital including venture capital and private equity, as illustrated in Figure 2. In practice, issuers often move from early project identification and piloting (crawl) to de-risked structuring and risk-sharing (blend), to portfolio aggregation suitable for institutional financing (bundle). This progression can support bank lending or debt capital markets issuance once commercial drivers, MRV readiness and reporting capacity are sufficiently mature. Blue-Green Bonds and Sukuk sit within this wider spectrum and are most appropriate where the cash-flow and risk profile, and the issuer's reporting capacity, support institutional debt, rather than as a default choice for all nature projects.

FIGURE 2

Spectrum of capital for nature-positive projects



Bonds and sukuk are most appropriate at the bundle stage, where pipelines reach institutional scale. Box 2 provides illustrative reference transactions at different points on the pathway.

Scale, quantum and intended audience

The financing spectrum illustrated in Figure 2 encompasses a wide range of transaction sizes, and each stage typically operates at a different order of magnitude. Early-stage project development, including baseline studies, site preparation and evidence-building, is commonly funded through grants and concessional capital in the range of tens of thousands to hundreds of thousands of dollars or equivalent. Technology-led interventions, including nature data platforms, remote sensing and verification systems, and agritech deployments such as controlled-environment agriculture and desalination-linked water efficiency, are often financed through venture capital or growth equity at the low to mid single-digit millions. As projects mature and cash flows become demonstrable, bank lending and project finance can support expansion at the scale of tens of millions, particularly where contracted revenues or avoided-loss value can be evidenced.

At the capital markets end of the spectrum, Blue-Green Bonds and Sukuk carry fixed issuance costs, including legal, structuring, external review, listing and ongoing reporting, that are difficult to justify below a minimum transaction size. In practice, issuance is typically viable at around USD 50 to 100 million, with many institutional investors expecting benchmark-scale transactions of USD

100 million and above for meaningful portfolio allocation and secondary market liquidity. There is variance within this range, and some issuances may sit below or above these indicative thresholds depending on the market, currency, issuer profile and investor base.

This Toolkit is oriented towards the capital markets end of this spectrum and is therefore most directly relevant to issuers with the balance sheet, project pipeline and reporting infrastructure to support institutional debt at this scale. In practice, this includes utilities, where nature-positive investments may relate to water systems, desalination, coastal protection or catchment management and can be integrated into existing capital programmes. It includes banks and financial institutions, which can aggregate eligible lending across clients and sectors into a diversified use-of-proceeds framework. And it includes large corporates and sovereigns, particularly those with portfolios spanning real estate, tourism, logistics or agriculture where nature outcomes are materially linked to asset value and operational performance.

For many nature-positive projects, reaching the minimum quantum for capital markets issuance requires aggregating a portfolio of eligible activities, for example combining coastal restoration, ecotourism infrastructure, water efficiency and controlled-environment agriculture into a single use-of-proceeds framework. This bundling approach allows issuers to build the critical mass needed for institutional capital, while maintaining project-level specificity in baselines, KPIs and reporting. A coastal ecotourism programme and a portfolio of agritech deployments may individually fall short of viable issuance size, but when stacked within a coherent framework with consistent MRV and reporting, they can collectively meet the threshold that institutional investors require.

Institutional capital naturally gravitates towards scale, liquidity and standardised disclosure. The primary intended audience for this Toolkit is therefore issuers and their advisors who are seeking institutional capital for nature-positive pipelines and who need practical guidance on how to make those pipelines credible, measurable and reportable at the quantum the market requires. Earlier-stage or smaller-scale interventions, including nature data platforms, desalination-linked efficiency projects and targeted technology deployments, may sit further back on the financing spectrum, progressing towards capital markets readiness as commercial drivers and MRV capacity mature.

For the purposes of this Toolkit, the following terms are used as working definitions:

Financeable refers to a project or programme that can reasonably attract capital on defined terms, including bank lending and equity investment, because it has credible value drivers, workable risk allocation, and measurable performance sufficient to support repayment and/or investor return. (The term "bankable" is sometimes used in practice, particularly in relation to debt suitability.)

Transaction-ready refers to a project that has clearly defined eligible activities, defensible baselines, credible KPIs, an MRV plan, and governance and data custodianship arrangements, with a reporting and assurance pathway that can be incorporated into documentation and ongoing disclosure.

Financial returns refer to the economic value generated by a project, which may include direct revenues, cost savings, avoided losses, contracted payments for services, or performance-linked mechanisms. Where environmental credit revenues are included, these should be treated as additional and evidenced through robust baselines, verification and disclosure.

Early-stage project development — baseline surveys, site assessment, evidence-building — is the foundation on which transaction-ready nature instruments are built

Illustrative financing pathways across the capital stack

The spectrum in **Figure 2** is not a single sequence, and projects may use multiple forms of capital in parallel. The examples below illustrate how financing structures vary across nature-positive project types, reflecting differences in risk profile, data maturity and the availability of contracted revenue or avoided-loss value.

Coastal resilience and ecotourism (real assets): Early-stage work (baseline studies, site preparation, permitting, community engagement) may be supported through grants or concessional funding. Capex for visitor infrastructure, access, utilities and long-term maintenance can then be financed through bank lending or project finance where cash flows exist (for example concession revenues, service contracts, or ring-fenced operating income). Once a portfolio of eligible capex and an MRV and reporting plan are in place, a Blue-Green Bond or Sukuk can be used to refinance or scale a pipeline of similar assets.

Agritech and water efficiency (commercial operations): Innovation and early deployment may be financed through venture capital or growth equity, particularly where the proposition is technology-led and revenue is operational. As assets mature and performance becomes measurable, bank lending can support expansion. Where projects are aggregated across sites and outcome KPIs are stable, capital markets issuance can support scaling, provided use of proceeds categories, baselines and reporting commitments are defined and deliverable.

Nature data and verification platforms (data companies and service providers): Platform build and market entry are typically funded through venture capital and strategic equity. As revenue becomes contracted (for example long-term service agreements for monitoring, analytics or verification), later-stage private capital or bank facilities may become viable. These businesses can strengthen the evidence base required for bonds and sukuk, even where they are not themselves financed through capital markets issuance.

Nature-positive infrastructure (urban cooling, flood management, coastal protection): Where the economic value is primarily avoided losses or public benefit, blended finance structures may be required, using guarantees or concessional capital to de-risk commercial participation. Where outcomes can be measured and linked to payment mechanisms, performance-linked structures may be viable. Capital markets instruments become appropriate once the financing structure, governance and reporting commitments are stable and auditable.

Box 2. Reference transactions and market initiatives across the financing pathway

These reference points illustrate how transactions and initiatives map onto different stages of the pathway.

Natural Environment Investment Readiness Fund (NEIRF), United Kingdom (Defra / Environment Agency): As an early-stage investment readiness mechanism, NEIRF is a competitive grants scheme providing grants of between £10,000 and £100,000 to support nature projects in England to reach investment readiness, including early-stage project definition, evidence preparation and pipeline development.

Big Nature Impact Fund (UK) (announced 2022; updated 2025): A Defra-backed public-private nature investment vehicle under the relaunched UK Nature platform, intended to mobilise private capital into nature recovery projects in England. Defra's £30 million commitment is structured as first-loss capital, providing a blended finance de-risking mechanism to attract private co-investment, with the fund targeting £120 million in total. Finance Earth acts as sole fund manager. The fund focuses on high-integrity nature recovery in England, including woodland creation, peatland restoration and biodiversity net gain projects; this first vehicle is England-only in scope.

Red Sea Global green financing for AMAALA, Kingdom of Saudi Arabia (credit facility under a Green Loan Framework, 2025): The commercial case for regenerative coastal tourism is introduced in Section 1.6; this example addresses the financing lens of the same theme. Red Sea Global announced a SAR 6.5 billion credit facility for AMAALA, described as adhering to its Green Loan Framework. The facility combines conventional and Islamic financing and provides a regional illustration of large-scale debt structured under a published green finance framework, with the framework setting the basis for use-of-proceeds discipline and associated investor-facing disclosures.

DP World Green Sukuk (2023), listed on Nasdaq Dubai and the London Stock Exchange: As a Gulf reference point for debt capital markets issuance in sukuk format, DP World issued a US$1.5 billion Green Sukuk in 2023, with listing reported by Nasdaq Dubai and the issuer. Credibility depends on the issuer's framework, eligible category definitions, and the delivery of allocation and impact reporting over the life of the instrument.

1.11 Making Nature Projects Transaction-Ready

To make nature and biodiversity projects transaction-ready in practice, issuers should present ecosystems and services as measurable value drivers. Healthy ecosystems can deliver economic services such as water filtration, coastal protection and microclimate regulation that can be quantified and, where appropriate, reflected in financial models and risk assessments. For example, coastal restoration projects can be designed with measurable indicators for shoreline protection, habitat condition and resilience outcomes. Where these are monitored and verified, they can support performance-linked financing, sukuk structures or blended finance mechanisms, depending on the asset base and risk allocation. (For the underlying financial transmission channels and risk framing, see Section 1.7.)

Transaction readiness requires clear documentation of eligible activities, defensible baselines, credible KPIs and a verification pathway — the evidence base that underpins investor confidence and external review

When concessional capital, public funding, guarantees or other risk-sharing structures are used to mobilise private capital for nature outcomes, issuers should describe the financing approach clearly, including the purpose of any de-risking and the implications for governance, reporting and long-term stewardship.

Data and delivery capacity are practical constraints in many nature transactions. Transaction-ready propositions therefore require an ESG data and MRV approach that is proportionate, auditable and capable of sustaining reporting over the life of the instrument, including where monitoring relies on specialist providers and long-term stewardship arrangements. Where blended finance is used, the emphasis should remain on demonstrable value drivers and evidence-based outcomes, rather than reliance on ongoing subsidy.

In practice, issuers can work backwards from conventional commercial drivers when selecting where to prioritise early piloting ("crawl") and how to structure programmes for scale ("bundle"). Issuers should start with sectors and asset types where nature outcomes are materially linked to cash flows, costs or risk exposure, and then define the interventions and indicators needed to protect or enhance those value drivers. In Gulf contexts, this commonly includes ecotourism and coastal real estate, water and infrastructure systems, and land and agricultural value chains, including controlled-environment agriculture and other agritech models where water efficiency, land productivity and resilience are central to performance.

Issuers may also consider stacking value drivers, provided claims remain conservative and evidence-based. This can include combining resilience and avoided-loss benefits with operational revenues and, where credible and independently verified, environmental credit revenues. Any discussion of offsets or credits should be clearly distinguished from the primary nature outcomes of the project and supported by robust baselines, verification and disclosure.

SECTION TWO

Designing, Developing and Reporting on Nature-Positive Projects

Project-level guidance for Gulf issuers and transaction teams

2.1 Purpose and Scope

This section provides guidance for issuers, developers and financiers on how to identify, design and deliver nature-positive projects suitable for financing through Blue-Green Bonds and Sukuk. It focuses on the project level, setting out how to define objectives, structure activities and evidence outcomes in a way that is credible to investors, regulators and assurance providers. It draws on the disclosure, taxonomy and measurement architecture introduced in Section 1.4, aligns with widely used market references for labelled issuance and nature-related assessment, and reflects relevant regional policy and regulatory requirements. The wider GCC policy context and institutional foundations are set out in Section 1.8.

Transaction teams may use this section as a working reference when building a project pipeline and the supporting evidence base required for issuer frameworks, external review and ongoing allocation and impact reporting.

The approach taken here is to reflect leading market practice while interpreting it through a Gulf lens so that project classification, MRV design and reporting outputs remain interoperable with international expectations while remaining implementable in regional contexts. Where sukuk are the intended instrument, additional structuring and governance considerations are addressed in Section 3.5.

2.2 Key Components of a Blue-Green Project

A credible Nature-Positive (Blue-Green) project should demonstrate the following core elements:

- Clear environmental objectives aligned with relevant GBF goals and targets to 2030 and, where appropriate, SDG 6, 13, 14 and 15.
- A defined baseline and a defensible additionality rationale, supported by appropriate methodologies and data sources.

- Classification of activities using recognised taxonomies (for example the MDB Common Nature Finance Taxonomy and the Climate Bonds Initiative (CBI) taxonomy) so that eligible use of proceeds categories can be tagged consistently and compared across portfolios and issuances.
- Governance and accountability structures, including a project owner, implementing partner, verification or assurance entity and, where relevant, Shariah supervisory oversight.
- Monitoring, reporting and verification (MRV) mechanisms aligned with applicable national requirements and consistent internal data governance.
- Early community and stakeholder engagement proportionate to the project's footprint and risk profile.
- A post-completion review and closure reporting plan documenting verified outcomes and lessons learned.

Issuers should be clear which direct drivers of biodiversity loss the project is addressing (for instance land or sea use change, overexploitation, pollution, climate-related impacts or invasive species). These requirements should be documented in the issuer's financing framework and in project-level annexes so that investors and reviewers can see accountability for delivery, what will be measured, and how measures connect to relevant national and international objectives. In practice, teams should use the components above as a design and documentation checklist to ensure evidence, roles, and reporting responsibilities are complete and audit-ready before projects are included in a use-of-proceeds pool.

In this Toolkit, Nature-Positive (Blue-Green) projects prioritise biodiversity and ecosystem service outcomes, with climate metrics reported as linked co-benefits where relevant, consistent with the primacy and boundary distinction set out in Section 1.5, using TNFD-style assessment to structure the nature logic and ICMA labelled market practice to anchor disclosure and reporting discipline.

How these components can align with regional frameworks

These components can be aligned to regional requirements and policy signals without creating parallel processes. For example:

- **United Arab Emirates:** MRV mechanisms and data governance can be designed to be consistent with the UAE climate MRV framework and associated national reporting infrastructure (see Section 1.8). In practice, issuers can apply equivalent principles of completeness, accuracy, consistency and transparency to nature metrics, supported by clear custodianship, verification pathways and a supporting evidence base for external review and reporting.
- **Kingdom of Saudi Arabia:** Objectives and eligible categories can be positioned within the Saudi Green Initiative and the wider environmental reform agenda under Vision 2030, while keeping investor disclosures anchored to recognised market guidance on baselines,

additionality, safeguards and reporting.

- **Qatar:** Issuers can link Blue-Green objectives to Qatar National Vision 2030 and national environment and climate strategies, while maintaining a single, coherent disclosure approach through consistent baselines, outcome indicators, and transparent reporting of nature results and climate co-benefits.

2.3 Frameworks and Standards to Reference

This section applies the disclosure, taxonomy, and measurement architecture set out in Section 1.4 at the project level. In operational terms, issuers should select a small, coherent set of frameworks, taxonomies and measurement approaches and apply them consistently to support screening, design, MRV and reporting, mapping to jurisdiction-specific requirements only where needed and without creating parallel systems (see Section 1.8).

How to use these in practice:

- Use TNFD LEAP (Locate, Evaluate, Assess and Prepare) to structure project logic, including dependencies, impacts, risks and opportunities.
- Use TNFD DIRO analysis (Dependencies, Impacts, Risks and Opportunities) to identify material nature issues, connect them to financial effects and ensure dependencies and impacts are captured systematically.
- Use the Science Based Targets Network (SBTN) target-setting methods, where relevant, as a complementary pathway to TNFD assessment and disclosure, particularly for issuers and corporate counterparties seeking to set science-based targets on nature where land, freshwater, biodiversity or value-chain impacts are material.
- Use GRI 101: Biodiversity 2024 to structure how biodiversity-related pressures, state and responses are described and to inform the selection of a concise set of nature-related KPIs and impact metrics.
- Use ICMA (Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines) and the ICMA Harmonised Framework for Impact Reporting to structure disclosures and present KPIs, baselines, methodologies, reporting frequency and verifier statements in allocation and impact reports.
- Use relevant national MRV requirements as reference points for MRV principles (for example completeness, accuracy, consistency, transparency and appropriate governance of measurement, verification and custodianship), applying equivalent discipline to nature metrics.
- Use Kunming–Montreal GBF Targets to map project objectives to global goals and to identify which targets a project supports (for example Target 2 on restoration, Target 8 on pollution or Target 11 on nature's contributions).

- Use the MDB Common Nature Finance Taxonomy and the CBI taxonomy to classify eligible activities and categories, including marine, water, land restoration and resilience, so that Blue-Green use of proceeds can be tagged consistently and compared with international portfolios.
- Use ISO 14064 and ISO 14065 for any quantification and assurance of climate-related co-benefits, including blue or green carbon where relevant.
- Use IFC Performance Standards (PS 1–8) as reference points for environmental and social safeguards, community engagement and cultural heritage issues.

Issuers are not expected to apply all frameworks exhaustively. In most cases, teams should select a small number of well-understood standards and taxonomies and apply them consistently, so that MRV, assurance and reporting remain feasible and disclosures and classifications are intelligible to international investors and regulators.

What to state in your framework (illustrative wording):

- "Nature-related dependencies, impacts, risks and opportunities are assessed using TNFD LEAP and DIRO, and inform project selection, KPI design, and reporting."
- "The issuer commits to ICMA Green Bond Principles and uses the ICMA Harmonised Framework for Impact Reporting to disclose allocation and impact indicators."
- "MRV follows applicable national requirements for climate-related data, with equivalent MRV principles applied for nature metrics."
- "Nature outcomes are mapped to relevant GBF Targets. Eligible categories reference the MDB Common Nature Finance Taxonomy and the CBI taxonomy."

Where issuers already report under these frameworks for other instruments, existing processes and data systems should be reused rather than duplicated.

International frameworks such as TNFD, ICMA Green Bond Principles and the Kunming–Montreal GBF Targets provide the shared architecture that allows nature finance instruments to be assessed, compared and reported consistently across markets

2.4 Community and Stakeholder Engagement

Community and stakeholder engagement is a core design element for Nature-Positive (Blue-Green) projects, given that many nature-positive outcomes depend on long-term stewardship, operational discipline and local knowledge.

Engagement should begin at the earliest stages of project design and should identify affected stakeholders and, where relevant, Indigenous Peoples and Local Communities (IP&LCs). It should be structured around a rights-based approach that recognises the rights, voice and agency of affected groups. Where projects may affect Indigenous Peoples' lands, resources or cultural heritage, the principle of Free, Prior and Informed Consent (FPIC) should be applied.

TNFD guidance on engagement with Indigenous Peoples, Local Communities and affected stakeholders provides a practical reference for operationalising these expectations. Engagement should also align with international safeguards and good practice, including IFC Performance Standards 7 and 8, particularly where projects interact with IP&LCs, traditional livelihoods, cultural heritage or areas of high community sensitivity.

In practice, issuers should establish engagement processes that are transparent, accessible and proportionate to the project context. These may include formal community oversight or advisory mechanisms, equitable benefit-sharing arrangements, grievance mechanisms, and documented opportunities for participation and feedback. Women should be meaningfully included in consultation, benefit-sharing and governance arrangements.

For many projects, credible engagement also requires recognising local governance and community institutions and integrating them into maintenance and monitoring arrangements, especially where the long-term condition of the nature asset is a determinant of project performance. Participation should be documented in a way that can be referenced in project annexes, investor reporting and verification materials.

Weak or superficial engagement can undermine safeguards and increase the likelihood that nature assets are degraded, contested or abandoned over time, weakening outcome integrity and the credibility of the instrument.

What to state in your framework (illustrative wording):

- "Stakeholder engagement has been undertaken to identify affected groups, including IP&LCs where relevant, and to incorporate local knowledge into project design, monitoring and long-term maintenance."
- "Engagement and safeguards approaches reference IFC Performance Standards, including PS7 and PS8, and TNFD guidance on engagement with Indigenous Peoples, Local Communities and affected stakeholders."

- "Where applicable, FPIC is applied for projects that may affect Indigenous Peoples' lands, resources or cultural heritage."
- "Community participation, benefit-sharing, feedback and grievance processes are documented and will be summarised in project annexes and reporting."

2.5 Measurement Tools and Indicators

Measurement tools and indicators translate project design into measurable, verifiable evidence that can support allocation and impact reporting. As set out in Section 2.3, teams should prioritise a small number of robust approaches and apply them consistently. Issuers should recognise that biodiversity data often involves gaps, inconsistencies and limitations in coverage, resolution and comparability across geographies and time periods. The confidence and granularity of available data also varies significantly by ecosystem type: coastal and mangrove systems in the Gulf are comparatively well documented, while data for arid land, freshwater and seagrass systems may be sparser and less standardised. Issuers should disclose both transparently and factor them into KPI design, baseline assumptions and reporting commitments.

Measurement approaches should be selected by asset class and intervention type, so that indicators reflect the way value, risk and performance are expressed for the underlying assets being financed. For example, coastal protection and ecotourism assets typically require geospatial baselines and habitat-condition indicators, while water and infrastructure assets rely more heavily on operational datasets (for example metering and SCADA), laboratory sampling and service-reliability metrics. This asset-led approach helps ensure MRV is proportionate, verifiable and aligned to investor decision-making. Indicators should be selected with verification in mind, favouring measures that are feasible to collect consistently and can be independently assured at a proportionate cost. (See Section 2.7 for assurance scoping and verification considerations.)

This Toolkit distinguishes between:

- **Measurement tools:** the frameworks, methods and platforms used to define what should be measured, how it should be measured and how results should be interpreted, supporting scoping, baselines, data collection, analysis and reporting.
- **Indicators:** the specific metrics selected to evidence outcomes and track performance over time for investor reporting, defined to enable verification and comparability.

In addition to project-specific methods, issuers and their banking partners can draw on consolidated biodiversity measurement guidance developed for financial institutions, including practitioner guides that review available approaches and assess robustness, data requirements and suitability for sector- and location-specific analysis. These summaries can help Gulf institutions select tools appropriate for coastal infrastructure, real estate, water, energy and tourism assets, rather than starting from first principles.

Measurement tools may include:

- TNFD LEAP for scoping and prioritisation.
- GBF monitoring indicators as reference points for ecosystem and species outcomes.
- GRI 101: Biodiversity 2024 for structuring pressures, state and response indicators.
- Natural Capital Protocol where valuing ecosystem services supports decision-making or articulation of avoided losses and value drivers.
- FAO SEPAL for geospatial monitoring where remote sensing is appropriate for land cover, vegetation and change detection.
- GHG Protocol for Project Accounting where climate-related co-benefits are quantified at project level.

Common indicators will vary by asset class. Nature condition indicators should be primary, with climate and socio-economic metrics reported as co-benefits where relevant, consistent with the distinction set out in Section 1.5.

Field-based ecological surveys, combined with remote sensing and satellite data, provide the auditable baselines and monitoring records that MRV systems and third-party assurance depend on

Primary nature condition indicators may include:

- Hectares of habitat restored or protected.
- Volume of water recycled or conserved.
- Biodiversity index change or species recovery rate (using a defined methodology).

Where relevant, co-benefit indicators may also be reported alongside primary nature indicators:

- Tonnes of CO_2e avoided or sequestered, where climate-related co-benefits are quantified.
- Number of jobs or SMEs supported, where social or livelihood co-benefits form part of the project logic and disclosure approach.

Each indicator selected should be clearly defined, with baseline, methodology, data sources, frequency and responsibilities specified. Where possible, indicators should be designed so that they can feed into existing reporting processes, avoiding duplication across disclosures and reporting cycles.

2.6 Reporting Frequency and Format

Once indicators and measurement methods have been defined, issuers should set clear reporting expectations across the life of the instrument so that allocation and impact claims remain transparent, comparable and verifiable. For Nature-Positive (Blue-Green) and other nature-linked instruments, reporting is typically structured around three stages in the project lifecycle: allocation, impact and closure.

- **Allocation reporting** is issued annually until proceeds are fully allocated.
- **Impact reporting** is issued at least every 12 months and includes the methodology, key assumptions and verified results.
- **Closure reporting** is typically prepared within six months of project completion, confirming allocations, verified outcomes and lessons learned.

As far as possible, these reports should be scheduled alongside existing financial and sustainability reporting cycles to minimise duplication and maintain consistent datasets.

At the project level, responsibility for reporting readiness sits with the project team and the sustainability or environmental function, not solely with the treasury or arranger. This means ensuring that baseline data, monitoring outputs, verified results and supporting evidence are collected, quality-checked and documented to an auditable standard on an ongoing basis, so that the data is available when allocation and impact reports are due. Where monitoring relies on specialist providers or long-term stewardship arrangements, roles, data flows and handover points should be defined and agreed before the instrument is issued, not retrofitted after the first reporting cycle.

2.7 External Review and Third-Party Assurance

External review is a core element of market practice for labelled bonds. Under the ICMA Principles, it is a Key Recommendation that issuers obtain a pre-issuance external review to assess alignment of the issuance, programme and/or framework with the relevant core components, and that post-issuance management of proceeds is supplemented by an external auditor. ICMA also recommends that external review reports are made publicly available, before or at the time of issuance.

External review can take several forms, depending on the instrument, claims and context:

- Second-party opinion (SPO) assessing alignment with the relevant ICMA Principles and the issuer's approach to use of proceeds, project evaluation and selection, management of proceeds and reporting.
- Verification against stated criteria or standards, which may include verification of internal processes (for example proceeds tracking) and, where commissioned, verification or assurance of selected reported metrics and outcomes.
- Certification under a recognised scheme (for example the Climate Bonds Standard), where used.
- Rating/scoring by an independent provider, where used.
- Shariah compliance review for sukuk, confirming that the structure, underlying assets or activities, and proceeds use are Shariah-compliant, with appropriate governance for ongoing compliance.

Issuers should engage reviewers early so that review scope and evidence expectations inform baseline development, KPI design and data system architecture before these are locked into the framework or legal documentation. This allows weaknesses in baselines, indicator selection, data access, and verification feasibility to be addressed before disclosure and reporting commitments are fixed. Where nature outcomes are central to the transaction, reviewers should demonstrate ecological competence, or draw on specialist partners, so that baselines, indicators and methodologies are technically defensible and capable of supporting credible post-issuance reporting.

FIGURE 3

Sequencing of external review and assurance from baseline to closure

PRE-ISSUANCE

Baseline & KPI design
Ecological baselines, MRV plan, indicator selection

→

Framework drafting
Use of proceeds, management, reporting commitments

→

External review scoping
SPO · Certification (where used) · Shariah review (sukuk)

↓

ISSUANCE

Issuance & listing
Documentation finalised · Framework published · SPO disclosed

↓

POST-ISSUANCE

Allocation tracking
Proceeds tracked to eligible categories

→

Annual reporting
Allocation & impact report Nature KPIs

→

Verification / assurance
Limited or reasonable assurance on metrics and proceeds

↓

CLOSURE

Project closure review
Final allocation confirmed · Outcome evidence consolidated · Lessons documented

Key principle: *engage reviewers early so review scope informs baseline, KPI and data system design.*

2.8 Project Closure and Review

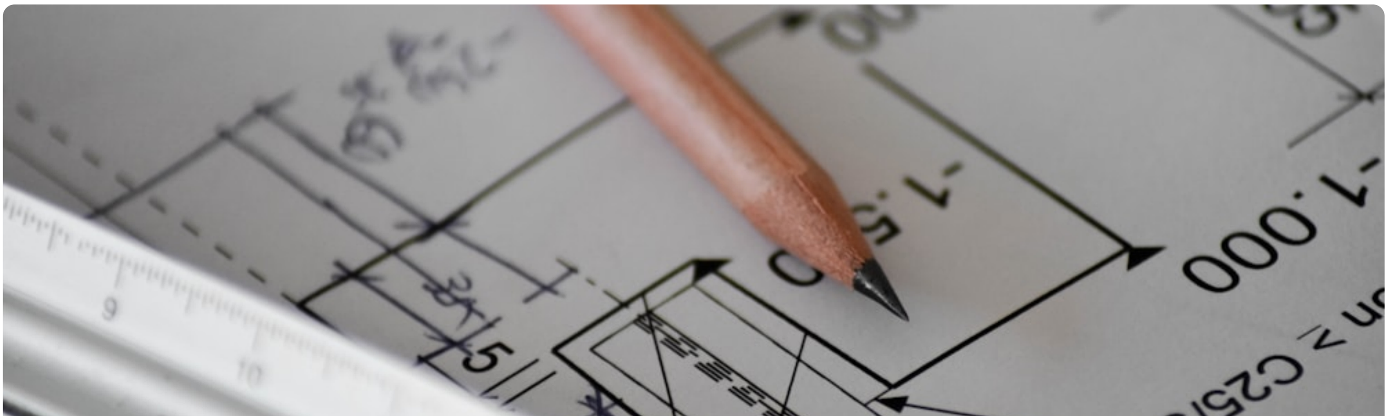
Closure should be treated as a credibility milestone, not an administrative end-point. It is the stage at which issuers consolidate the evidence base, confirm that allocation and impact claims remain defensible, and demonstrate outcome integrity in a way that builds institutional confidence and supports repeat issuance.

On completion, issuers should:

- Confirm allocation and verified impacts, including any material limitations, adjustments or restatements.
- Issue a closure statement, reviewed by external parties where appropriate, summarising allocations, outcomes and verification status.
- Archive project and instrument data within issuer-led MRV systems, with clear custodianship and retention procedures, and with compatibility in mind for national or regional registries where these exist or emerge.
- Assess co-benefits and continuity mechanisms, including reinvestment or maintenance arrangements where outcomes depend on long-term stewardship and operational discipline.

Lessons from closure should be fed back into internal project screening, risk management and framework criteria so that subsequent Nature-Positive (Blue-Green) transactions are progressively strengthened and post-issuance performance becomes easier to deliver and evidence.

2.9 Leading Practice



Leading practice in nature finance integrates landscape-scale thinking with project-level MRV discipline — ensuring that restoration interventions are mapped, measured and reported with the rigour institutional investors require

Critical decisions taken early in structuring largely determine whether a nature-linked transaction remains robust to scrutiny. This section sets out the core disciplines that support credible and defensible transactions, with "transaction-ready" baseline, MRV, governance, and deliverability expectations set out in Section 1.11.

In most cases, issuers should:

- Establish robust baselines, using geospatial datasets where appropriate, so that additionality and long-term change can be demonstrated.
- Keep impact claims proportionate to the available evidence, with methods, assumptions and limitations documented clearly.
- Define data custodianship and access arrangements, including responsibility for maintaining datasets and how they will be shared for assurance and regulatory purposes.
- Check alignment with applicable MRV rules, protected-area designations and permitting processes before projects are included in the use-of-proceeds pool.
- Integrate environmental and financial functions so that nature metrics inform core risk, finance and reporting processes, rather than being treated as standalone ESG indicators.
- Plan for closure and post-completion maintenance, including long-term stewardship and monitoring arrangements (see Section 2.8).
- Apply a rights-based approach to community and stakeholder engagement, including documented engagement with affected stakeholders and, where relevant, Indigenous Peoples and Local Communities, Free, Prior and Informed Consent where projects may affect Indigenous Peoples' lands, resources or cultural heritage, equitable benefit-sharing arrangements, and accessible grievance mechanisms (see Section 2.4).
- Explicitly rule out double counting of ecosystem services or the same emissions benefit across multiple instruments, disclosures or claims.

Weak baselines, overstated or non-replicable impacts, misalignment with MRV requirements, and unclear governance over data and custodianship can materially weaken the credibility of a transaction and increase exposure for issuers, arrangers and investors. Issuers should therefore treat these points as standard components of transaction preparation, not optional extras.

2.10 Summary

The disciplines set out in this section are not procedural recommendations. They are the minimum evidential and governance foundation on which the credibility of a Nature-Positive (Blue-Green) Bond or Sukuk depends. Weak or incomplete project-level preparation, whether in baselines, KPI design, MRV, safeguards, stakeholder engagement or assurance planning, directly increases exposure to greenwashing allegations, investor challenge, regulatory scrutiny and, in serious cases, litigation. As supervisory and investor attention to nature-related claims intensifies, issuers and arrangers who treat these disciplines as optional face material reputational, legal and financial risk.

Defensible baselines, clearly defined and verifiable KPIs, proportionate assurance, and documented stakeholder engagement are what distinguish a credible nature-linked instrument from one that cannot withstand post-issuance scrutiny. When embedded into project preparation and documentation from the outset, they enable financed projects to deliver measurable, verifiable and enduring outcomes that support investor confidence, reduce post-issuance reporting friction and lay the groundwork for repeat issuance.

The approach is intended to be practical and adaptable, providing Gulf issuers and their advisers with a structured template that can be tailored across different asset classes, habitats and regulatory settings. Consistent application across successive transactions supports comparability, strengthens institutional learning and progressively reduces the cost and complexity of future issuances.

SECTION THREE

Issuing Nature and Biodiversity Bonds and Sukuk

Structuring, review and disclosure for Gulf capital markets

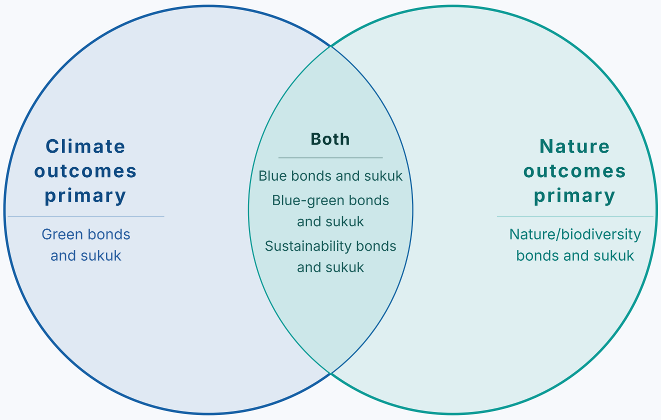
3.1 Purpose and Overview

This section provides a guide for issuers, arrangers and investors on structuring and managing Nature or Biodiversity Bonds and Sukuk. The issuance process follows standard labelled market practice (mandate, framework, external review, issuance, management of proceeds, and post-issuance allocation and impact reporting), but nature and biodiversity instruments typically introduce additional requirements that affect sequencing, documentation readiness, and the evidential basis for investor-facing disclosure. These differentiating requirements are reflected throughout Sections 3.2 to 3.7 and should be read alongside the project-level guidance in Section Two.

In practice, issuers may finance nature outcomes through use of proceeds instruments, including green or blue bonds and sukuk, where eligible categories and reporting are clearly defined. Sustainability bonds and sukuk may be appropriate where proceeds finance a combination of environmental and social categories, including nature-positive activities. Sustainability-linked instruments can also be used where issuer commitments can be expressed through measurable and verifiable climate and nature performance targets, supported by robust baseline data and reporting. Many transactions that deliver nature outcomes sit within these broader labelled formats, with climate outcomes often reported as co-benefits. The key is clarity on eligibility boundaries and disclosure, including the positioning of nature condition metrics as primary indicators.

FIGURE 4

Portfolio and instrument positioning: illustrative mapping of instrument types relative to outcome focus



Sustainability-linked bonds and sukuk

Position depends on KPI selection: can target climate, nature, or both outcomes; not anchored to a fixed region of this diagram.

Note: instrument labels are used differently across the market. Final positioning depends on the issuer's framework, eligible categories and reporting commitments. This diagram shows typical positioning, not market rules.

Building on the project-level design principles set out in Section Two, this section explains how transaction-ready, nature-positive projects are incorporated into bond and sukuk structures in a way that remains recognisable to capital markets while meeting the evidential standard expected for nature-related claims, as described in Sections 1.9 to 1.11.

3.2 Key Differences in the Issuance Process

Building on the project-level evidence and assurance readiness requirements set out in Section 2.7, this section addresses how external review is scoped, commissioned and sequenced within the issuance process, and identifies the key documentation and disclosure differences that distinguish labelled instruments from standard issuance.

At the documentation level, a labelled nature or biodiversity bond or sukuk differs from a standard instrument issued under the same programme in three principal ways:

- **Use of proceeds commitment and eligible category definitions.** A standard bond has no restriction on how proceeds are deployed. A labelled bond commits the issuer to allocate proceeds to defined eligible categories set out in a published framework, referenced in the offering documentation and assessed by an external reviewer pre-issuance.

- **External review and ongoing reporting obligations.** A standard bond requires no pre-issuance sustainability opinion and no post-issuance impact reporting. A labelled bond typically carries a Second Party Opinion confirming alignment with the relevant ICMA Principles, and the issuer commits to annual allocation and impact reporting (with limited or reasonable assurance) for the life of the instrument.
- **Additional risk factors in offering documentation.** The offering documentation for a labelled bond includes ESG-specific risk factors that do not appear in a standard issuance from the same programme. These typically cover the risk that eligible assets may not meet or continue to meet eligibility criteria, the risk that the framework or external review may not satisfy investor expectations, and the risk that the notes carry no assurance of meeting specific ESG investment criteria or listing requirements.

  Within labelled market practice, nature and biodiversity instruments typically require earlier and more detailed decisions on evidence requirements and data readiness, to ensure disclosure and reporting commitments remain deliverable. Practical considerations that commonly distinguish these transactions from standard labelled instruments include:

- Confirm the nature project pipeline early enough that baseline evidence, MRV arrangements, and data custodianship can be established in time to inform framework drafting and disclosure preparation (see Sections 2.2 to 2.6).
- Ensure the framework states clear eligibility boundaries and outcome claims that can be evidenced and reported through the life of the instrument (see Sections 2.2, 2.6, and 3.4).
- Scope external review early, including ecological competence where needed, so evidence expectations inform KPI selection and disclosure boundaries before documentation is finalised (see Section 2.7).
- Secure any specialist technical inputs early enough that they can be reflected consistently across the framework, external review materials, and investor disclosures.
- Ensure investor-facing disclosures remain consistent with the framework and the reporting package, including baselines, KPIs, assumptions, and stated limitations (see Sections 2.3 and 2.6).
- Involve non-traditional stakeholders such as NGOs, research institutions or specialist technical providers where this is material to baseline design, community engagement, long-term monitoring or stewardship capacity (see Section 3.3).
- Ensure any listing approach and investor-facing disclosure aligns with widely used market guidance that references ICMA Principles, nature-positive use of proceeds and measurable objectives, supported by independent external review (see Section 3.7).

  For detailed project-level method (baselines, KPIs, MRV, reporting cadence, and external review), see Sections 2.2 to 2.7; for listing and disclosure alignment, see Section 3.7.

Gulf capital markets — including Nasdaq Dubai, the London Stock Exchange and Tadawul — provide the listing infrastructure for nature and biodiversity bonds and sukuk, with credibility anchored in framework quality and disclosure discipline

3.3 Partnerships with NGOs and Technical Experts

Partnerships with NGOs, academic institutions and specialised technical bodies can materially strengthen the design and implementation of nature finance transactions, particularly where ecological baselines, monitoring and verification require specialist capability or long-term stewardship. Where partnerships are used, they should be described in functional terms linked to defined technical needs, and structured to support baseline design, data access, monitoring, verification, and stewardship. Partnerships should not be presented as endorsements of the instrument.

Issuers should specify roles clearly, including which entities are responsible for baseline design, monitoring protocols, independent technical review, safeguards oversight and long-term stewardship. Clear contractual arrangements, including data-sharing agreements, quality assurance responsibilities and reporting obligations, should be in place before the framework or issuance documentation is finalised.

3.4 Use of Proceeds

Proceeds should finance projects and expenditures that enhance, restore or protect ecosystems, with eligibility framed through the issuer's framework and supported by documentation that is proportionate to the nature claims being made. Eligible areas commonly include conservation, water management, ecosystem restoration, nature-based solutions, sustainable land and marine management, and circular resource systems.

Use-of-proceeds instruments require sufficient specificity that reviewers and investors can see what qualifies, what is excluded, and how project selection decisions are made. Where instruments include both nature outcomes and climate co-benefits, the framework should maintain clear boundaries between primary nature objectives and secondary climate metrics, consistent with Section 1.5.

Eligibility and proceeds management should therefore be supported by:

- Clear eligibility criteria and exclusions, including safeguards and regulatory screening where relevant; for ocean and water-related projects, issuers should also reference the UNEP FI Sustainable Blue Economy Finance Principles, which set out recommended exclusions for this category.
- A documented evaluation and selection process, including roles, governance, and decision-making thresholds.
- Evidence requirements proportionate to the nature claims being made (see Sections 2.2 to 2.4).
- Consistency across baselines, KPIs, MRV design, reporting cadence, and assurance scope, reflected in the framework and reporting plan (see Sections 2.2 to 2.7).
- Clear processes for management of proceeds and allocation tracking, including governance and data custodianship.

Eligible projects should be presented in a manner consistent with widely used market practice for labelled instruments, while ensuring that nature-related claims remain conservative, evidence-based and deliverable.

3.5 Specificities for Sukuk Issuance

Sukuk structures are Shariah-compliant and linked to identifiable underlying assets or activities. This asset linkage can strengthen credibility for nature-based transactions by reinforcing traceability between proceeds, financed activities and evidenced outcomes. Nature-linked sukuk therefore require dual discipline: Shariah compliance and financial integrity, alongside credible evidence of nature outcomes.

From an Islamic finance perspective, nature-linked sukuk can be positioned as consistent with Shariah objectives that emphasise stewardship of resources, avoidance of harm and the promotion of public benefit, provided the underlying assets and use of proceeds are clearly defined, and governance arrangements support ongoing compliance. In practice, this places particular emphasis on how Shariah governance interfaces with the issuer's sustainable finance framework and external review approach, including how eligibility, controls and reporting commitments remain internally consistent over the life of the sukuk.

For issuers, this reinforces the importance of:

- Segregated proceeds and clear eligibility definitions that can be applied consistently across the sukuk documentation and the sustainable finance framework.

- Shariah governance with clarity on the scope of review and how ongoing compliance is monitored, including any reallocation controls where projects change over time.
- Alignment between Shariah oversight and external review planning, so that evidence requirements, verification expectations and reporting commitments are clear and deliverable.
- Clear articulation of long-term stewardship and maintenance arrangements where outcomes depend on sustained ecosystem condition.

Common sukuk models that may be used, subject to structuring and Shariah approval, include Ijārah (leasing), Wakālah (agency-based) and Murābahah (trade-based). The appropriate model will depend on the asset base, cash flow profile, use of proceeds categories, and the issuer's governance and reporting capabilities. In the case of Ijārah sukuk, issuers should note that the structure involves the sale and leaseback of an identifiable asset to the SPV. All such assets used in underpinning a sukuk structure should be assessed for their nature sensitivity even though traditional bonds and associated guidance focuses principally on the use of proceeds from the issuance. ICMA and IsDB have issued guidelines (Apr24) on green and sustainability sukuk which can be referred to.

3.6 Lead Arranger, Issuer and Financial Institution Considerations

Poorly structured nature instruments can create material reputational, regulatory and legal exposure for issuers and lead arrangers, particularly where outcome claims are not matched by defensible baselines, robust MRV arrangements and transparent disclosure. The assurance expectations in Section 2.7, the project-level controls in Section 2.9 and the transaction design discipline in Sections 1.9 to 1.11 should be treated as due diligence inputs; the factors below summarise the arranger lens on scope, timetable and disclosure considerations.

Factors for lead arrangers and financial institutions to consider include:

- **Due diligence scope and capability:** Ecological assessments add complexity and require specialist capability, including the ability to review baselines, KPI selection and supporting evidence bases in a way that is proportionate to the claims (see Sections 2.2 and 2.7).
- **Transaction planning and timetable risk:** Ecological baseline development, MRV partner mobilisation and third-party review can affect critical path timelines and should be built into the issuance plan from mandate stage (see Sections 2.2, 2.6 and 3.2).
- **Documentation and disclosure alignment:** Investor-facing disclosures and, where relevant, offering documentation should reflect the issuer's framework, the scope of external review, and the reporting commitments that will be delivered post-issuance, including methodologies, assumptions and limitations (see Sections 2.3, 2.6 and 3.7).

- **Claims discipline and limitations:** Nature outcomes should be communicated in measurable and verifiable terms, with limitations stated transparently and with clear separation between primary nature outcomes and any climate co-benefits (see Sections 1.5 and 2.2). Arrangers should also note that evidence maturity and data confidence vary by ecosystem type, which affects the robustness of baselines, KPIs and assurance pathways for different project categories (see Section 2.5).
- **Greenwashing risk management:** Risk controls should prioritise conservative claims, documented evidence trails and verification pathways, with escalation routes where data access or methodological robustness is insufficient for the intended disclosure (see Sections 2.7 and 2.9).
- **Cross-border distribution and assurance expectations:** Cross-border listings and distribution may require alignment with international assurance expectations and reviewer practices, and should be assessed early to avoid post-issuance reporting commitments that are not deliverable (see Sections 3.7 and 2.6).
- **Repeat issuance readiness:** Maintaining access to qualified ecological assessors and data providers, and embedding lessons learned into internal screening and framework criteria, can improve transaction readiness and support repeat issuance capability (see Sections 2.8 and 2.9).

3.7 Listing and Disclosure Considerations

Listing venues and investors generally expect labelled instruments to demonstrate clear use of proceeds, measurable objectives and independent external review, supported by reporting commitments that are credible and deliverable. For nature and biodiversity-themed instruments, this expectation typically translates into greater scrutiny of ecological baselines, KPI definitions and the transparency of post-issuance allocation and impact reporting. For listing venues relevant to Gulf issuers, including the LSE Sustainable Bond Market, Nasdaq Dubai and Tadawul, see Section 1.3.

Issuers should translate their framework, external review scope, and reporting plan into listing and investor-facing disclosures that remain deliverable over the life of the instrument, supported by an auditable evidence trail.

Where multiple listing and distribution options are available, issuers and arrangers should prioritise a venue and disclosure approach that matches the strength of the project evidence base, the intended investor audience, and the issuer's capacity to sustain reporting over the life of the instrument (see Sections 2.6 and 2.7), and that remains consistent with the framework and external review scope (see Section 1.3).

3.8 Examples of Emerging Practice

While nature and biodiversity bonds and sukuk remain an emerging subset of the sustainable debt market, issuers are increasingly demonstrating how recognised labelled formats can be applied to nature and biodiversity themes.

The examples below provide reference points for issuance practice, showing how issuers have applied use-of-proceeds discipline, governance arrangements, and verification approaches across biodiversity- and nature-themed instruments, blue-labelled use-of-proceeds transactions financing ocean and water ecosystem outcomes, green-labelled frameworks that include biodiversity-relevant eligible categories, and outcomes-based structures where biodiversity performance metrics and independent verification are central to credibility. In parallel, ICMA guidance recognises an optional secondary "Nature Bond" designation where use of proceeds is exclusively allocated to nature-related projects, which provides a useful framing device for how issuers may signal nature primacy within recognised market formats.

Seychelles sovereign blue bond (2018)

A USD 15 million, 10-year sovereign blue bond supported by a USD 5 million partial guarantee from the World Bank (IBRD) and a USD 5 million concessional loan from the Global Environment Facility (GEF). Proceeds were channelled through the Seychelles Conservation and Climate Adaptation Trust (SEYCATT), a dedicated conservation trust fund established to receive and manage bond proceeds, to support marine protection and sustainable fisheries, with defined allocation and reporting expectations. The use of SEYCATT illustrates how blue bond proceeds can be structured to flow through an independent conservation trust, providing governance discipline and long-term stewardship accountability that goes beyond conventional use-of-proceeds tracking.

BDO Unibank blue bond, Philippines, with IFC participation (2022)

A blue bond issuance by BDO Unibank supported by IFC participation as a cornerstone investor (with IFC subscribing up to USD 100 million). The transaction is commonly referenced as an example of applying recognised market principles and an issuer framework to blue categories such as water and wastewater and pollution reduction, with external review and reporting features used to strengthen credibility. Nature-relevant use of proceeds is framed primarily around water, wastewater and marine pollution reduction categories, with IFC support including assistance in identifying eligible projects and strengthening monitoring of project impacts.

Asian Development Bank (ADB) Biodiversity and Nature Bond (2024)

ADB issued its first biodiversity and nature theme bond to finance a pool of eligible projects across Asia and the Pacific. As an MDB issuance, it provides a practical reference for how biodiversity and nature themes can be expressed within a conventional use-of-proceeds bond structure, supported by defined eligibility parameters and investor-facing disclosure intended to support transparency and comparability.

Indonesia sovereign green sukuk (first issued 2018)

A sovereign green sukuk issued under Indonesia's Green Bond and Green Sukuk Framework, aligned to recognised market principles. Eligible categories include mitigation and adaptation and explicitly include biodiversity-related sectors such as sustainable natural resource management and habitat and biodiversity conservation, supporting a credible basis for land use and ecosystem-related allocations when backed by transparent selection, management of proceeds and reporting. While labelled green, the sovereign framework's explicit biodiversity-relevant eligible categories demonstrate how nature outcomes can be financed through green-labelled frameworks where eligibility and reporting are clearly defined.

World Bank Wildlife Conservation Bond (Rhino Bond) (2022)

A USD 150 million, 5-year principal-protected bond issued by IBRD, structured as an outcomes-based instrument. The structure includes a potential performance payment funded by the Global Environment Facility (GEF), linked to independently verified conservation performance, providing a reference model for performance-linked structures where the outcome metric and verification approach are central to credibility.

Across these examples, credibility is driven by the same fundamentals: tightly defined eligibility, auditable proceeds management, and a verification pathway that matches the ambition of the stated outcomes.

Blue bonds and nature-themed instruments from the Seychelles to the Philippines demonstrate that ocean and coastal outcomes can be financed credibly — when eligibility, baselines and reporting are clearly defined

Box 3. Recent Gulf market transactions (with illustrative images)

DP World corporate blue bond (UAE, 2024)

In December 2024, DP World issued a USD 100 million blue bond under its USD 10 billion Global Medium Term Note Programme, listed on Nasdaq Dubai, and maturing in 2029. The transaction was positioned as the first corporate blue bond from the Middle East and North Africa, and it provides a Gulf reference point for how a ports and logistics group can present "blue" financing in a way that remains legible to capital markets.

Use of proceeds was defined through a small set of eligible categories that translate core operations into clearly articulated nature and water outcomes, aligned to SDG 14 (Life Below Water) and SDG 6 (Clean Water and Sanitation), including sustainable marine transportation, including alternative fuels and technologies intended to reduce emissions and marine pollution, and sustainable ports development through upgrades designed to reduce environmental impacts. Also included was marine ecosystem conservation and restoration, explicitly referencing the expansion of nature-based solutions projects, alongside measures to prevent or reduce marine pollution and improve water quality, including initiatives linked to equitable access to water.

Proceeds are tracked specifically against this bond, rather than being blended into general corporate funding, and reporting is provided by project category so that stakeholders can see how allocations map to each eligible theme. DP World commits to publish annual allocation and impact reporting until the proceeds have been fully allocated.

In a GCC context, this provides a practical template for corporates with coastal, marine-facing, or water-dependent assets to finance nature and water priorities through a mainstream funding programme, while keeping the use of proceeds and reported outcomes clear and comparable.

DP World's landmark issuance, MENA's first corporate blue bond, setting a regional precedent for blue finance within the ports and logistics sector.

Emirates NBD dual-tranche blue-green bond (UAE, 2026)

In January 2026, Emirates NBD issued a USD 1 billion dual-tranche blue-green bond under its Euro Medium Term Note programme, billed as the world's largest dual-tranche blue-green bond and the largest blue bond issued in the UAE and GCC. The transaction attracted strong ESG-focused demand, including participation from T. Rowe Price in the blue tranche.

The issuance comprised a USD 300 million three-year "Blue" tranche (30%) and a USD 700 million five-year "Green" tranche (70%). Proceeds from the blue tranche were earmarked for marine conservation and sustainable water projects, aligned to SDG 14 (Life Below Water), while proceeds from the green tranche were earmarked for broader green initiatives, aligned to SDG 13 (Climate Action).

For issuers, the key distinction is that the "blue" and "green" separation extends beyond labelling. The proceeds are administered as two separate pools, with separate annual allocation and impact reporting for each tranche while the instruments remain outstanding. Allocation reporting is supported by limited assurance until proceeds are fully allocated, expected within 24 months of issuance. In a GCC context, this provides a practical route to financing water and ocean-linked priorities alongside wider green investment, while maintaining clear traceability on use of proceeds and reported outcomes.

Emirates NBD's dual-tranche sukuk structure illustrates how Gulf issuers can separate blue and green proceeds into distinct, independently reported pools — a model for nature-positive instrument design

3.9 Summary

In structural terms, nature and biodiversity bonds and sukuk follow recognised labelled issuance approaches. In practice, differentiation is driven by the strength of the evidence base, and by the discipline applied to baselines, MRV, assurance, and disclosure to support defensible nature outcomes.

The practical differentiators, with detailed guidance set out in Sections 3.2 to 3.7 and the supporting project-level method set out in Section Two, centre on science-based baselines and monitoring arrangements that enable verification, specialist ecological and MRV data inputs proportionate to the project and claims, stakeholder engagement and safeguard approaches that support long-term outcomes, and clear articulation of dependencies, impacts, risks and opportunities using TNFD-aligned assessment where applicable. Disclosure and reporting should explicitly address nature KPIs and outcome credibility, including stated limitations. For sukuk, the additional requirement of dual discipline, combining Shariah compliance with outcome integrity, reinforces the importance of aligning Shariah governance with the evidence and reporting architecture set out in Section 3.5.

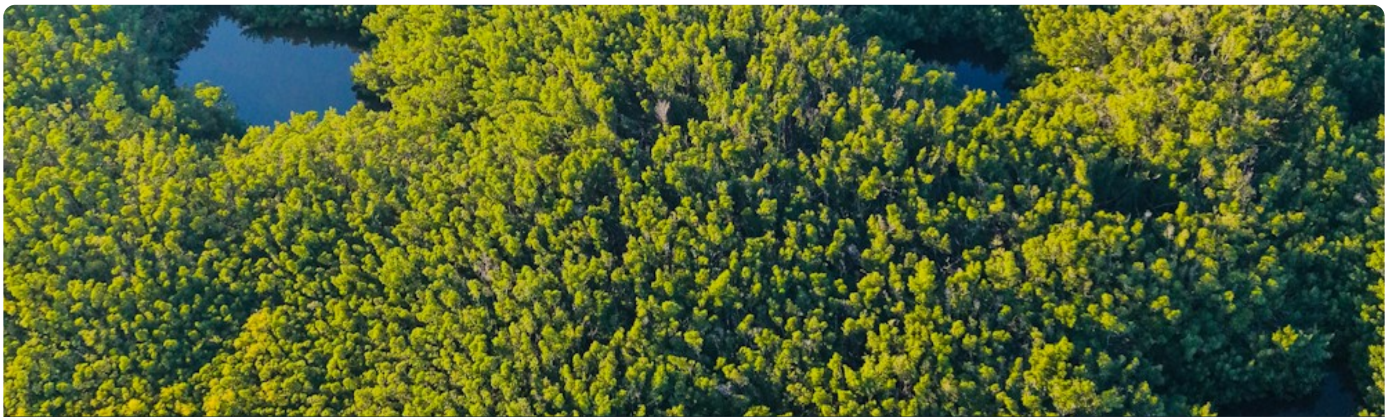
Closing Note

Climate finance in the Gulf is now well established. Nature and biodiversity finance is not. This Toolkit seeks to change that by providing Gulf issuers, financiers and policymakers with a practical, transaction-focused reference for designing and implementing credible, verifiable and transparent nature-positive finance instruments, and by positioning nature and biodiversity outcomes alongside climate as a core component of the region's sustainable finance agenda.

The frameworks, standards and market infrastructure to support this shift are already in place. TNFD provides the assessment and disclosure architecture. ICMA provides the labelled market guidance. The MDB Common Nature Finance Taxonomy provides a classification basis for eligible activities. Listing venues including the LSE Sustainable Bond Market, which provides an established segment for labelled instruments including those with blue and nature-related themes, Nasdaq Dubai and Tadawul provide recognised routes to market for Gulf issuers seeking both regional visibility and international investor access.

What has been missing is practical guidance that brings these elements together at the transaction level, interpreted through a Gulf lens and grounded in the realities of regional ecosystems, policy frameworks and capital markets. This Toolkit is intended to fill that gap by combining project-level design, MRV and assurance guidance with issuance considerations for bonds and sukuk, so that nature-positive pipelines can be structured to meet the evidential and governance standards that institutional investors, regulators and assurance providers expect.

Nature finance in the Gulf will not develop through frameworks alone. It will develop through transactions that are credible, repeatable and capable of withstanding scrutiny. This Toolkit is designed to support those transactions.



Gulf coastlines — mangroves, coral reefs, seagrass beds, wadi systems — represent both the region’s most significant concentration of nature-related financial exposure and its greatest opportunity for credible, verifiable nature-positive finance

Annexes

Annex 1: Practical Checklists and Templates

This annex provides practical, transaction-ready checklists and templates to support nature-positive project design, MRV set-up and instrument structuring. It is intended as an internal working tool for transaction teams and should be adapted to each institution's governance, risk processes and approval pathways. The checklists are designed to be applied alongside the transaction-readiness guidance in Section 1.11 and the project and issuance guidance in Sections Two and Three.

1.1 Project Design and MRV Checklist

To be applied when screening and designing Nature-Positive (Blue-Green) and wider nature-positive projects.

The minimum supporting evidence base should include baseline documentation, KPI definitions, data sources, governance roles, and a verification approach proportionate to claims.

A. Scoping and objectives

Confirm that environmental objectives are clearly defined and explicitly linked to specific ecosystems and services (for example coastal protection, water quality improvement, habitat restoration).

Confirm that objectives are mapped to relevant GBF targets and SDGs (for example GBF Targets 2, 3, 7 or 8 and SDG 6, 13, 14 or 15).

Identify and document key nature-related dependencies and impacts, drawing where appropriate on TNFD LEAP and DIRO concepts.

Do not proceed where objectives remain framed only as high-level narrative and cannot be translated into measurable outcomes, baselines, and governance commitments suitable for disclosure.

B. Baselines and additionality

Confirm that an ecological baseline for the project area is documented, using recognised methods such as FAO LCCS, SEPAL, GBF indicators or equivalent national datasets.

Confirm that baseline documentation and KPI selection are sufficient to evidence change over time and to support the project's additionality rationale.

Identify climate co-benefits (for example blue or green carbon) and confirm that they are clearly distinguished from the core nature objectives, consistent with the primacy and boundary distinction set out in Section 1.5.

Do not rely on baselines that are not replicable, not consistently defined over time, or not suitable for third-party scrutiny relative to the intended disclosure claims.

C. Governance and partnerships

Confirm that a project governance structure is defined, including project owner, implementing partners, MRV providers and verification entities.

Confirm that roles for NGOs, research institutions and technical bodies are specified in formal documentation, including responsibilities for baselines, monitoring, technical review and data stewardship.

Identify potential conflicts of interest between implementation, analytical and assurance functions and confirm that appropriate safeguards are in place.

Do not proceed where change control, substitution governance, and escalation routes are not explicit, as this increases integrity risk as projects evolve.

D. MRV and data systems

Confirm that indicators, measurement methods, frequency and responsibilities are specified for both nature and climate metrics.

Confirm that MRV approaches are consistent with national requirements on greenhouse gas reporting and, where applicable, with the UAE climate MRV framework and associated reporting infrastructure (see Section 1.8). Apply equivalent governance discipline to nature metrics where relevant to the project and disclosures.

Document data flows, storage and custodianship arrangements, including retention periods and procedures for assurance and regulatory access.

Identify and document known data gaps, coverage limitations and comparability constraints affecting baselines, indicators and monitoring datasets, so that these can be disclosed transparently in reporting and factored into KPI design and assurance scope (see Section 2.5).

Do not commit to KPI reporting where the evidence trail, retention, and access arrangements are not defined to an audit-ready standard for the expected assurance and regulatory pathway.

E. Risk and business relevance

Map material nature-related risks to financial channels (for example operating expenditure, capital expenditure, insurance costs, revenues and asset values).

Confirm that outcome-based indicators are identified that capture both nature condition (for example habitat extent, water quality, ecosystem function) and associated business outcomes (for example avoided damage, reduced downtime, improved service reliability).

Confirm that nature-related risks and responses are proposed for inclusion in risk registers and board-level reporting, rather than being treated solely as stand-alone ESG disclosures.

F. Community and stakeholder engagement

Identify and document affected communities and stakeholders, including, where relevant, Indigenous Peoples and Local Communities (IP&LCs).

Confirm that an engagement and benefit-sharing plan is in place, consistent with IFC Performance Standards (particularly PS 1, PS 6, PS 7 and PS 8 where relevant) and TNFD guidance on engagement with Indigenous Peoples, Local Communities and affected stakeholders.

Confirm whether Free, Prior and Informed Consent (FPIC) is required where projects may affect Indigenous Peoples' lands, resources or cultural heritage, and document the consent process applied.

Assess risks arising from weak or superficial engagement (for example contestation of land use, lack of consent, or inadequate maintenance of nature assets) and confirm that mitigation measures are identified.

Do not proceed where local legitimacy, benefit-sharing, or grievance pathways are absent or informal, as this increases delivery and reputational risk even where technical design is strong.

G. Legal and regulatory alignment

Confirm alignment with national MRV rules, protected-area designations and permitting processes in the relevant jurisdiction or jurisdictions.

Where projects are cross-border, identify regulatory, data-transfer and permitting considerations between jurisdictions and confirm how these are addressed.

Where relevant, assess and record the potential interface with national carbon credit registries or other official registries.

H. Documentation and disclosure

Confirm that project design, KPIs, baselines and governance arrangements are documented in a form suitable for inclusion in a bond or sukuk framework and associated annexes.

Confirm that selected indicators are capable of supporting both transaction-level reporting and, where appropriate, corporate disclosures under GRI 101, TNFD and emerging ISSB requirements.

Define public disclosure boundaries, including which information will be reported in allocation and impact reports and which information will remain internal or confidential.

Confirm that nature outcomes and any climate co-benefits are not double counted across instruments, disclosures or claims, and that boundaries are stated clearly.

Do not allow marketing or stakeholder-facing claims to extend beyond the disclosure boundary, reviewer scope, and evidence base described in the framework and reporting commitments.

Confirm internal owners and sign-off: Sustainability/MRV lead; Risk; Legal/Compliance; Treasury; Project owner; Shariah (if applicable).

1.2 Issuance and Instrument Structuring Checklist

To be applied when preparing Nature or Biodiversity Bonds and Sukuk based on the project pipeline described above. The minimum supporting evidence base should include the eligible project list, baseline summaries, KPI definitions, use-of-proceeds categories, external review scope, and a reporting and assurance plan proportionate to claims.

A. Strategic alignment and mandate

Confirm that nature-positive finance is explicitly aligned with the issuer's strategy, risk appetite and ESG or sustainability frameworks.

Confirm that a clear rationale is articulated for issuing a Nature or Biodiversity Bond or Sukuk, as distinct from a broader green or sustainability instrument.

Confirm that core internal functions (for example treasury, risk, finance, sustainability, legal and, where applicable, Shariah) are formally engaged and endorse the objectives, scope and target investor base.

Do not proceed where the proposed instrument is misaligned with the issuer's credit profile, asset base, governance capacity, or target investor base, as this increases execution and pricing risk.

B. Framework preparation

Confirm that the framework defines nature-positive use of proceeds and eligible project categories, linked to GBF targets, TNFD analysis and recognised taxonomies such as the MDB Common Nature Finance Taxonomy and the CBI taxonomy.

Confirm that project evaluation and selection processes are described, including screening for safeguards, community engagement, MRV readiness and regulatory compliance.

Confirm that KPIs, external review arrangements and reporting commitments are set out in a manner consistent with ICMA GBP and, where relevant, SBP and Sustainability Bond Guidance.

Where a sustainability-linked structure is used, confirm alignment with the ICMA Sustainability-Linked Bond Principles, including KPI definition, SPT calibration and verification expectations.

Do not allow eligibility, exclusions, proceeds management, and substitution rules to remain insufficiently specific to support investor diligence and underwriting.

C. Sukuk-specific considerations (where applicable)

Confirm that an appropriate sukuk structure (for example Ijārah, Wakālah or Murābahah) is selected that can host nature-positive assets or activities in a Shariah-compliant manner.

Confirm that underlying assets or activities are Shariah-compliant, identifiable and demonstrably linked to defined nature outcomes.

Confirm that a recognised Shariah supervisory board is engaged to review the structure, documentation and ongoing compliance, including the treatment of nature-related outcomes.

Do not leave asset pool definition, SPV structuring, cross-jurisdiction enforceability, and core contractual mechanics (including purchase undertaking and dissolution provisions where relevant) to late-stage resolution, as this can reduce market acceptability and weaken execution.

D. External review and assurance planning

Confirm that external reviewers (for example second-party opinion providers, verifiers or assurance firms) with expertise in both ICMA alignment and ecology are appointed.

Confirm that the scope of external review is agreed in advance, covering the framework, project portfolio, baselines, KPIs and MRV systems as appropriate.

Confirm that a plan and budget are in place for post-issuance verification or assurance of nature and climate data, using standards such as AA1000 or ISO 14065 where required (see Section 2.7).

Do not appoint reviewers late, or accept a review scope that is not commensurate with the ambition of the claims, as this can weaken investor confidence and extend the diligence cycle.

Do not permit scope ambiguity across second-party opinion, verification, and assurance, including unclear articulation of what has been assessed, using which criteria, and to what level of assurance.

Do not use assurance arrangements where independence and conflicts of interest are not adequately managed, including where advisory, delivery, and assurance functions are not appropriately separated.

E. Documentation, listing and disclosure

Confirm that the term sheet, prospectus or offering circular reflects use-of-proceeds language, risk factors and reporting commitments in a manner consistent with the framework.

Where TNFD-aligned analysis and MRV integration are material to the instrument, confirm that these are described clearly so that investors understand the evidential basis for nature-related claims.

Confirm that listing requirements for target exchanges (for example London Stock Exchange Sustainable Bond Market, Nasdaq Dubai or Tadawul) are reviewed and met, including expectations on ICMA alignment, external review and ongoing reporting.

Do not allow drift between the framework, external review materials, offering documentation, and investor presentation language, as inconsistencies commonly increase Q&A burden and weaken execution discipline.

F. Post-issuance reporting and data management

Confirm that a schedule and responsibility matrix for allocation, impact and closure reporting is established, aligned with the issuer's financial and sustainability reporting calendars and consistent with the reporting approach set out in Section 2.6.

Confirm that processes are in place to aggregate project-level data into instrument-level KPIs and to disclose any material limitations, estimates or data gaps in a transparent manner.

Confirm that internal controls ensure nature-related claims remain proportionate to the evidence as projects evolve, and that any restatements or corrections are appropriately governed and communicated.

Do not proceed without operationally implementable proceeds tracking and evidence retention processes, as this creates post-issuance integrity and reporting risk even where the initial framework is sound.

Do not permit extended periods of unallocated proceeds without a documented pipeline readiness plan and clearly defined allocation and substitution governance.

G. Lessons learned and repeated issuance

Confirm that mechanisms exist to capture lessons from each issuance, including feedback from investors, reviewers, regulators and technical partners.

Confirm that insights from previous transactions are systematically incorporated into project-screening criteria, frameworks and internal policies for subsequent issuances.

Confirm that experience with nature-positive instruments is used to inform wider transition planning, portfolio strategy and dialogue with supervisors on nature-related risk.

Institutions may choose to convert these checklists into formal internal templates with allocated responsibilities, timelines and sign-off requirements, so that nature-related considerations are embedded within existing governance, risk-management and capital-markets processes.

Confirm internal owners and sign-off: Treasury; Sustainability; Risk; Legal/Compliance; Finance; Investor Relations; Shariah (if applicable); External review lead.

Annex 2: Glossary of Key Terms and Acronyms

This annex brings together the principal terms and acronyms used throughout the Toolkit. It is intended to support consistent interpretation across transaction teams, reviewers and counterparties, particularly where nature-related concepts and MRV terminology are used alongside established capital-markets language, and should be read alongside Annex 3 where teams require a cross-reference between Toolkit components and external standards.

AA1000 (AccountAbility 1000 Assurance Standard)	Assurance standard used by independent assurance providers to assess the quality of sustainability and impact information. In this Toolkit, AA1000 is referenced as one recognised basis for third-party assurance over allocation and impact reporting, including nature-related KPIs.
ADB (Asian Development Bank)	Multilateral development bank that issues labelled bonds, including green and blue bonds. In this Toolkit, ADB is referenced as an MDB issuer example, including through theme bonds and use-of-proceeds structures that incorporate biodiversity and nature outcomes.
Additionality	The principle that a project delivers measurable environmental outcomes that would not have occurred in the absence of the intervention and, in a finance context, that the capital raised contributes to outcomes beyond what would have been achieved through existing funding or business-as-usual activity. In this Toolkit, additionality is referenced as a core element of project design and baseline documentation, requiring issuers to articulate and evidence the counterfactual against which nature outcomes are assessed.
Biodiversity measurement approaches	Methods and toolsets used by financial institutions to assess biodiversity-related impacts, dependencies and risks, and to generate indicators for reporting and decision-making. These approaches can include footprinting tools, risk-screening tools, geospatial platforms and indicator frameworks aligned with the

	GBF. In this Toolkit, biodiversity measurement approaches are referenced as practical inputs to project-level MRV, alongside disclosure frameworks and taxonomies.
Blended finance	The strategic use of development or concessional capital to mobilise additional private capital towards outcomes that would not otherwise attract commercial investment on acceptable terms. Structures may combine grants, concessional loans, guarantees, first-loss positions or technical assistance with commercial debt or equity. In this Toolkit, blended finance is referenced as a mechanism for bridging the gap between early-stage nature projects and the risk, return and scale expectations of bond and sukuk investors.
Blue-Green Bonds	Labelled bonds where proceeds are allocated to projects with biodiversity and ecosystem-service outcomes as the primary objectives, commonly in coastal, marine, freshwater and related terrestrial ecosystems. Climate mitigation, adaptation or resilience outcomes may be reported where relevant, but should be presented as co-benefits with clear boundaries and supporting methodologies. In this Toolkit, "blue-green" is used as a practical term for nature-first use-of-proceeds bonds aligned with established labelled market practice and disclosure expectations.
CBI (Climate Bonds Initiative)	International organisation that develops taxonomies and certification criteria for climate-aligned bonds. In this Toolkit, CBI is used to help classify eligible green and climate-aligned project categories, including categories relevant to water, marine, resilience and adaptation, alongside other classification references used in the Toolkit.
Defra (UK Department for Environment, Food and Rural Affairs)	UK government department involved in nature finance pilots and natural flood management programmes. In this Toolkit, Defra is referenced through case material and reference mechanisms that Gulf issuers can draw on when designing nature-positive projects.

DIRO (Dependencies, Impacts, Risks and Opportunities, TNFD)	TNFD's categorisation of how organisations relate to nature: what they depend on, how they impact it, and the resulting risks and opportunities. In this Toolkit, DIRO is used as one basis for selecting nature-first KPIs and for explaining how nature outcomes can be financially material.
Ecosystem services	The benefits that people and economies obtain from ecosystems, such as water purification, flood regulation, shoreline protection, pollination and microclimate regulation. In this Toolkit, ecosystem services are treated as functional outputs that can support the business case for nature-positive investments and underpin business outcomes.
ESG (Environmental, Social and Governance)	Environmental, social and governance factors that investors, regulators and other stakeholders use to assess an organisation's sustainability performance, risk profile and long-term resilience. In this Toolkit, ESG is used in its conventional sense to cover climate and nature impacts, labour and community outcomes, and governance, strategy and oversight.
FAO (Food and Agriculture Organization of the United Nations)	UN agency whose technical guidance supports land-use, forestry and ecosystem monitoring. In this Toolkit, FAO tools such as LCCS and SEPAL are referenced as practical options for baseline development and geospatial monitoring of habitats and land cover.
FAO LCCS (Land Cover Classification System)	Standardised system for classifying land-cover types. In this Toolkit, LCCS is referenced as one method issuers can apply to define baselines and track changes in terrestrial or coastal habitats relevant to blue-green projects.
FPIC (Free, Prior and Informed Consent)	The internationally recognised principle that Indigenous Peoples and, where applicable, Local Communities have the right to give or withhold consent to projects that may affect their lands, territories, resources or cultural heritage, with consent provided freely, prior to project decisions, and on the basis of accessible and accurate information. In this Toolkit, FPIC is referenced as a core element of rights-based community and stakeholder

	engagement for nature-positive projects, particularly where Indigenous Peoples and, where applicable, Local Communities may be affected.
GBP (Green Bond Principles, ICMA)	ICMA's voluntary guidelines for green bonds, organised around use of proceeds, project evaluation and selection, management of proceeds and reporting. In this Toolkit, GBP is used as the primary reference for use-of-proceeds bond structuring and reporting discipline so that frameworks remain recognisable to international investors.
GEF (Global Environment Facility)	Multilateral financing mechanism that provides grants and concessional finance for global environmental priorities, including biodiversity and climate. In this Toolkit, GEF is cited in relation to precedent transactions and blended structures that support nature outcomes.
GHG (Greenhouse Gas)	Gases that contribute to climate change, including carbon dioxide (CO_2), methane (CH_4) and others. Where blue-green projects have significant climate co-benefits, in this Toolkit, GHG metrics are treated as secondary KPIs, quantified under recognised standards, while keeping biodiversity and ecosystem condition as primary objectives.
GHG Protocol (Greenhouse Gas Protocol)	Widely used framework for accounting and reporting greenhouse gas emissions. In this Toolkit, it is referenced where climate co-benefits (for example blue or green carbon) are quantified alongside nature KPIs.
GRI 101: Biodiversity 2024	Updated Global Reporting Initiative Topic Standard on biodiversity, aligned with the GBF and TNFD. In this Toolkit, GRI 101 is referenced as a reporting standard that can support corporate biodiversity disclosures, including clear description of dependencies, impacts and management responses.
IBRD (International Bank for Reconstruction and Development)	The main lending arm of the World Bank. In this Toolkit, IBRD is cited in relation to precedent transactions, including principal-protected structures and blended arrangements supporting

	nature outcomes.
ICMA (International Capital Market Association)	Industry association that publishes the Green, Social, Sustainability and Sustainability-Linked Bond Principles and related guidance. In this Toolkit, ICMA guidance is used as the primary reference for labelled bond and sukuk frameworks and related disclosure discipline.
IFC (International Finance Corporation)	Private-sector arm of the World Bank Group. In this Toolkit, IFC Performance Standards are referenced as a benchmark for environmental and social risk management and for community and stakeholder engagement in nature-positive projects.
IFC Biodiversity Finance Reference Guide	Guidance developed by IFC to support biodiversity finance decision-making and classification. In this Toolkit, it is referenced as an additional basis for defining and assessing biodiversity-related finance activities.
IFC Performance Standards (PS 1–8)	Set of eight standards covering environmental and social risk, including biodiversity conservation and community rights. In this Toolkit, PS 1–8 are referenced as safeguards benchmarks, particularly PS 6 (biodiversity) and PS 7–8 (Indigenous Peoples and cultural heritage), including for stakeholder engagement and community-sensitive projects.
Ijārah	Shariah-compliant lease structure in which an asset is sold to a special purpose vehicle and leased back to the originator, with periodic rental payments forming the basis of investor returns. In this Toolkit, Ijārah is referenced as one of the principal sukuk structures capable of hosting nature-linked assets, with specific implications for how assets are identified, transferred and maintained over the life of the instrument.
Impact reporting	Post-issuance reporting that describes the environmental and social outcomes of projects financed by a bond or sukuk, including KPIs, methodologies and verification status. In this Toolkit, impact reporting for blue-green instruments is expected

	to cover nature outcomes (for example habitat condition) and climate co-benefits where relevant, with limitations stated transparently.
IP&LCs (Indigenous Peoples and Local Communities)	The terminology used internationally, including under the Kunming–Montreal Global Biodiversity Framework and TNFD guidance, to refer collectively to Indigenous Peoples and the local communities most directly connected to natural ecosystems through customary use, livelihoods, governance or stewardship. In this Toolkit, IP&LCs are referenced in the context of community and stakeholder engagement, rights-based approaches and benefit-sharing arrangements.
IPCC (Intergovernmental Panel on Climate Change)	UN body that synthesises climate-science evidence and develops guidelines for emissions accounting. In this Toolkit, IPCC methodologies may be cited where climate co-benefits are quantified and relevant to the chosen accounting approach.
ISO 14064 and ISO 14065	International standards for greenhouse gas quantification (ISO 14064) and for bodies that validate and verify environmental information (ISO 14065). In this Toolkit, these standards are referenced where climate co-benefits are quantified and where verification of climate-related data is required.
IFRS (International Financial Reporting Standards)	Global baseline sustainability disclosure standards issued by the International Sustainability Standards Board, including IFRS S1 on general sustainability-related financial disclosures and IFRS S2 on climate-related disclosures. In this Toolkit, the IFRS Sustainability Standards are referenced as a global baseline for investor-focused sustainability disclosure, designed to be interoperable with jurisdictional and thematic frameworks.
ISSB (International Sustainability Standards Board)	Standard-setting body established by the IFRS Foundation to develop a global baseline of sustainability disclosure standards. In this Toolkit, ISSB is referenced in relation to the development of a global baseline for sustainability disclosure, including work that draws on frameworks such as TNFD for nature-related issues.

KPI (Key Performance Indicator)	Specific quantitative or qualitative metric used to monitor and report performance. In this Toolkit, KPIs are used to evidence and communicate environmental objectives, nature outcomes and associated business impacts.
Kunming–Montreal Global Biodiversity Framework (GBF)	Global framework adopted under the Convention on Biological Diversity, structured around four long-term goals and 23 targets to 2030. In this Toolkit, GBF targets are referenced as a basis for mapping nature objective and KPIs (for example restoration, conservation or pollution reduction) to globally recognised biodiversity goals.
LEAP (Locate, Evaluate, Assess and Prepare, TNFD)	TNFD's core analytical process. In this Toolkit, LEAP is referenced as a structured process for locating interfaces with nature, evaluating dependencies and impacts, assessing risks and opportunities, and preparing responses that feed into project design and KPI selection.
LGX (Luxembourg Green Exchange)	Dedicated sustainable bond listing platform operated by the Luxembourg Stock Exchange, providing a recognised venue for green, social, sustainability and sustainability-linked instruments with defined listing requirements and disclosure expectations.
LSEG (London Stock Exchange Group)	Global markets infrastructure and data group that operates the London Stock Exchange and its Sustainable Bond Market. In this Toolkit, the Sustainable Bond Market is referenced as a listing venue for labelled instruments aligned with recognised market standards.
MDB Common Nature Finance Taxonomy	A reference list of activities that qualify as nature finance, developed by a group of multilateral development banks to support consistent identification and tracking of nature finance. In this Toolkit, it is referenced as a primary classification basis for nature finance activities, supporting consistent tagging and portfolio comparability, alongside other taxonomy references where relevant.

MRV (Monitoring, Reporting and Verification)	The full cycle of measuring project activities and outcomes, reporting them in a structured way and subjecting them to independent verification. In this Toolkit, MRV is a central concept linking project-level data systems, issuer reporting and third-party assurance, and where relevant, interfacing with national requirements.
Murābahah	Shariah-compliant cost-plus financing arrangement in which an asset or commodity is purchased and resold at a disclosed mark-up, with payment typically deferred. In this Toolkit, Murābahah is referenced as one of the sukuk structures that may be used to finance nature-positive activities, subject to Shariah supervisory review and alignment with eligible use-of-proceeds criteria.
National Register for Carbon Credits (NRCC)	Register provided under UAE Federal Decree-Law No. 11 of 2024 on the Reduction of Climate Change Effects and Cabinet Resolution No. 67 of 2024, designed to record, track and manage carbon credits within the national system. In this Toolkit, the NRCC is referenced as a potential interface for climate-related units generated or used alongside nature-positive projects, where carbon co-benefits are quantified and may need to be reflected in national registries.
Natural Capital Protocol	Decision-making framework that helps organisations identify, measure and value their impacts and dependencies on natural capital. In this Toolkit, it is referenced as a structured approach to integrating nature-related risks and opportunities into strategy, risk management, project appraisal and reporting.
Nature and Biodiversity Bonds	Labelled bonds where the use of proceeds is dedicated to the conservation, restoration or sustainable use of biodiversity and natural capital. These instruments focus on measurable nature outcomes, such as habitat protection, species recovery or ecosystem restoration, and may be issued under green, sustainability or other labelled bond frameworks, depending on the issuer's framework and the intended disclosures.

Nature finance taxonomies	Classification systems that define which activities and sectors qualify as nature or biodiversity-related finance and under what conditions. Examples referenced in this Toolkit include the MDB Common Nature Finance Taxonomy and the Climate Bonds Initiative taxonomy. In this Toolkit, nature finance taxonomies are referenced to classify eligible use-of-proceeds categories and support comparability across portfolios, issuers and jurisdictions.
Nature-positive finance	Finance directed towards activities that halt and reverse nature loss and lead to an overall improvement in the health, resilience and extent of ecosystems. In this Toolkit, nature-positive finance refers to transactions where biodiversity and ecosystem-service outcomes are positioned as the primary objectives, with climate outcomes reported as co-benefits where relevant and supported by clear boundaries and evidence.
NBSAP (National Biodiversity Strategy and Action Plan)	Country-level strategy required under the Convention on Biological Diversity, setting out how a signatory intends to implement the GBF targets domestically. In this Toolkit, NBSAPs are referenced as a policy context for nature-positive finance, including as a signal of national commitment that can support issuer positioning and investor dialogue.
Outcome-based indicators	Indicators designed to capture realised changes in environmental or socio-economic conditions, rather than only tracking inputs or activities. In this Toolkit, outcome-based indicators are referenced to evidence nature-positive results (for example improved habitat condition or reduced flood losses) that can be credibly linked to financed projects.
Rights-based approach	An approach to project design, engagement and delivery grounded in international human rights and safeguard standards, recognising the rights, voice and agency of affected stakeholders and, where relevant, Indigenous Peoples and Local Communities. In this Toolkit, a rights-based approach is referenced as a foundation for credible community engagement, Free, Prior and Informed Consent and benefit-sharing in nature-positive projects.

SBG (Sustainability Bond Guidelines, ICMA)	ICMA's guidance for sustainability bonds. In this Toolkit, SBG is referenced where use of proceeds finances a combination of environmental and social categories and issuers report against both.
SBP (Social Bond Principles, ICMA)	ICMA's guidance for social bonds. In this Toolkit, SBP is referenced where blue-green projects have material social dimensions (for example livelihoods or water access) and issuers wish to communicate both nature and social outcomes.
SBTN (Science Based Targets Network)	A multi-organisation initiative providing methods for companies and other organisations to set science-based targets on nature, including land, freshwater, ocean and biodiversity. In this Toolkit, SBTN is referenced as a complementary target-setting pathway alongside TNFD assessment and disclosure, particularly for issuers and corporate counterparties whose value chains have material nature impacts.
SDG (Sustainable Development Goals)	Set of 17 global goals adopted by UN member states. In this Toolkit, SDGs are referenced as a framing tool for communicating project objectives, particularly where alignment to SDG 6, 13, 14 and 15 supports dialogue with investors and policy stakeholders.
SEPAL (System for Earth Observation Data Access, Processing and Analysis for Land Monitoring)	FAO platform providing Earth-observation and land-monitoring tools. In this Toolkit, SEPAL is referenced as a practical option for baseline mapping and ongoing monitoring of land and vegetation change in nature-positive projects.
SEYCATT (Seychelles Conservation and Climate Adaptation Trust)	A dedicated conservation trust fund established in the Seychelles to receive and manage proceeds from the country's sovereign blue bond, providing an independent governance mechanism for the allocation and stewardship of conservation finance.
SLBP (Sustainability-Linked Bond Principles, ICMA)	ICMA's voluntary principles for sustainability-linked bonds. They cover core elements such as KPI selection, calibration of sustainability performance targets (SPTs), reporting and verification.

SPO (Second-Party Opinion)	A type of external review in which an independent provider assesses the alignment of an issuer's framework and issuance with relevant market principles (commonly ICMA), and provides an opinion on the issuer's approach to use of proceeds, governance, reporting and related commitments.
Sukuk	Shariah-compliant capital-markets instrument giving investors a share in underlying assets or activities, with returns derived from those assets rather than from interest. In this Toolkit, sukuk structures are discussed as a potential format for financing nature-positive projects, provided underlying assets and contractual arrangements are Shariah-compliant and aligned with eligible use-of-proceeds criteria.
TNFD (Taskforce on Nature-related Financial Disclosures)	Framework providing recommendations and guidance for assessing and disclosing nature-related dependencies, impacts, risks and opportunities. In this Toolkit, TNFD is referenced as a core basis for project logic (including LEAP and DIRO) and for linking nature outcomes to risk and disclosure.
UAE Federal Decree-Law No. 11 of 2024	Federal climate-law framework on the Reduction of Climate Change Effects that establishes national systems for monitoring, reporting and verification and a National Register for Carbon Credits. In UAE contexts, this law provides a regulatory reference point for MRV governance, data custody and independent verification expectations relevant to climate-related data.
UNEP FI (United Nations Environment Programme Finance Initiative)	A partnership between the United Nations Environment Programme and the global financial sector, working to develop and promote sustainable finance practices, frameworks and standards across banking, insurance and investment.
Use of proceeds	Specification of how bond or sukuk proceeds will be allocated across eligible project categories. In this Toolkit, use-of-proceeds language is used to define eligibility boundaries for nature-positive and blue-green activities, supported by recognised taxonomies, KPIs and reporting commitments.

Wakālah	Shariah-compliant agency structure in which an agent (wakīl) is appointed to manage a pool of assets or investments on behalf of sukuk holders, with returns generated from the managed portfolio. In this Toolkit, Wakālah is referenced as one of the sukuk structures that may accommodate diversified nature-linked asset pools, subject to Shariah supervisory review and defined agency terms.

Annex 3: Frameworks and Standards Cross-Reference

This annex provides an indicative cross-reference between core Toolkit components and the principal international and UAE references used for project design, safeguards, issuance documentation, disclosure and assurance. For each component, it identifies the primary and supporting external references, the relevant Toolkit sections where guidance is provided, and the indicative outputs that transaction teams should expect to produce. It should be read alongside Annex 1, which provides operational checklists for project design and instrument structuring, and Annex 2, which defines key terms and acronyms.

Table A. Project design, nature-related risk and safeguards

COMPONENT	PRIMARY REFERENCE	SUPPORTING REFERENCES	TOOLKIT SECTIONS	INDICATIVE OUTPUTS
Project logic and nature interfaces	TNFD (LEAP)	GRI 101; GBF Targets	Sections 2.1, 2.3	Project logic narrative; interface mapping; priority nature issues identified and documented
Dependencies and impacts	TNFD (DIRO)	GRI 101; GBF Targets	Sections 1.5, 2.1	Dependencies and impacts summary; material issue identification; boundary between nature objectives and climate co-benefits
Nature-related risks and opportunities	TNFD	GBF (goals and targets); issuer risk registers	Sections 1.5, 1.9, 1.10	Risk and opportunity narrative; linkage to financial channels (operating expenditure, capital expenditure, insurance, revenues, asset values)
Nature-first KPIs and targets	TNFD (metrics and targets)	GRI 101; GBF indicators; SBTN methods (where relevant)	Section 2.5	KPI register (definitions, baselines, methods, frequency); primary nature condition indicators distinguished from co-benefit indicators; data limitations identified and documented
Project screening and boundaries	TNFD (LEAP and DIRO)	MDB Common Nature Finance Taxonomy; IFC Performance Standards	Sections 2.2, 2.3	Screening record; eligibility rationale; boundary statements for nature objectives and any climate co-benefits
Safeguards and environmental and social risk management	IFC Performance Standards (PS 1 to 8)	National environmental and social permitting requirements	Section 2.4	Safeguards screening; mitigation measures; environmental and social documentation proportionate to project risk profile

COMPONENT	PRIMARY REFERENCE	SUPPORTING REFERENCES	TOOLKIT SECTIONS	INDICATIVE OUTPUTS
Community and stakeholder engagement	IFC PS 1, PS 7, PS 8; TNFD IP&LC engagement guidance	GBF Targets 22 and 23	Section 2.4	Stakeholder mapping; engagement and benefit-sharing plan; FPIC process documented where applicable; grievance mechanism; rights-based engagement approach

Table B. Use of proceeds, reporting and external review

COMPONENT	PRIMARY REFERENCE	SUPPORTING REFERENCES	TOOLKIT SECTIONS	INDICATIVE OUTPUTS
Label choice and instrument positioning	ICMA (GBP, SBP, SBG)	TNFD; GBF	Sections 3.1, 3.2	Label rationale; statement of scope and boundaries; articulation of nature-first positioning
Use of proceeds categories and eligibility	ICMA (GBP)	MDB Common Nature Finance Taxonomy; CBI taxonomy; IFC Biodiversity Finance Reference Guide	Section 3.4	Eligible categories and exclusions; taxonomy tagging; eligibility definitions sufficient for investor diligence
Management of proceeds	ICMA (GBP)	ISAE 3000 (where assurance over proceeds tracking is sought)	Section 3.4	Proceeds tracking method; allocation register; documented approach to unallocated proceeds and substitution
External review scope and deliverables	ICMA (Guidelines for External Reviews)	AA1000; ISO 14065 (where used)	Sections 2.7, 3.2	Second-party opinion or verification scope agreed in advance; reviewer outputs; publication approach; independence and conflicts of interest addressed
Allocation and impact reporting	ICMA (Harmonised Framework for Impact Reporting)	TNFD; GRI 101; GBF Targets	Sections 2.6, 2.8	Allocation report; impact report with KPI tables, methods, stated limitations and assurance status; responsibility matrix across project team and treasury
Sustainability-linked structures (if used)	ICMA (SLBP)	AA1000; ISO 14065 (where used)	Section 3.2	KPI and SPT definitions; calibration rationale; verification plan and reporting approach
Sukuk governance (if applicable)	ICMA/IsDB/LSEG Guidance on Green, Social and Sustainability	Issuer Shariah governance framework	Sections 3.5, Annex 5	Shariah approval scope; compliance monitoring process; asset linkage

COMPONENT	PRIMARY REFERENCE	SUPPORTING REFERENCES	TOOLKIT SECTIONS	INDICATIVE OUTPUTS
	Sukuk; AAOIFI Shariah Standards			documentation; interface between Shariah oversight and external review

Table C. UAE MRV and registry interfaces (apply where relevant)

Where issuers operate in other GCC jurisdictions, equivalent national MRV and registry requirements should be identified and applied using the same governance discipline.

COMPONENT	PRIMARY REFERENCE	SUPPORTING REFERENCES	TOOLKIT SECTIONS	INDICATIVE OUTPUTS
MRV governance discipline (climate data)	UAE climate MRV framework (Section 1.8)	ICMA GBP (reporting pillar)	Sections 1.8, 2.5, 2.6	MRV governance approach; data custodianship controls; equivalent discipline applied to nature metrics where relevant
Climate co-benefits quantification (if claimed)	GHG Protocol; ISO 14064	UAE climate MRV framework (where applicable)	Sections 1.5, 2.5	Quantification method; calculation records; verification scope; co-benefits clearly distinguished from primary nature outcomes
NRCC interface (if relevant)	UAE Decree-Law No. 11 of 2024; Cabinet Resolution No. 67 of 2024	Verification methodology where applicable	Section 1.8	Registry interface assessment; unit tracking controls; confirmation that nature outcomes and carbon co-benefits are not double-counted across instruments or claims

Annex 4: Illustrative Case Studies

This annex provides illustrative case studies showing how the Toolkit can be applied to develop credible, investable blue-green and wider nature-positive instruments in a Gulf context. Each case study illustrates one possible transaction structure for a specific sector and issuer type. The approaches described are not exclusive or exhaustive; issuers should adapt them to their own project pipelines, sector exposures and governance arrangements, using the transaction-readiness guidance in Section 1.11 and the operational checklists in Annex 1 as working references.

The examples demonstrate how nature outcomes can be positioned as the core use-of-proceeds allocation within recognised labelled market formats, while keeping the reference architecture disciplined and avoiding unnecessary framework proliferation. They also show how to embed the issuance and disclosure pathway into the transaction narrative from the outset, and how to structure delivery and MRV so that reporting remains feasible over the life of the instrument.

Case Study 1 sets out the reference architecture, external review approach and reporting discipline in full. Case Studies 2 and 3 follow the same discipline and note only where their approach differs.

Illustrative Case Study 1: UAE Master Developer Blue-Green Sukuk for Mangrove Buffering and Coastal Real Estate Resilience

The Issuer is a UAE-based master developer with a major concentration of coastal real estate and destination assets. The Issuer's material nature interface is coastal: shoreline dynamics, nearshore habitat condition and storm-event exposure translate into practical, budgeted impacts, including increased expenditure on shoreline maintenance, higher costs to protect public realm and utilities, and greater disruption risk. The Issuer also recognises a reputational dimension, as the condition of the nearshore environment influences long-term asset attractiveness and the credibility of sustainability commitments made to tenants, visitors and investors.

The Issuer develops a financeable programme focused on mangrove restoration and associated coastal habitat enhancement as natural buffers, paired with long-term stewardship to keep outcomes durable. To finance the programme, the Issuer issues a use-of-proceeds Blue-Green Sukuk positioned explicitly as a nature-positive labelled instrument, with measurable nature outcomes as the primary impact thesis and any climate co-benefits treated as secondary. The issuance and disclosure pathway is embedded from the outset: framework design, external review, issuance, allocation reporting, impact reporting, and clear disclosure of any assurance scope.

Eligible expenditures

The illustrative case studies draw on real asset types across the Gulf — coastal mangrove buffers, KSA agritech and Oman blue carbon — to show how nature-positive pipelines are structured for capital markets instruments

The programme finances three linked components. First, mangrove restoration and rehabilitation in designated coastal zones adjacent to priority assets, including hydrological restoration and invasive species management where relevant. Second, supporting habitat and shoreline enhancement measures designed to work with habitat recovery rather than replace it, helping stabilise shorelines and improve ecosystem function. Third, stewardship and monitoring budgets that cover maintenance, repeat surveys, and long-term management arrangements. Eligibility criteria include clear exclusions to avoid hard infrastructure that substitutes for habitat recovery, except where enabling works are necessary to support restoration effectiveness and are permitted.

Reference architecture

The Issuer uses a small core set of references applied consistently throughout the framework. ICMA Green Bond Principles provide the issuance backbone: use of proceeds, project evaluation and selection, management of proceeds, and reporting. TNFD (LEAP, including dependencies, impacts, risks and opportunities) provides the organising lens for describing material nature interfaces and why the programme matters to asset risk and long-term resilience. For classification, the Issuer uses the MDB Common Nature Finance Taxonomy as the primary nature finance tagging basis. GBF Targets are used as a mapping reference to situate objectives and KPIs, without implying exhaustive reporting against the full framework. IFC Performance Standards are referenced for safeguards and stakeholder considerations where relevant to access controls, sensitive habitats or community interface issues, alongside applicable UAE permitting and environmental approval requirements. Other standards are referenced only where the Issuer chooses to quantify secondary climate co-benefits and can do so credibly (see Section 2.5 on data limitations and indicator design).

This reference discipline applies across all three case studies. In each case, the ICMA instrument-level standard corresponds to the label chosen (Green Bond Principles, Sustainability Bond Guidelines or equivalent), while the project-level references (TNFD, MDB taxonomy, GBF, IFC PS) remain consistent.

Baselines and KPIs

Baselines are established before documentation is finalised (see Section 1.11). The Issuer combines field ecology surveys with remote sensing time-series to document habitat extent and condition and to provide repeatable monitoring over time. KPIs are selected to be measurable and sustainable to report: habitat extent and condition measures, proxy indicators of buffering function where methods are appropriate (for example shoreline change rates, sediment accretion proxies, or other agreed indicators), and biodiversity indicators where appropriate and environmental reporting against the full framework. Assumptions and limitations are stated for all indicators (see Section 2.5). Any carbon-related metrics are treated as secondary co-benefits and only disclosed where methods and verification pathways are robust.

External review and reporting

External review is scoped early so that baseline design, KPI commitments and reporting remain deliverable. A second-party opinion assesses alignment to ICMA Green Bond Principles and the credibility of the baseline and KPI approach, including the suitability of the process for project evaluation and selection and the coherence of reporting commitments.

Post-issuance reporting follows a clear cadence: annual allocation reporting until full allocation, annual impact reporting with methods, assumptions and limitations set out plainly, and closure reporting for completed phases. Any assurance scope and level is clearly disclosed so that readers can distinguish what has been independently checked from what has not.

This review and reporting discipline applies across all three case studies, adapted for the relevant ICMA standard and instrument structure.

Illustrative Case Study 2: UAE Ports and Logistics Sustainability Bond for Coastal Water Quality and Marine Habitat Protection

The Issuer is a UAE-based ports and logistics operator with a major operational footprint across terminals, free zone assets and adjacent industrial tenants. The Issuer's material nature interface is operational: ports sit next to sensitive coastal waters, and environmental performance is scrutinised through incidents, compliance outcomes and the credibility of public reporting. The Issuer's internal rationale is practical: fewer water quality incidents, stronger spill prevention and response capability, better visibility over runoff and sediment pressures, and a monitoring approach that can stand up to external review.

The Issuer develops a programme focused on coastal water quality improvements and marine habitat protection and enhancement, alongside targeted operational measures that reduce pressures on the marine environment. To finance the programme, the Issuer issues a use-of-proceeds Sustainability Bond. The Sustainability label reflects the inclusion of both environmental categories (marine habitat, coastal water quality) and social categories (community access to coastal resources, livelihoods support for affected fishing communities, and worker health and safety programmes linked to environmental performance). Nature outcomes are treated as the core environmental allocation and social outcomes are reported as a distinct category, each with their own KPIs. The issuance and disclosure pathway is explicit from the outset.

The framework aligns with ICMA Sustainability Bond Guidelines, with the project-level reference architecture following the discipline set out in Case Study 1.

Eligible expenditures

Eligible expenditures are structured around three clusters. First, marine habitat measures in defined, permitted areas adjacent to operations, designed with specialist input. Second, coastal water quality upgrades, including runoff capture and treatment, monitoring stations and operational improvements that reduce pollution pathways. Third, spill prevention and response measures, including equipment upgrades, response readiness and training, and long-term monitoring contracts to sustain the evidence base. Eligibility definitions include clear exclusions to avoid general operational spend, with the third cluster confined to prevention, containment and response investments that demonstrably reduce the risk and severity of marine pollution events and can be evidenced through MRV.

Baselines and KPIs

MRV design starts with what is already available (operational monitoring, incident logs, water sampling programmes) and adds what is needed for nature outcomes (habitat condition baselines in relevant zones, repeatable monitoring protocols, and geospatial mapping where useful). KPIs are chosen to be workable in a port environment and meaningful to the programme: water quality indicators selected for relevance and feasibility, habitat condition indicators where habitat enhancement is funded, and pressure indicators that show whether drivers of impact are being reduced. Attribution is treated conservatively: indicators are designed to evidence reduced pressures and local condition change in defined monitoring zones, with assumptions and limitations stated (see Section 2.5). Climate co-benefits, if any, are reported separately and only where quantification is robust.

External review and reporting follow the discipline set out in Case Study 1, with the second-party opinion assessing alignment to ICMA Sustainability Bond Guidelines.

Illustrative Case Study 3: GCC Agri-Food Group Sustainable Agriculture Bond for Water Efficiency, Soil Health and Supply Chain Resilience

The Issuer is a GCC-based integrated agri-food group with material exposure to agricultural input costs, water availability and supply continuity across domestic production, contracted farms, and processing and distribution assets. The Issuer's material nature interface is land and water: irrigation demand, soil condition, nutrient management and farm-level productivity translate into direct financial channels, including operating expenditure on water and energy, yield variability, quality losses and higher procurement risk. The Issuer also recognises an increasing market-access and reputation dimension, as buyers, financiers and regulators expect credible evidence of improved resource efficiency, reduced land degradation risk and stronger supply chain stewardship.

The Issuer establishes a Sustainable Agriculture Bond framework with a defined set of eligible categories and exclusions, and uses proceeds to finance and refinance a portfolio of projects and related expenditures that meet those eligibility criteria. The financed portfolio is expected to comprise multiple projects across farms, crop types and supply zones, rather than a single programme, and may evolve over time through a governed evaluation, selection and substitution process. Nature outcomes are positioned as the primary impact thesis, with any climate-related metrics treated as secondary and disclosed only where methodologies and verification pathways are robust. The issuance and disclosure pathway is defined from the outset.

The framework aligns with ICMA Green Bond Principles, with the project-level reference architecture following the discipline set out in Case Study 1. In addition, the Issuer supplements the MDB Common Nature Finance Taxonomy with a recognised agriculture classification reference (such as the FAO Sustainable Food Systems framework or equivalent) to ensure category definitions remain sufficiently specific for investor diligence in an agricultural context.

Eligible expenditures

Eligible expenditures are structured around three clusters that can be applied across a multi-project pipeline. First, water efficiency upgrades implemented across priority production sites and contracted-farm programmes, including irrigation modernisation (for example drip conversion, precision scheduling, telemetry-enabled monitoring), farm-level water metering, and enabling works required to support measured water savings. Second, soil health and land management interventions implemented across defined farms and supply zones, including soil baseline testing, practices to improve soil condition and reduce erosion, and nutrient management planning to reduce runoff and improve soil function. Third, delivery and monitoring expenditures that support consistent implementation and evidence across the financed portfolio, including technical support to farms, training, data capture systems and monitoring contracts. Eligibility definitions include clear exclusions to prevent general operating expenditure being allocated to the bond, and to confine proceeds to capital expenditure, defined programme costs and evidence-building expenditures that can be tracked at portfolio level.

Baselines and KPIs

Baselines are established before documentation is finalised, with a design that supports portfolio-level reporting. The Issuer combines historical farm and procurement records with a structured baseline campaign for priority sites and supply zones, including water metering baselines and agreed soil testing protocols (for example soil organic matter proxies, salinity where relevant, and erosion risk indicators), supplemented by geospatial mapping where useful. KPIs are selected to be measurable, repeatable and feasible to report across multiple growing seasons and across a diversified project portfolio. Water-use efficiency indicators are defined with clear boundaries (for example cubic metres per tonne of output for selected crops or production units where data is available and comparable). Soil condition indicators are defined using agreed proxies that can be measured consistently over time. Input-use efficiency indicators are used only where measurement approaches are robust and do not create misleading attribution. Where outcomes are influenced by weather variability and other external factors, the Issuer treats attribution conservatively and discloses assumptions and limitations plainly (see Section 2.5). Any carbon-related metrics are disclosed, if at all, as secondary co-benefits, and only where robust methodologies and verification pathways are available.

External review and reporting follow the discipline set out in Case Study 1, with the second-party opinion assessing alignment to ICMA Green Bond Principles and the credibility of the eligible categories, evaluation and selection processes, proceeds management and reporting commitments, including whether the baseline and KPI approach is coherent for a portfolio instrument.

Common principles across all three case studies

The three case studies differ in sector, issuer type and instrument label, but share a common discipline. From an issuance perspective, each uses a use-of-proceeds framework aligned to the relevant ICMA standard, with eligible categories and exclusions clearly defined and MDB Common Nature Finance Taxonomy tagging used to keep nature allocations consistent and comparable. From a delivery perspective, each is evidence-led: baselines are established before documentation is finalised, monitoring protocols are designed for long-term repeatability, and KPIs are limited to measures that remain feasible to report over the life of the instrument. From a disclosure perspective, each separates core nature outcomes from any secondary co-benefits, and states methods, assumptions, limitations and any assurance scope plainly.

These principles are not specific to the sectors illustrated. They apply to any nature-positive bond or sukuk structured under this Toolkit.

Annex 5: References and Source Materials

This annex lists the principal standards, laws, frameworks and reference materials cited in the Toolkit, together with selected guidance and KPI resources used to support transaction design, MRV and reporting. It is intended as a consolidated source list that teams can draw on when drafting frameworks, commissioning external reviews and preparing post-issuance reporting.

A. Global frameworks, standards and disclosure guidance

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B. Capital markets principles, guidance and reporting handbooks (ICMA)

- International Capital Market Association (ICMA) (2025). Green Bond Principles (GBP) (June 2025). Available at: https://www.icmagroup.org/assets/documents/Sustainable-finance/2025-updates/Green-Bond-Principles-GBP-June-2025.pdf
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C. Taxonomies and nature finance tracking

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D. Measurement and verification standards and tools

- World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). Greenhouse Gas Protocol – Standards. Available at: https://ghgprotocol.org/standards
- International Organization for Standardization (ISO). ISO 14064-1: Greenhouse gases – Part 1 (overview page). Available at: https://www.iso.org/standard/66453.html
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G. Example transactions and market initiatives (as referenced in Section 1.10 and Section 3.8)

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