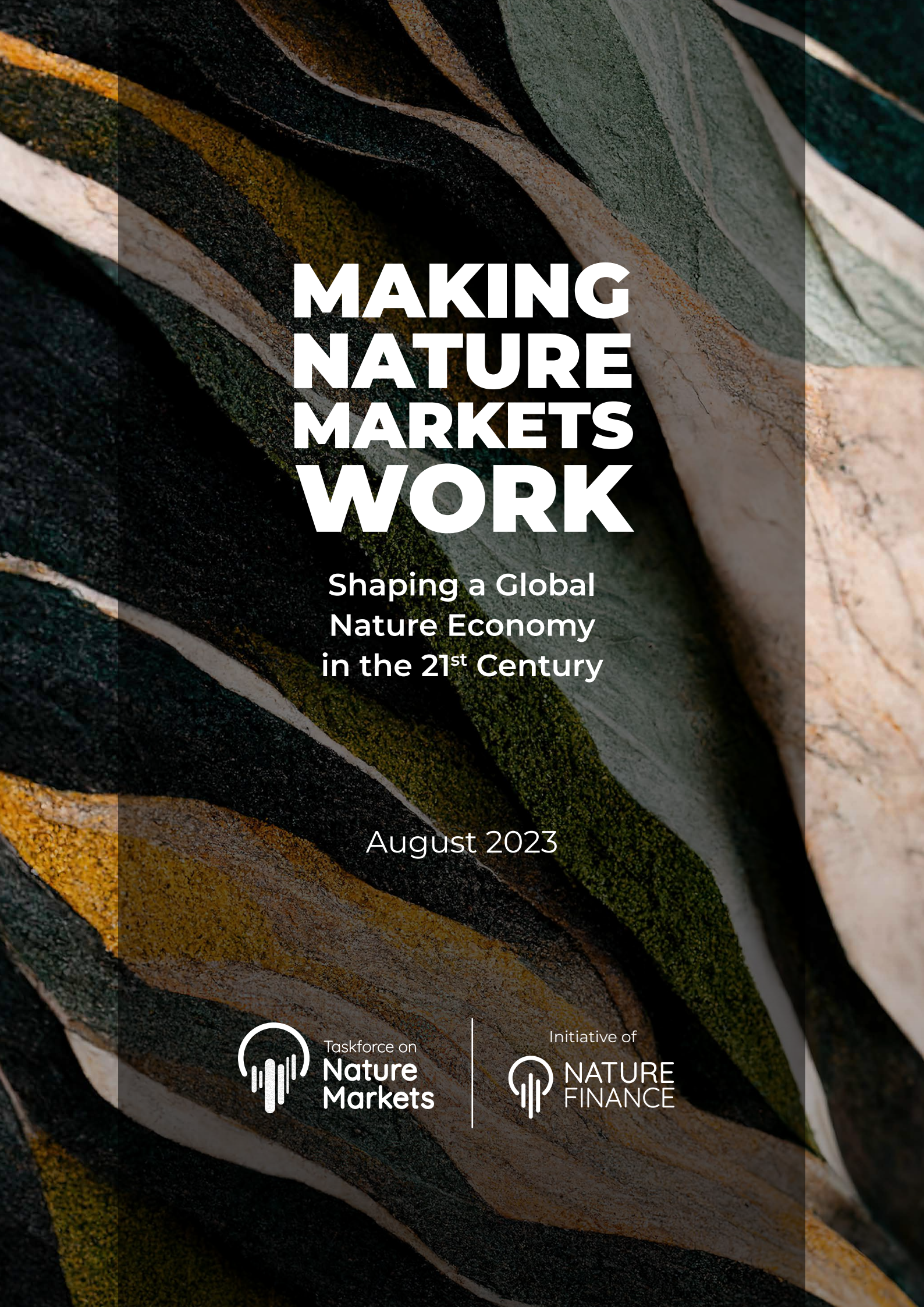

MAKING NATURE MARKETS WORK

Shaping a Global Nature Economy in the 21st Century

August 2023

Taskforce on Nature Markets

Initiative of NATURE FINANCE

About the Taskforce on Nature Markets

The Taskforce on Nature Markets was established in April 2022 to support the development of a new generation of purposeful nature markets, so that they deliver nature positive and equitable outcomes, and in so doing contribute to meeting climate goals.[1]

The rise of nature markets does not automatically guarantee better outcomes. Indeed, left simply to evolve in their own way they could even make things worse. The Taskforce believes that the sort of recommendations set out in this final report—aimed at the carefully implemented, well-designed nature markets—are therefore essential for nature markets to achieve their considerable potential.

Guided by its 15 high-level members[2] and supported by its knowledge partners[3] and secretariat[4] - NatureFinance,[5, 6] the Taskforce has mobilised analysis and debate on nature market trends and prospects. It has undertaken and commissioned multiple technical papers covering many aspects of nature markets,[7] including a taxonomy of nature markets[8] and a quantitative landscape analysis of the current size of each main type of nature market.[9] Beyond this, it has focused on four market archetypes: large, mature, intrinsic nature markets - notably food commodities;[10] emerging derivative nature markets - such as biodiversity credits;[11] illegal nature markets; and the nature-related activities of mainstream financial institutions.

Nature markets and the broader nature economy or "bioeconomy" have become even more visible over the Taskforce's brief lifespan. From Australia to Brazil to the UK, nature market debates and practices have become more contested. The Taskforce has ultimately focused on the governance aspects of nature markets as the centrepiece of its analysis and recommendations, which include the development of a common framework for assessing and progressing the governance of specific nature markets, in-depth consideration of specific governance instruments, including legal innovations[12] such as the Rights of Nature[13] and the application of digital technology to improve traceability and accountability.

The Taskforce's findings and recommendations highlight the relevance for nature of both shifting geopolitics[14] and a growing realisation that we are on the brink of global temperature rises well in excess of the targeted, and comparatively safe, 1.5 degrees Centigrade.

www.naturemarkets.net

NATURE FINANCE

The Taskforce on Nature Markets is an initiative of Nature Finance which also hosts its secretariat. NatureFinance is a Geneva-based, international not-for-profit dedicated to aligning global finance with climate resilient, equitable and nature positive outcomes. Its work spans initiatives that are building and using biodiversity data to better manage nature related risks, developing purposeful nature markets, advancing financial innovations including in sovereign debt markets and strengthening nature-related liabilities.

www.naturefinance.net

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*The members of the Taskforce on Nature Markets are participating in a personal capacity and are not expressing endorsements or commitments on behalf of their institutions

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This paper was prepared by NatureFinance on behalf of the members in its role as the Secretariat, drawing on the guidance of its members and the invaluable technical inputs from its knowledge partners, as well as feedback from the wider community of practice. The authoring NatureFinance team included Simon Zadek, Marcelo Furtado, Julie McCarthy, Monique Atouguia, Matthew Doncel, Dorothee Herr, Luana Maia, with editorial, communication and design led by Ceandra Faria, Roberta Zandonai and Natan Aquino with additional editorial support from Matthew Bishop.

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Whilst these many people and institutions have contributed to the work of the Taskforce, they do not necessarily agree with all aspects of its findings and recommendations, and any errors and omissions in its final report remain the responsibility of its authors.

The Taskforce is time-bound and will end with the launch of its final report, but the topic remains very much alive and in continuous development, and NatureFinance is committed to continuing and intensifying efforts to turn the Taskforce's recommendations into practice. With this in mind, we welcome all comments, feedback, and suggestions, which can be channelled to us at **naturemarkets@naturefinance.net**.

MAKING NATURE MARKETS WORK

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Taskforce on Nature Markets

List of Abbreviations

ACMI	African Carbon Market Initiative
ADM	Archer Daniels Midland
AML	Anti-money-laundering
AMMOD	Automated Multisensor stations for Monitoring of species Diversity
ARMM	Automated Regression Market Makers
BCA	Biodiversity Credit Alliance
BNG	Biodiversity Net Gain
BOJ	Bank of Japan
BRICS	Brazil, Russia, India, China, and South Africa
CBAM	Carbon Border Adjustment Tax
CEA	Controlled Environmental Agriculture
COP	Congress of Parties
DLT	Distributed Ledger Technology
ESG	Environmental, Social and Governance
EU	European Union
FATF	Financial Action Task Force
G20	Group of Twenty
G7	Group of Seven
GDP	Gross Domestic Product
GBF	Kunming-Montreal Global Biodiversity Framework
IIED	International Institute for Environment and Development
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPLC	Indigenous People and Local Communities
IFRS	International Financial Reporting Standards
IUCN	International Union for Conservation of Nature
LEAF	Lowering Emissions by Accelerating Forest Finance
LMIC	Low- and Middle-Income Countries
NCAVES	Natural Capital Accounting and Valuation of Ecosystem Services
NGFS	Network of Central Banks on Greening the Financial System
NGO	Non-Governmental Organisation
NSIP	Nationally Significant Infrastructure Projects
OECD	The Organization for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
OTC	Over The Counter
SEEA EA	System of Environmental Economic Accounting Ecosystem Accounting
SME	Small and Medium-Sized Enterprises
'Taskforce'	The Taskforce on Nature Markets
TCFD	Taskforce on Climate-related Financial Disclosure
TNFD	Taskforce on Nature-related Financial Disclosure
UK	United Kingdom
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNCTAD	United Nations Conference on Trade and Development

1

GETTING NATURE MARKETS RIGHT

With our world on the brink of climate and biodiversity emergency, humanity is finally waking up to the disastrous consequences of our unsustainable overuse of nature in delivering economic prosperity (albeit unequal and temporary). This pathway can and must be reversed, building on societies' diverse ways of conserving nature, including culture and norms, policies and regulations, incentives, and technologies.

One part of the solution is to begin accurately and consistently pricing the value of nature in economic decision making across the global economy. This could incentivise nature-conserving market behaviour, help mobilise billions of dollars to protect and restore nature, and fairly reward those on the frontline of stewarding it, including Indigenous Peoples and other local communities.

> **The rise of nature markets can play a central role in reshaping our unsustainable economy if, and only if, their design and governance is rooted in a radical and robust commitment to impact and equity.**

In this way, they could help to reverse extractive economic patterns that for centuries have enriched some people and countries, largely in the Global North, at the expense of citizens and countries of the Global South, and at the expense of our planet.

Without this pivot, there is a serious risk that the current enthusiasm for nature markets could cause further damage to nature, worsening the climate crisis and deepening existing inequities.

The Taskforce on Nature Markets was launched in April 2022 to identify and highlight the potential and dangers of the rise of nature markets and to set out what needs to be done to ensure that emerging nature markets advance equitable, nature positive outcomes.

There are seven major recommendations, and many more detailed specific recommendations, set out in this final Taskforce on Nature Markets report which range from securities design to governance and regulation. These recommendations can help avoid the worst outcomes and instead make new and expanded nature markets a key driver of a Just Transition to a sustainable post-carbon economy in which all humanity, and nature more broadly, can thrive on a healthy planet.

"Without nature there is no life on our planet nor a sustainable economy – it is fundamental that Indigenous peoples are in the driving seat of designing and governing nature markets."

Chief Almir Narayamoga Surui
Leader of The Paiter Surui People

Exhibit 1

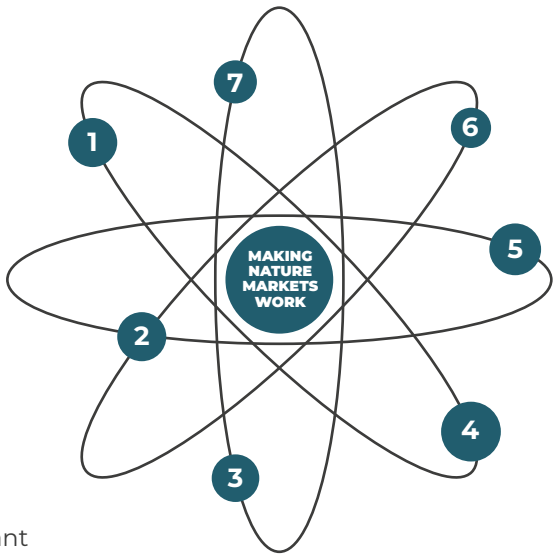
Recommendations to Make Nature Markets Work

7 Converging measures of the state of nature

Action to establish a common approach to measuring and making publicly available the state of nature anywhere on the planet.

1 Aligning economic and financial architecture with an equitable, global nature economy

Action to align the international economic and financial architecture with the imperative of advancing an equitable, global nature economy.



6 Addressing the harmful impacts of nature crimes

Action to reduce the incidence and impact of nature crimes by establishing a requirement for investors and financiers to demonstrate that their financing value chains are nature crime free.

2 Policy alignment of central banks and supervisors

Action to broaden the mandates of central banks and supervisors to require them to ensure that actions by financial actors, markets and systems are aligned with relevant government and international policy commitments on nature and climate.

5 Securing improved economic benefits for nature's stewards

Action to form one or more nature sellers' clubs comprising either/and nature rich sovereign nations and groups of Indigenous Peoples and local communities to deliver high integrity nature at agreed or, if necessary, imposed prices.

3 Aligning public finance with the needs of an equitable, global nature economy

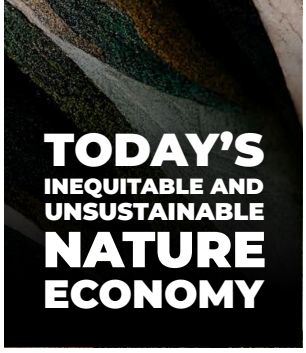
Action to align public sector financial management with international nature commitments crystallised in the Kunming-Montreal Global Biodiversity Framework.

4 Making food commodity markets accountable to people and the planet

Action to make soft commodity markets more accountable for people and the planet – as the world's largest and most impactful nature market - that notably facilitates the global trade of food.

2

TODAY'S INEQUITABLE AND UNSUSTAINABLE NATURE ECONOMY



100% of today's global economy is 100% dependent on nature.

In addition to the food we eat, the water we drink, and the air we breathe, nature includes all living things and the minerals under our feet. It is ever-present in the stuff of our homes and mobile phones, the movies we stream, and how we manage our health and consumption of energy.

Most economic activity undervalues nature, using it like a limitless, free resource when it is neither.

The annual unpriced cost of nature used by the global economy (through greenhouse gas emissions, water use, land use, wild species use, pollution, waste, etc) has been estimated at 13% of global GDP.[15] Likewise, the World Bank estimates that our roughly US$8 trillion a year global food system generates US$12 trillion annually in negative externalities, notably through destroying nature and contributing to global warming.[16]

> **In other words, if the global economy was a single company that had to price in today's negative externalities, it would be technically insolvent.[17]**

And that is exactly what the global economy is - inequitable and unsustainable in its current form to the point where 1.6 planets are required to feed the economy's current impact on nature, according to Professor Sir Patha Dasgupta's landmark *Economics of Biodiversity Review*.[18]

Biodiversity is being destroyed at an unsustainable scale and pace.

As the Chair of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) concludes: "Biodiversity is being lost and nature's contributions to people are being degraded faster now that at any other point in human history".[19]

> **This destruction is accelerating both the climate crisis and an alarming loss of biodiverse ecosystems, intensifying inequality, and undermining financial stability and food security.[20]**

The numbers are astonishing, even in a world overwhelmed by fear-inducing data:

- Global biodiversity has declined by 70% since 1970.[21]
- A garbage island the size of India, Europe and Mexico combined, floats in the Pacific Ocean.[22]
- Populations of freshwater species have declined by 84% in the past 50 years.[23]
- 1,692 acres of formerly productive land become desert every hour.[24]

The unsustainable use of nature underpins structural economic inequalities.

Nature rich countries, rural communities, and Indigenous Peoples have been systematically disadvantaged by the unsustainable use of nature. This history has been marked by political and economic dependency, military conflict, and human rights violations. In the process, it has set the stage for — and continues to reinforce — the current economic, social, and political imbalances between developed and developing countries, and, more broadly, the Global North and Global South.[25]

There are few robust estimates of the extent of the historic transfer of economic wealth due to the unsustainable use of nature.

> **According to a 2021 study, between 1960 - 2018, the Global North appropriated from the South a total of $62 trillion constant 2011 dollars, or $152 trillion[26] (in 2011 dollars) in commodities when accounting for lost growth.**

This extractive pattern has largely continued. In 2022, it was estimated that between 1990-2015 the Global North's net appropriations from the Global South amounted to 12 billion tons of embodied raw material equivalents, 822 million hectares of embodied land, 21 exajoules of embodied energy, and 188 million person-years of embodied labour, valued at US$10.8 trillion in international prices.[27]

Moreover, many countries emerging from under-development have succeeded in doing so, at least partly, through the continued unsustainable use of nature. This has brought with it nature-related development crises, from shortages in the availability of potable water to the deterioration of major biodiversity land and seascapes including major parts of the Amazon and Congo Basin, as well as the Asia-Pacific Ocean, which covers 40% of the world's surface.

The prevalence of this industrial development model in nature rich countries — while historically understandable — has further reinforced national and global patterns of inequality, while continuing to exacerbate the nature and climate crises.

"Nature markets cannot be addressed piece-meal, we need a complete system reset to deliver an equitable, nature positive economy in service of people, planet and prosperity."

Sandrine Dixon-Declève
Co-President of the
Club of Rome

Efforts to conserve and restore nature may reinforce these structural inequalities.

As the implications of the catastrophic depletion of nature become more apparent, efforts are growing to protect economic prosperity where it currently exists by restricting the over-use of nature, both domestically and internationally.

> **Government-driven policy initiatives have been amplified by growing amounts of civil society litigation, often targeted at increasing domestic climate action but with significant implications for nature.**

One example is when the Dutch Supreme Court ruled in 2019 that the Government had a duty to implement its climate change commitments, which had significant implications for reduced domestic dairy farming and increased rewilding in the Netherlands.[28]

More recently, these efforts have been met with a growing backlash across the Global North. For example, the pushback in the US against action on climate and Environmental, Social and Governance (ESG) investment screens, and growing resistance in the EU to the additional costs (at least in the short to medium term) associated with the more ambitious aspects of the new EU Nature Restoration Law.[29]

Internationally, there are growing fears that climate and nature-focused policy initiatives will constrain development opportunities. One example of this is the zero-deforestation requirement being imposed by the European Union on its corporate community.

> **Many developing countries argue this will unfairly place much of the burden of the cost of transition to a post-carbon economy on poorer but nature rich nations, especially commodity exporters.[30]**

Another example is the new EU Carbon Border Adjustment Tax (CBAM) mechanism, which will introduce tariffs on carbon-intensive imports, often from lower income countries. While these efforts may achieve some of their short-term intended impacts on climate and nature, if designed and applied in crude and unilateral ways, they will fail to account for negative social and political impacts in poorer, nature rich countries and may ultimately be counter-productive.

Securing nature's contribution to tackling climate challenges is essential.

Nature and climate are indivisible when it comes to restricting the rise of global temperatures.[31] This is true of nature's capacity to absorb and store carbon, its direct positive impacts on our climate, and its central role in securing livelihoods and food security.

The nature-climate nexus is core to addressing:

- **Food security**, increasingly at risk, impacted by water scarcity, land encroachment, declining soil productivity, and species extinction on land and at sea. More than 800 million people do not know where their next meal will come from, according to the World Food Programme.[32]

- **Human encroachment** on wider nature increases the risks of cross-species diseases and pandemics, exemplified by the human tragedy and extraordinary economic costs of COVID-19.[33]

- **Strategic minerals** critical to the green economic transition are increasingly a focus of economic and potentially militarised competition, already leading to devastating social and environmental impacts.[34]

"We are entering into an era of political and legal battles of jurisdictions, with nature and climate as the centre of gravity, resulting in new forms of trade and protectionisms becoming viable again."

Carlos Lopes
Professor, Mandela School of Public Governance & African Climate Foundation Advisory Council Chair

Making nature count is essential to achieving a more sustainable and equitable global economy.

Recognising nature's intrinsic and economic value is an existential need. Taking this agenda seriously requires us to embrace the need to transition the global economy away from its current addiction to the unsustainable use of nature. This requires radical changes to the shape of businesses, markets, and economies. And whilst beneficial to everyone, there will be winners and losers.

> **For such a massive shift to be a genuinely Just Transition, it will require a fundamental reset of the terms of trade between nature and other parts of the global economy, and between the Global North and Global South.**

This shift should ensure far more of the global economic cake going to nature's stewards, including sovereign nations, local communities, and Indigenous Peoples.

"Earmarking funds for new environmental projects is not enough. Countries must also stop subsidising nature-harming industries and deploy national resources to support sustainable activity that can change the trajectory of the global economy."

Carlos Manuel Rodriguez
CEO and Chairperson of the
Global Environment Facility

3

THE RISE OF NATURE MARKETS

The idea that nature should be valued explicitly in economic activities is catching on.

Recent years have witnessed a shift towards counting nature properly in markets for positive and equitable outcomes, rather than under-valuing it or ignoring it entirely.[35]

This pivot towards 'nature markets' – in which an explicit economic value of nature is identified and can be traded – is being catalysed by four main drivers.

The four drivers of 'nature markets' are: public awareness and citizens' intrinsic valuing of nature; the increasingly visible negative impacts of nature's fragile condition; a growing understanding of the dependency of economic assets on nature; and an explosion of cheap and timely biodata making clearer the true condition of nature.

These underlying trends are reflected in scaled markets, both by policies and as a result of business and technological innovation.

The largest nature markets by far are what we have called **'intrinsic'** nature markets - that enable the trade of nature itself, such as agricultural products and minerals, seafood and other products derived from wild species and, oil and gas.

There are markets that trade nature **assets**, notably land rights, but also freshwater rights.

There are the public purpose **'credit'** markets, such as for carbon and now also for biodiversity, that seek to satisfy compliance requirements or to conserve and invest in nature.

Finally, there are **derivative** markets - involving the trade of financial products that reflect normative efforts to conserve and invest in nature or seek to mitigate and manage nature-related risks.

"Game changing data innovations like geospatial insights and ground truthing are giving investors the power to measure, monitor and manage nature-related risks and opportunities with a level of transparency and precision not yet seen before in the market."

Vian Sharif
CEO of NatureAlpha and Head of Sustainability at FNZ

Exhibit 2 The Many Forms of Nature Markets – a Taxonomy

Type	Description	Category	Traded element	Segments
Asset Markets	Markets in which the right to use ecosystem assets with long-lived value are traded	**Real assets**	Rights to use an entire ecosystem asset and resulting services	Agricultural land, timberland, water rights, biodiversity IP, additional ecosystems assets
Intrinsic Markets	Markets in which provisioning, regulating, or cultural ecosystem services are traded	**Products**	Use of provisioning services	Hard and soft commodities, legal and illegal wild species, genetic materials, water rights leases
		Conservation	Conservation of nature for direct economic benefit or altruistic value	Payments for ecosystem services, overseas development aid, philanthropic grants, sustainability-linked debt
		Access	Access to/use of cultural services	Wildlife tourism
Credit Markets	Markets in which credits that reflect efforts to enhance or conserve ecosystem assets or services are traded	**Nature-specific credits**	Credits that reflect the value of ecosystem services	Mitigation banks, water quality credits, voluntary biodiversity credits
		Nature-related carbon credits	Credits that reflect the value or carbon sequestration or storage	Nature-related voluntary carbon credits, AFOLU sector compliance carbon allowances
Derivative Markets	Markets for financial products which directly reflect ecosystem values or ecosystem risks	**Financial products**	Financial products directly tied to ecosystem assets or services	Commodity derivatives, nature-related insurance, wildlife NFTs, biodiversity loss insurance, securitization of ecosystem assets, water futures

Source: Taskforce on Nature Markets and Vivid Economics (2022)

Nature markets could protect nature and deliver greater equity or be a part of the problem.

For some, the idea that ecosystems should have a monetary value creates a welcome route to conserving Earth's endangered regions.

> **Pricing nature across the global economy could increase the potential for nature to be preserved, invested in, and restored.**

Citizens and consumers could potentially reinforce such pricing through their consumption choices, voting, investment decisions, and activism.[36] Governments and regulators could also play an integral part in the rise of nature markets through their deployment of fiscal and regulatory actions, such as Australia's Nature Repair Bill and the UK's Nature Market Regulatory Framework.[37]

For others, there is an irony and considerable risk in trying to use market mechanisms to address chronic problems originally created or made worse by markets.[38]

> **Given nature's complexity, the efforts to count it and so preserve it also open the door to significant risks of greenwashing.**

One analysis, for example, suggests that 90% of current rainforest carbon offsets are "worthless".[39] Pricing and trading of scarce and endangered nature, without the necessary safeguards, could increase food insecurity for vulnerable communities, restrict development opportunities for nature rich countries, and increase the cost of capital for those countries and communities facing nature-related risks.

"There is scope for markets to transform the way we reward both nature's contribution to the economy, and nature's stewards, including ways to clean nature value chains by engaging consumers and ensuring greater disclosure from producers, traders and investors."

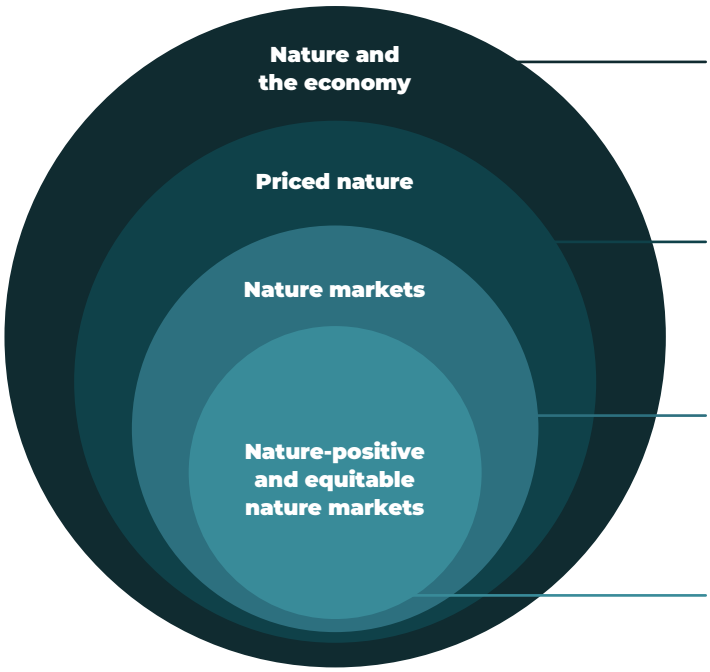
Joaquim Levy
Director for economic strategy
and market relations,
Banco Safra S.A

Leaving it in the ground and the seabed

There may be good reason for not using some natural resources at all - not to preserve them, but to avoid their destructive impacts. Deep sea mining is increasingly an area where many stakeholders are calling for an outright moratorium to protect marine life.[40] Carbon intensive energy sources are perhaps the most significant case in point.

> **Recent research found 90% of coal and 60% of oil and gas reserves should not be extracted in order to have even a 50% chance of keeping global heating below 1.5°C, the temperature rise above which the worst climate impacts would be most likely to occur.[41]**

Exhibit 3 Not All Nature Markets are Equitable or Nature-Positive



Source: Taskforce on Nature Markets and Vivid Economics (2022)

"Nature markets should have hard limits. Deep sea mining, for example, would be an environmental disaster and cause irreversible damage on a staggering scale, impacting marine life and carbon sequestration."

Nakul Saran
Entrepreneur, Advocate and Oceanographer

Making nature markets work can draw on the climate playbook, but only in part.

Integrating climate risk, mitigation and adaptation into the global economy is an unfinished journey, yet there are lessons to be drawn that can inform how nature markets can be shaped.

Most obviously, the build out of national and international climate policy commitments and their execution has to date driven financial risk pricing, enterprise and product innovation, and more national and regional economic strategies.

There are, however, at least three major differences between the climate and nature playbooks.

When it comes to nature:

1. There is no equivalent to carbon, which does not simply complicate efforts to address the nature crisis but also means that there is no obvious equivalent to a carbon price.
2. There is the critical importance of engaging nature's stewards, in particular Indigenous Peoples and local communities, in formulating and executing effective solutions.
3. There is no equivalent, at least not yet, to the clean energy revolution that is core to reducing emissions and underpinned by technologies with dramatic down-sloping cost curves.

> **The similarities and differences between the climate and nature playbooks are paramount. Their implications tilt the balance of solutions away from technology-price pathways towards policy and broader governance drivers of necessary enterprise and market transformations.**

This is not simply a job for governments and regulators - consumer pressure and citizen action, as well as voluntary corporate leadership and innovation, all have a crucial role to play.

"Lessons we can apply from climate finance work to nature markets include the innovative uses of different types of capital to mobilise private finance and the need to collaborate to develop the frameworks, standards and even an accepted vocabulary."

Rhian-Mari Thomas OBE
CEO of the Green Finance Institute

Effective governance is essential for nature markets to work.

While it may be tempting to want to make nature and markets entirely separate, the reality is that nature is fundamental to all our economic activities.

Our real choice is not whether there should be nature markets – both long established markets, and those that are emerging – but rather how they can best be designed and governed to deliver equitable outcomes and sustainable positive impacts on nature and communities.

This is made clear in the recently agreed Kunming-Montreal Global Biodiversity Framework (GBF), and new scenarios set out by the Intergovernmental Panel on Climate Change (IPCC).

> **The GBF and recent IPCC scenarios both stress that to have any chance of meeting the new global biodiversity goals, direct government interventions via public finance alone will not be enough - nature markets will need to be mobilised at scale.**

Nature markets can only be fixed as part of a system-wide reset.

Nature markets can be addressed one by one, and some progress can certainly be made on that basis. Yet they are part of a wider ecosystem of precedents, norms, incumbent interests, rules, and governing processes - and simple inertia.

Ultimately, fixing nature markets to deliver equitable, nature positive outcomes has to be part of a wider reset of the financial and economic architecture.

"Nature's destruction presents profound risks to human societies and as with any serious risk we face, the rational response is to hedge - in the case of biodiversity loss this means a comprehensive, worldwide effort to appropriately value, protect, and restore nature."

Hank Paulson
Chair of the Paulson Institute

4

THE NEW GEOPOLITICS OF NATURE

Nature markets could benefit nature rich countries but might have the opposite effect.

Seismic shifts in today's geopolitics have many causes and features, with uncertain consequences that can be both localised and structural. It is increasingly clear that nature as well as climate will be part of such a shift, especially through contentious issues around finance, market access, and pricing.

These new dimensions of geopolitics and associated tensions were already becoming clear at key political events including COP27 in Sharm El Sheik in late 2022 and the Summit for a New Global Financing Pact hosted by President Macron in Paris in mid-2023.

> **Growing recognition of nature in global markets can and should benefit nature rich countries, notably through increased earnings and investments. Yet perversely, taking account of nature-related risks could disrupt food production systems, which in turn could precipitate a surge in rural unemployment and increases in the cost of nutrition.[42]**

Similarly, pricing in the fragility in nature is already leading to some nature rich countries finding themselves penalised in global financial markets, including through increases in the cost of capital for some climate vulnerable countries.[43] Further efforts to reduce nature's continued destruction could become entangled in cross-border trade and investment rules and flows.[44]

Nature is becoming a centre of gravity in global competition.

Certain aspects of nature have long been central to geopolitics and economics, notably hard commodity markets, especially oil and gas.

> **What is new is the growing geopolitical importance of living nature, such as biodiversity (including water), as an ever more significant factor in global economic competition.**

This is especially relevant in the context of climate challenges and the so-called green transition. Increasingly, such competition is adding to economic and broader geopolitical tensions.

In summary:

> **Nature rich countries,** often economically more constrained, are seeking to reverse historical inequalities by shifting the terms of trade for nature more in their favour, including through the conversion of nature into a source of monetary benefits.

> **Economically wealthier countries,** often nature-depleted, are seeking to secure nature as a strategy for slowing climate change whilst not having to pay too much for this service, and as a means of ensuring food security and safeguarding critical inputs to their global value chains.

The prospect of catastrophic climate change will reshape nature-related economic strategies.

The likelihood of catastrophic climate change is growing, despite efforts to restrict the rise of global temperatures in line with the Paris Climate Agreement. Indeed, for increasing numbers of people, such catastrophes are already part of daily life.

This scenario may increasingly demand very different forms of economic and related nature strategies:

> **Nature rich countries,** whilst seeking to sustain their natural assets for as long as possible, may accelerate the pace and scale of their monetarisation to generate financial support for what would undoubtedly be a painful economic transition.

> **Economically wealthier countries** might adopt more technologically intensive economic strategies designed to reduce dependence on rapidly depleting aspects of nature through major investments in de-coupling and circularity.

The geopolitics of nature markets is likely to catalyse new coalitions.

Early, loose coalitions have started to appear in recent years, such as the High Ambition Coalition for Nature and People[45] and the Lowering Emissions by Accelerating Forest Finance (LEAF) Coalition.[46] More politically assertive coalitions are also emerging, such as the alliance formed by Brazil, Indonesia, and the Democratic Republic of the Congo, to cooperate on the bioeconomy and restoration of tropical forests and critical ecosystems.[47]

Such coalitions have technical and political features but are not yet focused on the core matter of pivoting away from historic inequities. This pivot would entail a fair price and scaled volumes of finance paid for ecosystem services to nature's stewards, including sovereigns, Indigenous Peoples, and local communities, as well as project developers.

> **A next step might be the formation of one or more 'sellers' clubs' for nature. These 'sellers' clubs' would draw on important lessons, both positive and cautionary, learned from the experiences of older sellers' clubs, such as the Organization of the Petroleum Exporting Countries (OPEC).**

Sellers' clubs that set fair prices in return for guarantees of high integrity ecosystem services would make even more sense in the context of a catastrophic climate scenario. Under such a scenario, there will be a need to both protect and restore nature for as long as possible, and to create some form of 'transition fund' that can later support these countries' painful economic and physical transitions in a climate disrupted world. Such an approach would not be materially different from that taken by oil and gas-rich countries, such as Norway and Saudi Arabia, in building up their sovereign wealth or 'future generations' funds.

Nature must be embedded in a reformed international financial and economic architecture.

Faced with both common concerns and divergent strategic interests, all countries need to align the broader international economic and financial architecture with what is required to transition to a more equitable, nature-positive global economy.

> **This transition would include a reformed global debt architecture, trade and investment policies, financial and monetary policies, regulations and standards, anti-money laundering rules applied to nature crimes, and rules governing public procurement and subsidies.**

Reforms could and should also cover the regulation of how nature is considered across specific and significant markets, notably commodity markets, and nascent markets such as those for digitally sequenced information on genetic resources.[48]

> **There have been encouraging recent efforts to use the G20 to consider the climate dimensions of monetary policy and financial regulation. More recently, there have been a number of developments on which basis nature-related risks are understood, quantified, and disclosed.[49]**

Similarly, the G7 has launched an 'Alliance for Nature Positive Economies', although its initial focus is modestly on advancing disclosures of nature-related risks.[50]

Such progress, though welcome, remains ad hoc and incomplete. It is important to make use of ongoing international climate and nature negotiations: the UNFCCC COP28 in the United Arab Emirates in 2023, and the CBD COP16 in Turkey in 2024, through to Brazil's UNFCCC COP30 Presidency in 2025. Another option would be to broaden the G7's Alliance of Nature Positive Economies.

However, advancing progress through the G20 in 2024 under the Brazilian Presidency may be preferable in building a more inclusive approach that includes significant leadership from nature rich countries in the Global South.

5

GOVERNING NATURE MARKETS

Our analysis of nature markets has focused on four specific market archetypes.

The work of the Taskforce on Nature Markets has been to develop insights and recommendations that apply across all established and emerging nature markets.

At the same time, the Taskforce has taken an in-depth look at, and set out recommendations for reform of four specific nature markets that require the most urgent attention:

- Nature credit markets, especially focused on carbon markets and emerging biodiversity credit markets.
- Illegal nature markets, covering the trading of the results of nature crimes.
- Soft commodity markets, the largest and arguably the most important set of nature markets, trading the world's food supply.
- Financial markets, which have the most influence on all nature markets, shaping the global economy and the terms of its relationship with nature and climate.

Each of these four archetypes is considered in-depth, highlighting the opportunities and risks that shaped the Taskforce recommendations. Beyond these archetypes, the Taskforce has considered other related markets, notably broader financial markets and surging bio-data markets, and those focused on or making use of the digital representation of nature.

"Nature is our life-support system. If markets continue to neglect the consequences of short-term profit maximization on nature, the human journey on the planet will become much more perilous."

André Hoffmann
Vice Chairman,
Roche Holding

1 Nature Credit Markets

Especially focused on carbon markets and emerging biodiversity credit markets, with a current combined annual value of less than US$5 billion.[51]

Biodiversity credit markets have become a lightning rod for many substantive nature market design considerations,[52] especially in the light of the all-too-visible shortfalls in voluntary carbon markets.[53]

The Global Environment Facility (GEF) recently concluded that, "...with clear policy frameworks and signals, good governance, improved institutional capacities, and inclusive and transparent rules of engagement, biodiversity-positive carbon credits and nature certificates have the potential to markedly complement other financial mechanisms towards meeting the goals and targets of the Global Biodiversity Framework and the Paris Agreement".[54]

The design of carbon and biodiversity credit markets to date has not, at their core, integrated a fair deal for project developers or nature rich sovereigns, let alone Indigenous Peoples and local communities. The most challenging issues are presented by 'Over the Counter' (OTC) trades which are mostly bilateral deals between buyers and sellers outside of any formal market structure.

A Global Roadmap for Harnessing Biodiversity Credit Markets for People and the Planet was launched by France and the UK at the 'Summit for a New Global Financial Pact' held in Paris in June 2023.[55] The development of this Roadmap has been supported by NatureFinance as part of the Taskforce's initiative-based approach. It highlights five key design challenges to address in building equitable, nature positive biodiversity credit markets and broader nature credit markets, summarised in Exhibit 4.

Exhibit 4

Nature Positive Biodiversity Credit Markets – Core Design Challenges

A Measuring the state of nature.

B Stimulating timely, sustained, and effective demand for credits with associated financing.

C Ensuring sufficient, high-integrity supply of credits offering a nature-positive outcome.

D Securing equitable distribution of rewards to project developers, sovereigns, and Indigenous Peoples and local communities.

E Establishing robust and participatory governance and broader institutional arrangements.

"Biodiversity credit markets can help ensure private sector financing is leveraged to protect and restore nature, as long as they are scaled for integrity, impact, and equity."

Sylvie Lemmet
Ambassador for the Environment at the Ministry of Europe and Foreign Affairs

2 Illegal Nature Markets

Covering the trading of products of nature crimes, that generates the third largest source of illegal financial flows, estimated at up to US$1.5 – 2 trillion.[56]

Illegal trade in wild species, including logging and fishing, and the gains generated from 'environmental crimes' including illegal mining, waste dumping and other crimes, are estimated at up to US$281 billion.[57] Illegal trade in wild species decreases tax revenues, mainly in poorer, nature rich countries by an estimated US$30 billion per year. If the broader impacts on ecosystem services are considered, the illegal trade in wild species is globally estimated at US$1 trillion-2 trillion per year.[58]

There are major lessons to be drawn from the world's experience of tackling nature crimes that could be applied to the governance of nature markets, summarised in Exhibit 5. This includes the use of international cooperation, national laws and regulations, established financial mechanisms, market-based initiatives, accurate, up-to-date data and information, traceability, and transparency.[59] At the core of any meaningful approach is the protection and agency of Indigenous Peoples and local communities.

The Taskforce's initiative-based approach to analysis and impact has included ongoing engagement with the Brazilian and Swiss Governments to improve the traceability of exported gold illegally mined in the Amazon. Strengthened anti-money laundering rules applied to nature crimes are encouraged, including the development of a robust 'conflict diamond' type approach to ensure that financing value chains are nature crime free.[60]

Efforts to halt illegal gold from entering the jewellery market or bank reserves as an asset class are additional good examples of how finance can address nature crimes in its value chain.

Exhibit 5

Illegal Nature Markets - Top-Down to Bottom-Up Governance

Multi-faceted Solutions: effective governance of nature markets requires a combination of international cooperation, national laws, market-based initiatives, community engagement, alternative livelihood development and accurate data for traceability, and transparency.[61]

Protecting Rights: any meaningful approach requires the protection and agency of Indigenous Peoples and local communities, including protection of their rights, and effective conflict resolution when these rights overlap with those of other actors, especially business.

Follow the Money: anti-money-laundering rules that prevent the conversion of proceeds from illegal activities into clean money need to be applied to environmental crimes.[62] Another approach would be to establish a 'conflict diamond' approach to requiring financial institutions to ensure that their investment value chains are nature crime free.[63]

Ecocide: establish the criminal offense of ecocide as "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts".[64]

3 Soft Commodity Markets

The largest and arguably the single most important set of nature markets, trading food valued at upwards of US$4 trillion annually.[65]

The impacts of soft commodities are profoundly impacted by the way they are traded. Although there has been a surge of 'sustainable commodities' initiatives over the last decade, the vast bulk of soft commodities are traded with no reference to their nature, climate, or societal impacts.[66] Given that it is food that is being bought, traded, and sold, equity issues are paramount.

Today's surging and volatile food prices are linked to, but not only about a result of the disruption caused by Russia's invasion of Ukraine.[67] For example, profits generated by the world's largest agricultural trader, Cargill, increased by 141% to record levels in the financial year from June 2021 to May 2022. Archer Daniels Midland, another major trader, described 2021 as a "watershed year", with the highest profits of its nearly 120-year history.[68]

Exhibit 6

Opportunities for Positive Change in Soft Commodity Markets

- **Regulators:** strengthen regulatory oversight with both conventional competition policy and specific nature and climate-related mandates.
- **Corporate governance:** ramp up basic disclosure requirements including full impacts on nature and climate all along the corporate value chain.
- **Incentives:** introduce nature and climate-linked executive remuneration incentives.
- **Transparency:** require full value chain transparency to enable back-to-farm traceability and disclosure of climate, nature and people impacts.

Notwithstanding its dynamic complexity, three broad classes of governance challenges are clear front runners to address, with possible solution pathways set out earlier in Exhibit 6:[69]

- **Poor market wide governance:** due to overconcentration, vertically and horizontally, in these markets.
- **Perverse incentives:** these markets still reward nature destructive outcomes in land and marine use across agricultural supply, food production, distribution, and consumption.
- **Information asymmetry:** a lack of adequate disclosure on sourcing, pricing, and distribution from production to supply chain and final consumer market level.

"An international nature markets governance framework would enable financial, scientific and government communities to work together on protecting marine and terrestrial health, climate resilience and food security for billions of people."

Bruno Oberle
Director General, International Union for Conservation of Nature (IUCN)

4 Financial Markets

Have the most influence on all nature markets, shaping the global economy and the terms of its relationship with nature and climate.[70]

The recent rise in visibility of nature in financial markets, and of biodiversity, has been remarkable. This includes the call by financial institutions representing over US$24 trillion in assets under management to adopt an ambitious post-2020 Global Biodiversity Framework at the UN Biodiversity Conference COP15 and the 1000+ organisations, including many financial institutions, that have joined the Taskforce on Nature-related Financial Disclosures.[71]

Central banks and supervisors are beginning to focus on nature as a factor driving financial instability,[72] and there is a surge of financial innovation supporting the measurement of nature-related exposure, such as nature-linked sovereign debt issuance and debt for nature swaps.[73]

Notwithstanding such progress, the lenses of 'material financial risk' and 'financial instability risk' are inadequate to positively impact nature and climate at scale in a timely manner. This is demonstrated by the global records over the last two years for deforestation rates as well as the deterioration of other aspects of biodiversity.[74]

There is an urgent need for a stepwise change in the governance of financial markets. We need to move beyond finance-related risks to require financial institutions to align their investments with policy and legal commitments to climate and nature action made by the governments of countries in which they are domiciled. See Exhibit 7.

"As rule setters of the economic system, central banks and finance ministries need to promote putting a monetary value on nature - a critical step for nature to be included in key economic and financial decision making."

Naoko Ishi
Professor and Executive Vice President at the University of Tokyo

Exhibit 7

From Risk to Policy Alignment – Making Finance Nature Positive

1. **Aligning Purpose:** governing institutions can and should pursue instrumental goals such as price and financial stability, but these must be embedded within a broader set of objectives to foster sustainable prosperity and survival.

2. **Aligning Instruments:** the toolbox deployed by the institutions governing finance must reflect this broader purpose, as well as the changing landscape in which they operate, grounded in a robust analysis of their effective contribution to sustainable prosperity.

3. **Aligning Institutions:** governing institutions should be more effective, ensure rapid and cooperative learning, and involve a greater diversity of actors and decision-making venues in the governance of dynamic complex systems during an era of perpetual poly-crisis.

"Emerging technologies like blockchain, tokenisation and smart contracts are the best in the toolkit for delivering on principle-based nature market design, so that in the future, taxpayers do not need to bail out private invested interests."

Katrina Donaghy
CEO and Co-Founder,
Civic Ledger

There are cross-cutting lessons and recommendations for the governance of all nature markets

Nature markets vary dramatically, as do their existing governance arrangements. Nonetheless, several broadly applicable lessons can be drawn from our analysis of the four selected nature market archetypes.

These cross-cutting lessons include:

Governance must be designed to meet the complexity of the system it seeks to govern: delivering a nature economy that is equitable and nature positive requires new business models and markets. It ultimately requires a transformation of the international economic and financial architecture from one that is largely 'nature-ignorant' to one that is 'nature and people-centric'.

Top-down governance will only work if it is integrated with bottom-up market shapers and governance: top-down approaches to governing nature markets need to nurture and complement bottom up, community-led action and efforts across many complementary governance layers.

Dynamic, multi-faceted approaches cannot be ad hoc: ambitious, coherent action to harness nature markets for equitable, nature positive outcomes demand a common vision, agreed goals and a framework that in turn allows for multiple actors to align over time, similar to the intent of the Paris Agreement on Climate.

Fundamental changes to governance can be built on tested building blocks: making fundamental changes to governance can often simply involve the more effective deployment of existing approaches. Examples include the adoption of tried and tested approaches to market transparency, the ways in which traders themselves can be certified,[75] and establishing meaningful and effective price floors.[76]

Governance of nature markets can deploy scalable innovation: governance innovations can be effectively deployed at a global scale. Examples include open-source platforms for biodata, using blockchain to enhance price discovery and market liquidity and legal innovations such as the 'rights of nature'.[77]

A 'governance stack' can be applied flexibly across diverse nature markets.

Drawing on these lessons, policymakers should combine existing and innovative elements together in a 'governance stack' of basic building blocks from which the governance of nature markets can be flexibly yet systematically developed.

> **In some instances, the key may be to advance greater transparency, amplify stakeholder voices, or improve price discovery and liquidity. In other instances, regulatory developments may be the essential piece - whether judicial action, deploying innovative legal instruments, financial regulations or setting new standards.**

This governance stack should be embedded within a broadly agreed Nature Market Governance Framework, comprised of a series of elements such as those set out in Exhibit 8. This would provide a basis for comparative assessments of the state of governance in specific nature markets, informing market design efforts and improvements in practice.

Exhibit 8 Principal Elements of a Nature Market Governance Framework

1 INTEGRITY PRINCIPLES
Establishing the vision and purpose of nature markets, and so guiding their technical design and oversight.

2 NATURE MEASUREMENT
Including the quality of terms of access to and use of data, including agreed measures of the state of nature.

3 CAPITAL ACCOUNTING
Including the basis on which measures of the state of nature are translated into accounting that can in turn be represented financially.

4 TRANSPARENCY AND TRACEABILITY
Including a radical approach to both transaction-level and trader transparency, and full traceability, making greater use of enabling digital technologies.

5 EQUITY AND RESPECT
Including mechanisms for empowering weaker market actors in securing fair prices and to embed relevant cultural characteristics into products, rules and governance.

6 STAKEHOLDER VOICES
Including more traditional means of involvement of impacted stakeholders and leveraging digital innovations to embed voices into product characteristics.

7 BUSINESS ACCOUNTABILITY
Including the well-trodden approach to risk and impact assessment and disclosure requirements, augmented by extended fiduciary responsibilities.

8 LEGAL ARCHITECTURE
Clarifying and extending the legal and regulatory basis on which nature markets are governed, including the use of more ambitious 'rights of nature' legislation.

9 PURPOSEFUL REGULATORS
Extending the mandates of regulators to ensure adoption of, or alignment with, nature positive policies and international commitments.

6

RECOMMENDATIONS TO MAKE NATURE MARKETS WORK

Ambitious and targeted interventions are needed to trigger scaled nature market transformation.

Making nature markets work – where nature is more effectively priced to deliver equitable, nature positive outcomes – does not imply an exclusive or even primary focus on market-based solutions. Indeed, the balance of the Taskforce's findings argue that the opposite is the case – that most solutions are underpinned by political and policy actions needed to transform the basis on which enterprises, markets and economies use, invest in, trade, and pay for nature.

The engagement of citizens (consumers, taxpayers, and voters) is paramount to shaping markets for a positive outcome and to ensure effective implementation of regulatory requirements or public policy frameworks.

Informing this general framing of recommendations is the entirely inadequate pace of change witnessed in addressing climate challenges. This shortfall has occurred despite the availability of a unitary measure of carbon and the opportunity to harness the extraordinary clean energy technology wave.

Addressing the interlinked but distinctive climate and nature crises will require different playbooks. For nature, at its core, the major difference is a much more intensive (although by no means exclusive) reliance on policies and associated instruments to trigger shifts in market behaviour and innovations.

Nature does not have the benefit of big tech plays or simplified price discovery helping independently accelerate market development.

The nature playbook includes policy incentives, regulation, and new governance frameworks at the local, regional, and international levels. It will also require mechanisms to ensure that nature markets can be effectively influenced by local communities and Indigenous Peoples, to a degree not previously seen in financial markets.

Key major interventions that could make nature markets work for people and the planet.

There are multiple points of intervention needed to shape equitable, nature positive markets, including many that have been highlighted throughout this report and discussed at greater length in the various technical papers released by the Taskforce.

From these extensive findings, we have drawn together a small number of high-level recommendations that we consider to be central to advancing an ambitious yet practical, systemic approach to a global nature economy fit for the 21st century.

Exhibit 1

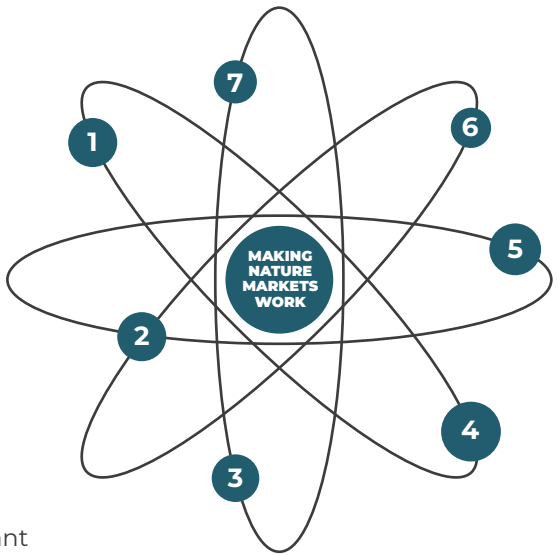
Recommendations to Make Nature Markets Work

7 Converging measures of the state of nature

Action to establish a common approach to measuring and making publicly available the state of nature anywhere on the planet.

1 Aligning economic and financial architecture with an equitable, global nature economy

Action to align the international economic and financial architecture with the imperative of advancing an equitable, global nature economy.



6 Addressing the harmful impacts of nature crimes

Action to reduce the incidence and impact of nature crimes by establishing a requirement for investors and financiers to demonstrate that their financing value chains are nature crime free.

2 Policy alignment of central banks and supervisors

Action to broaden the mandates of central banks and supervisors to require them to ensure that actions by financial actors, markets and systems are aligned with relevant government and international policy commitments on nature and climate.

5 Securing improved economic benefits for nature's stewards

Action to form one or more nature sellers' clubs comprising either/and nature rich sovereign nations and groups of Indigenous Peoples and local communities to deliver high integrity nature at agreed or, if necessary, imposed prices.

3 Aligning public finance with the needs of an equitable, global nature economy

Action to align public sector financial management with international nature commitments crystallised in the Kunming-Montreal Global Biodiversity Framework.

4 Making food commodity markets accountable to people and the planet

Action to make soft commodity markets more accountable for people and the planet – as the world's largest and most impactful nature market - that notably facilitates the global trade of food.

1

Aligning economic and financial architecture with an equitable global nature economy

Action to align the international economic and financial architecture with the imperative of advancing an equitable, global nature economy.

Pivoting a global economy that is dependent on the unsustainable overuse of nature and generates structural inequalities will require fundamental changes to the prevailing conventional wisdom that underpin today's economic and financial architecture. Changes are needed in key areas pointed to in the recommendations below, such as financial and monetary policies and regulations, and also trade and investment rules.

A piecemeal approach is unlikely to be effective, being too slow, creating new levels of inconsistency and not preventing, and therefore itself being disrupted by, growing tensions and conflict. What is needed is a more systematic and ultimately, systemic design undertaken collaboratively at the highest levels, encouraging ambition, leadership, trust, and increased coherence.

Such an approach is best advanced where possible through existing international cooperation channels. This should notably include the G20, starting with Brazil's Presidency in 2024, given the country's pre-eminence as a major nature economy and its public commitment to equity and addressing the climate and the nature emergency. Alongside this, the agenda can and should also be progressed in related and parallel fora including the G7, climate and nature COPs, the IMF Annual Meetings, the WTO/UNCTAD and the BRICS Summits.

2

Policy alignment of central banks and supervisors

Action to broaden the mandates of central banks and supervisors to require them to ensure that actions by financial actors, markets and systems are aligned with relevant government and international policy commitments on nature and climate.

Efforts to advance the incorporation of nature-related risks in private sector financial decisions and stability considerations must be encouraged through initiatives like the TNFD and the NGFS.

Such approaches will not, however, deliver the timely pivot needed towards net zero, nature positive outcomes. A pivot towards a 'policy alignment' approach is needed. First and foremost, this requires those that govern financial markets - central banks and supervisors - to have broadened mandates that obligate them to direct financial market actors to deliver and execute timed plans that transition their portfolios to align with well-defined nature positive and net zero carbon impacts.

Policy aligned central banks and supervisors are today more common in developing countries that have not embraced the contemporary practice amongst most OECD countries to separate substantive policies (such as climate and nature targets) from financial policy and regulation. That said, such an alignment approach has historically been adopted by major economies during emergency 'war time' periods, and there is little doubt that the combined nature-climate crisis warrants a comparable approach.

3

Aligning public finance with the needs of an equitable, global nature economy

Align public sector financial management with international nature commitments crystallised in the Kunming-Montreal Global Biodiversity Framework.

Alongside the focus on private financial flows highlighted in the first recommendation, there is the need to ensure that public finance is aligned to nature and climate policy commitments, taking effective account of both expenditures and the raising of funds through taxes and borrowing.

- Green fiscal budgeting that is both climate and nature sensitive is a growing practice that needs to be encouraged through national action and international initiatives such as the BIOFIN programme of the United Nations Development Programme (UNDP).

- Perverse public subsidies that incentivise the destruction of nature, notably linked to fossil fuel use and intensive food production, need to be terminated, as highlighted in numerous international fora and commitments including the GBF.

- Sovereign financing, raised through international capital markets and for many developing countries through development finance institutions, needs to be sensitised to nature risks and outcomes. This includes, where relevant, the use of performance-based financing instruments such as sustainability-linked sovereign debt.

4

Making food commodity markets accountable to people and the planet

Action to make soft commodity markets more accountable for people and the planet – as the world's largest and most impactful nature market – that notably facilitates the global trade of food.

An integral part of aligning global finance with equity and nature impact imperatives is making soft commodity markets, that trade the world's underlying food supply, fit-for-purpose. There is no simple fix in pivoting food commodity markets to take greater account of their impact on people and the planet, not least because of the corporate and sovereign interests that maintain the unresponsiveness of these markets to broader sustainability concerns.

Innovative advances made through diverse so-called 'sustainable commodities' initiatives have only succeeded, if at all, by in effect circumventing the core soft commodity markets through direct purchasing. Such practices are, and are likely to, remain marginal to these multi-trillion-dollar markets, whose dominant trading enterprises remain extraordinarily untransparent and largely unresponsive to serious and much needed change.

The starting point must be a commitment by policy makers and regulators to advance governance arrangements that require at a minimum full traceability and enhanced transparency about impacts. The next stage would require major commodity traders to issue publicly available transition plans to nature positive and net zero, with enhanced mandates given to relevant regulators to ensure compliance.

5

Securing improved economic benefits for nature's stewards

Action to form one or more nature sellers' clubs, comprising either/and nature rich sovereign nations and groups of Indigenous Peoples, to deliver high integrity nature at agreed or, if necessary, imposed prices.

Reversing the historic unsustainable extraction of under-priced nature from nature rich countries and from Indigenous Peoples and local communities by establishing coalitions of suppliers that can together establish higher prices in return for guaranteed high integrity nature/ecosystem services in terms of equity and sustainability. Such developments already exist in various forms, such as OPEC and the recent attempt by the Democratic Republic of the Congo to establish a sellers' club for cobalt.

One approach would be to kick start such a club building on existing financing challenges, such as the urgent need to establish approaches to funding sovereigns and Indigenous Peoples and local communities to conserve intact land and seascapes, notably for standing forests that are critical to collective efforts to address climate challenges.

Such an approach could be linked to current efforts to develop biodiversity credits and more sophisticated and effective bio-enhanced carbon credit markets. It could build on, as an example, the recently launched Global Roadmap to Harness Biodiversity Credits for People and the Planet, and parallel and connected efforts to develop bilateral and plurilateral nature financing 'country packages'. These efforts will not succeed if they remain purely at the level of sovereign states — Indigenous Peoples and local communities will need to be directly involved as equal partners in the design, governance and ownership of nature markets going forward, and receive their appropriate share of benefits.

6 Addressing the harmful impacts of nature crimes

Action to reduce the incidence and impact of nature crimes by establishing a requirement for investors to demonstrate that their financing value chains are nature crime free.

Nature crimes are without doubt one of the greatest causes of the destruction of nature and related social and human rights abuses. Many efforts are underway to address such criminal activity through the use of multiple actors and channels, but the problem remains chronic across many natural land and seascapes.

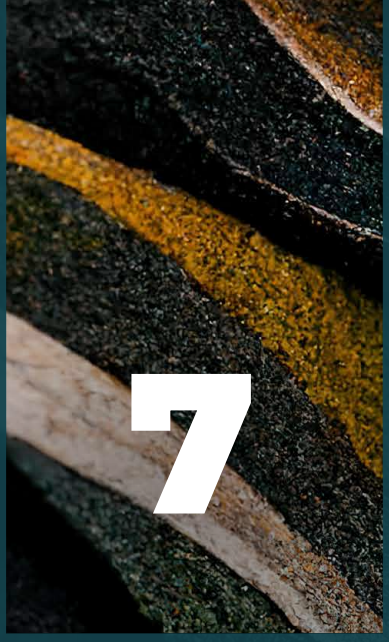
Much of nature crime is linked to contaminating existing legal nature markets with illegal inputs. Examples include illegal gold, illegal timber, or agricultural commodities, which are tainted by illegal activities such as deforestation and slave labour. A growing number of progressive actors in agribusiness understand the need, value and importance of traceability, transparency and a value chain free from deforestation and slave labour, for all commodities. Nonetheless, the extraordinary challenges involved in addressing these issues mean that the legal food system is still tainted to a serious degree with the products of nature crimes. These products, in turn, are largely financed by entirely legal investors, often from the world's most prestigious trading and financial institutions.

While no one is intentionally seeking to finance nature crime, adequate steps are not yet being taken either, at the systemic level, to ensure that supply chains and investment portfolios are free from the fruits of nature crime. Likewise, combating illegality — often a survival strategy for the poorest and most vulnerable — requires not only disclosures from financial market, but also real economy policies. This could be through rewarding of nature preservation including through market mechanisms and other sources of livelihood support in combination with law enforcement in the face of highly organised criminal networks.

In the absence of that and in such a deeply embedded and extensive situation, investors are effectively benefitting financially from the under-priced ecosystem services associated with nature crimes, with local populations in nature rich countries often bearing the weight of the costs.

A major opportunity exists, and today remains untapped, to significantly reduce the level of nature crimes by requiring legal investors to demonstrate that their financing value chains are nature crime free, and to incur penalties for failing to do so. Such an approach could be embedded in existing institutional arrangements governing anti-money laundering — amplifying and accelerating the leadership already being demonstrated by the Financial Action Task Force (FATF). Alternatively, reform could be advanced through a 'conflict diamond' type approach embedded in specific national or supra-national agreements and corporate governance rules, potentially coordinated through the G20 or other platforms. The efforts placed to halt illegal gold from entering the jewellery market or the bank reserves as an asset class is another good example of how finance can address nature crimes in its value chain.

In addition, it is critical to engage consumers and citizens at large to demand nature crime free value chains and use their purchasing power as well as voting rights to help stem nature crime.



7

Converging measures of the state of nature

Action to establish a common approach to measuring and making publicly available the state of nature anywhere on the planet.

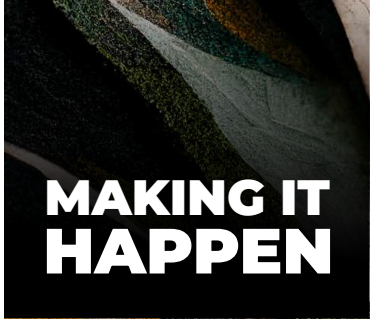
The surging availability of biodata through many mechanisms and from many sources is improving our understanding of both nature-economy dynamics and the nature-climate nexus. Much is being done to encourage or require the business community to make use of such data in assessing and reporting on nature dependencies, risks (as well as opportunities) and impacts.

Agreement on the fundamentals of measuring the overall state of nature, however, remains elusive. This is despite decades of work in developing natural capital accounting methods, and more recently, innovative approaches to delivering composite measures of biodiversity intactness that take account of its complexity and heterogenous elements. We have to reach a common basis for measuring the state of the current stock of nature. The risk of using partial measures, for example looking exclusively at water, soil, or air quality in isolation, is likely to distract, distort and ultimately undermine attempts to ensure that markets price, use and impact nature in a sustainable manner.

Alongside the need for a robust, convergent approach is the need to ensure that such foundational data is publicly available, rather than becoming locked up behind paywalls that institutionalise information asymmetries and increase the likelihood of greenwashing and a broader lack of accountability of market and state actors. What is needed is a large scale, institutionally robust and sustainable basis for such data to be made freely available and easy to access, perhaps building on early experiences in designing and developing open-source public data utility platforms.

7

MAKING IT HAPPEN



Overcoming our 'collective cognitive dissonance' is the key.

Pivoting to a sustainable, ecological global economy is a task fraught with challenges and risks. As with the need to address urgent climate challenges, there is a 'collective cognitive dissonance' that constrains our will to act ambitiously faced with the magnitude of what needs to be done, combined with the immediacy of multi-faceted, ongoing crises.

As the full extent of the twin climate and nature crises becomes more apparent, there is a perverse danger that this self-imposed constraint to act incrementally versus ambitiously becomes ever stronger.

> **Overcoming this collective behavioural impulse to act incrementally on nature and climate — instead of ambitiously and decisively — is the single greatest challenge of our time.**

Our recommendations are game-changing, already in motion, and absolutely achievable.

Our seven main recommendations, individually and together, would make a significant difference to the way in which nature is integrated into, priced, and traded in individual markets and the wider global economy. As a result, this would make a major contribution to our efforts to address climate change, and advance greater equity across many parts of the global economy.

> **Crucially, each and every one of these recommendations builds on what is already happening.**

We have highlighted some of these emergent shifts that we can and must harness. Ranging from the early considerations of climate and broader sustainability issues by the world's central banks and financial regulators through to windows on the workings of soft commodity markets, and convergence in approaches to measure nature.

There is, in short, nothing in the recommendations that is not practical and implementable.

Observing and reporting on progress has its place in catalysing systemic change.

Although our ambitious recommendations are all actionable, the system tendency is to move slowly, avoid conflict, and reduce ambition. A clear danger is that those who should and could act will focus on, and claim victory in securing, lower-hanging fruit, rather than risking visible shortfalls by focusing on more fundamental system wide changes.

> **Ongoing monitoring, measuring and public reporting on what progress is being made can make a difference - market by market, place by place - highlighting the roles of different actors in making this transition possible, or not.**

Whilst many actors will play important roles in observing and commenting on progress, there is an important role to play of an "observatory" that can periodically consolidate an overview of progress set against increasingly ambitious needs. Given the first recommendation to elevate the agenda to the level of the G20, a good place to start would be to establish a "nature economy scorecard" of G20 member countries.

Contributing to change, not the last word.

The Taskforce on Nature Markets was established to advance the potential and mitigate the risks of growing nature markets, with the aim of -nudging their development in pursuit of more equitable, nature positive outcomes.

Its intended contribution to such an ambitious mandate needs to be understood in the broader context of the many other actors seeking to advance aspects of the same agenda, including those focused on specific markets, jurisdictions, and governance instruments as well as others already working on more systemic aspects related to elements of nature or climate. The recommendations need to be understood and acted on in this broader context.

> **The thinking and practice around nature markets, the nature economy and the nature-finance nexus are rapidly evolving. New thinking and novel pathways and approaches will continue to emerge and need to be embraced.**

That said, we hope our recommendations will help form the core pillars of any serious attempt to pivot the global economy towards one that is more equitable and sustainable in its use of, and investment in, nature.

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Taskforce publications

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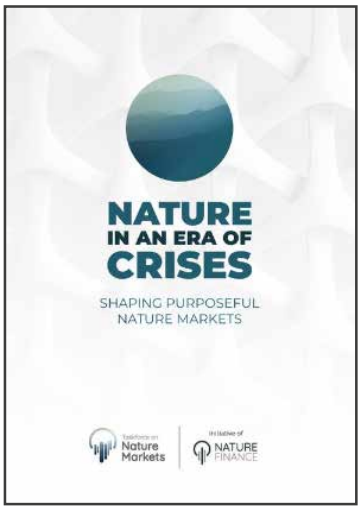

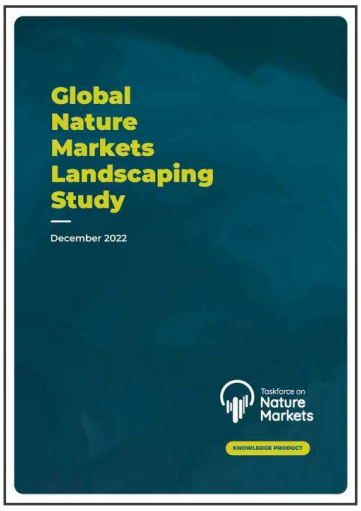

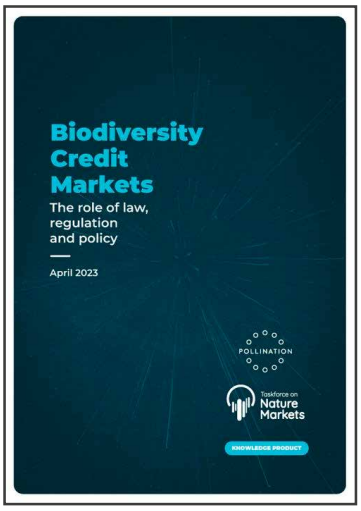

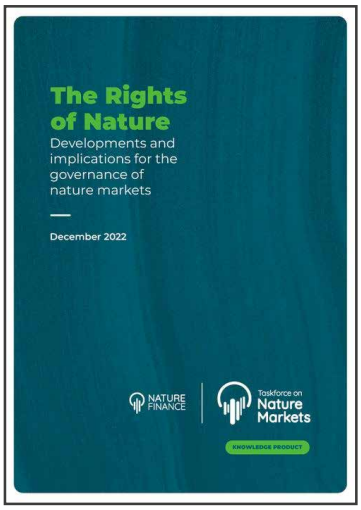

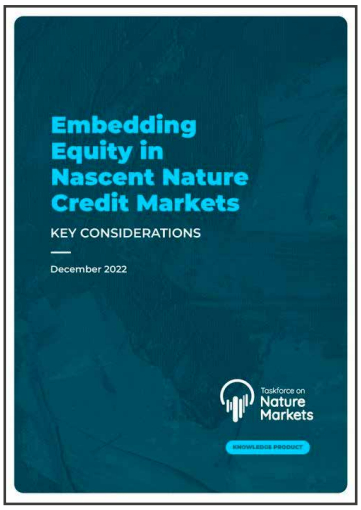

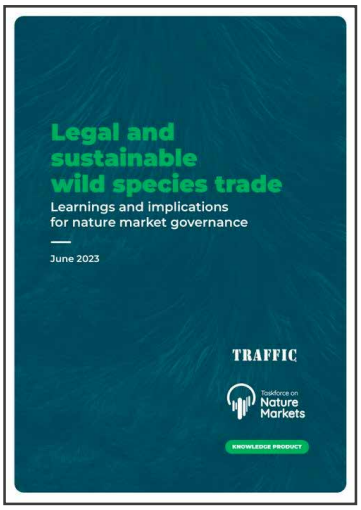

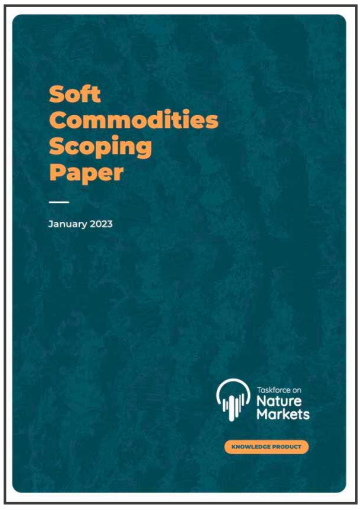

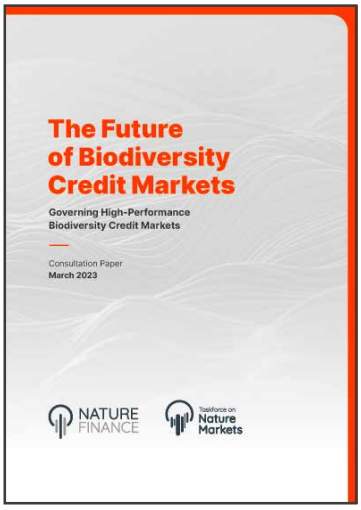

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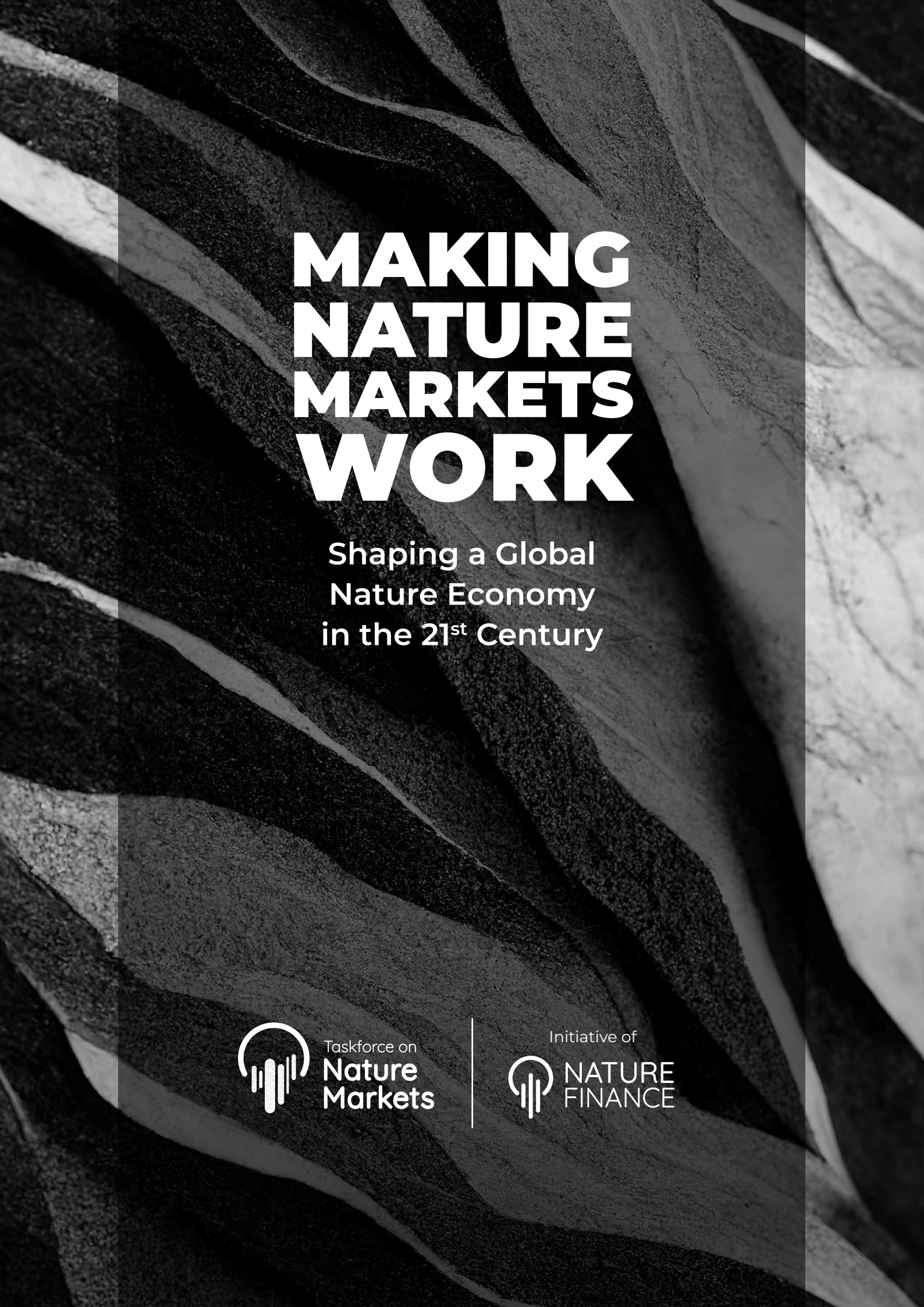

MAKING NATURE MARKETS WORK

Shaping a Global Nature Economy in the 21st Century

Taskforce on Nature Markets

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