# An introduction to the Taskforce for Nature Related Financial Disclosure (TNFD)

10AM 19<sup>th</sup> July 2023

Joint Graduate School of Energy and Environment

King Mongkut's University of Technology Thonburi

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## **The Lecture Series at JSGEE**

### Monday 26th June

- Challenges in the Australian Electricity Market
- Tuesday 27th June
  - Survey of Environmental Finance
- Wednesday 19<sup>th</sup> July (10 AM) ← THIS LECTURE.
  - Introduction to the Taskforce for Nature related Financial Disclosures (TFND)
  - (Rescheduled from Wed 28th June)
- Wednesday 26<sup>th</sup> July (10 AM)
  - Case Studies from biodiversity and other enviro-markets
  - (Rescheduled from Wed 28th June)
- Thursday 29<sup>th</sup> June (AM)
  - Global energy transformation issues, and the IEA reports

## Who am I to be talking about all this?

#### **PREVIOUSLY**

- Australian Financial Markets Association Electricity and **Environmental Products Policy Officer** 
  - Developed a lot of data services and documentation
- Senior Lecturer / Founding Director University of New South Wales Centre for Energy and Environmental Markets
- Director in Macquarie Bank Climate Change team
- CEO of NextGen Brokerage

#### **AND TODAY**

- Visiting Professor JGSEE
- Founder and Director, Aton Consulting
  - https://aton.com.au/who-we-are
  - Currently (among other things) advising NSW Department of Environment and Australian Grains Research Development Corporation
- Co-founder of Skjander Partners
  - Biodiversity and carbon investment management





alting and employed roles including in the Macquarte Bank Climate Change and Utilities team and Macquarte Global Investments 007-13), as a Sentor Research Fellow in the Faculty of Business at UNSW from 2003-2007 (and as a founding director of the UNSW Territory Government (2019-20).

le has a PhD in Energy Economics and Electrical Engineering from the

He has been an investor/Sounder/executive in 4x startups across poor finance, energy trading, blockchain, and agri-tech, and a 1019 he was appointed as a Visiting Professor at the Joint Gradual School of Energy and Environment at King Mongat University in

nent remeditor ESG / Sustainable Finance and Biodiversit





He has a PhD to Economics from the University of Elizate Chicago

Illinois Environmental Protection Agency, the US Department of nog program, the viability of farmers entering in carbon sequestration



Department of Planning and the Environment, advancing the state

New South Wales.

Pactic, including the farming, fisheries and forestry sectors.

Lit has an associatment as an Adjunct Senior Lecturer at South

Liz has received research, communication, and perform from the NSW Government, the University of NSW, the Royal Zoological Society and the Australian Society for Fisheries Biolog





Stuart holds a Bachelor of Commerce (Land Economics) and also hold

develop agricultural investments with environmental dividends



#### **Skiander Partners**



- environment, and real assets.
- Principal Investment Manager for Queensland government in North America facilitating
- Deep connections to Silicon Valley and successful track record of taking growth firms to
- Sydney Law School, University of Sydney, 2010. Columbia University Graduate Private
- FINDA / Securities Exchange licensure Series 7, 24, 53, 6, 66, 63



- · COO of Beyond Meat
- Head of Supply Chain at Wonderful Citrus.
- MBA Rotterdam School of Management, Erasmus University, Netherlands, Bachelor of Modern Languages, The Citadel, USA., Six Sigma Black Belt Certification., fluent in Spanish





agriculture and cleantech/renewable energy sectors.

Consultant with NSW Department of Environment on green finance. Hons. Electrical Engineering, University of Melbourne (1992) PhD (Economics & Electrical

ownership of Archer Capital.

Climate Change business. Deal list of approximately \$2.4B including across Water,

Senior Research Fellow & Founding Director UNSW Centre for Energy & Environmental Markets, and Visiting Professor Joint Graduate School of Energy and Environment, King

CEO of Next Cen Energy/Environmental Brokerage.

Mongut University of Technology Thailand.

Fngineering) University of New South Wales (2007).

- ▲ Botany Group current Commercial Director with responsibility for M&A. special project proprietary brands, and legal.
- Bachelor of Commerce (Economics & Finance) and Bachelor of Laws (First Class onours) - University of Sydney.
- . Emerging COO Program Stanford Graduate School of Business



# What is the Taskforce on Nature-related Financial Disclosures (TNFD)?



(In my opinion) one of the most significant developments in the last decade.

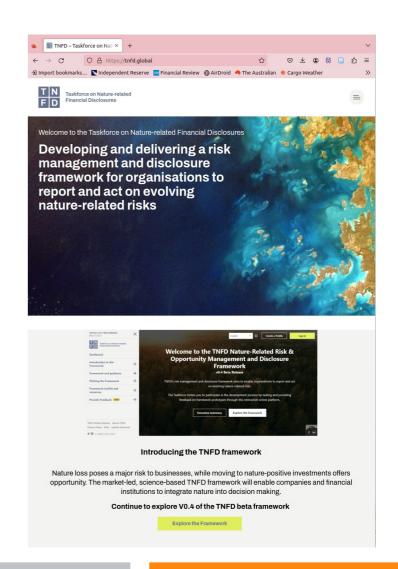
https://tnfd.global/

https://tnfd.global/about/taskforce-members/

At core, it is around developing a consistent risk management framework for asset managers / the finance sector to incorporate nature into decision making.

To give a concrete example, if a fund is investing in a new copper/gold mine what sort of nature related risks (or benefits) should be quantified, reported and considered in investment decision making, asset management, and investor reporting?

(consider the extremely fraught history of the Ok Tedi mine in PNG, and how this might have been pre-emptively managed)



# A quick historical (and extreme) example of the problem ...



Ok Tedi Copper and Gold Mine in PNG

BHP first mined gold in 1981, using a cyanide extraction method.

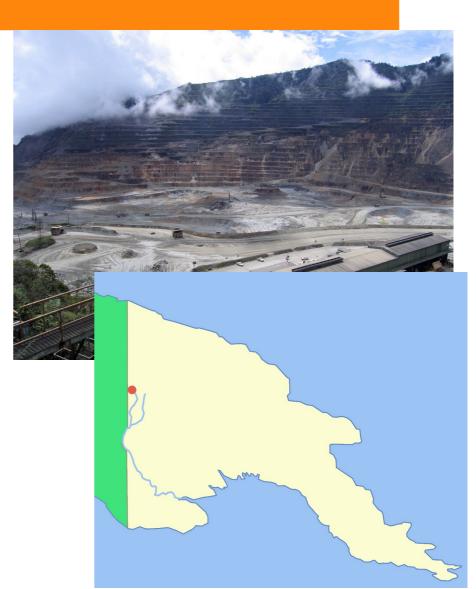
80 million tons of contaminated tailings put into river each year. "widespread" ecological damage.

Became subject to armed insurrection by local inhabitants

2002 BHP transferred ownership to a consortium including PNG Govt.

Legal claims for \$4B in compensation (eventually settled for \$110 M)

PNG Govt nationalised project in 2013





## Who are the TNFD Consortium

The Taskforce consists of 40 individual <u>Taskforce Members</u> representing financial institutions, corporates and market service providers with over US\$20trn in assets. The <u>TNFD Co-Chairs</u>, David Craig and Elizabeth Mrema, lead the Taskforce.

Funding for the TNFD is provided by governments, the UN, and philanthropic foundations, including the governments of Australia, France, Germany, the Netherlands, Norway, Switzerland and the United Kingdom; the Children's Investment Fund Foundation (CIFF), the Global Environment Facility (GEF), the Macdoch Foundation, and the United Nations Development Programme (UNDP).

The TNFD also benefits from pro-bono support offered by Taskforce member organisations, TNFD Forum organisations and governments.

#### **Financial Services**

Johan Florén, AP7, Chief ESG and Communication Officer

Celine Soubranne, AXA, Group Chief Sustainability Officer

Abyd Karmali, Bank of America, Managing Director, ESG Client Advisory

Jessica McDougall, BlackRock, Director, BlackRock Investment Stewardship

Sébastien Soleille, BNP Paribas, Global Head, Energy Transition & Environment

Madeleine Ronguest, FirstRand, Head, Environmental & Social Risk Management

Jose Luis Muñoz, Grupo Financiero Banorte, Executive Director Investor Relations &

Sustainability

Marine de Bazelaire, HSBC, Group Advisor, Natural Capital

Elizabeth O'Leary, Macquarie Group, Head of Agriculture

Makoto Haraguchi, MS&AD Insurance Group, SVP of Sustainability Section

Mathilde Dufour, Mirova, Head, Director of Sustainability Research

Snorre Gjerde, Norges Bank Investment Management, Senior Sustainability Analyst

Hirotaka Hideshima, Norinchukin Bank, Counsellor on Global Strategy to President and the

**Board of Directors** 

Marie-Claire Franzen, Rabobank, Lead Nature

Nora Ernst, Swiss Re, Senior Sustainability Risk Manager

Judson Berkey, UBS, Managing Director, Group Head: Engagement & Regulatory Strategy

#### Corporates

https://tnfd.global/about/ taskforce-members-full-list/ Andre Fourie, AB InBev, Global Director: Water Sustainability

David Álvarez Canales, Acciona, Sustainability Performance Manager

Ian Hudson, Anglo American, Head of Environment

Natasha Santos, Bayer AG, Vice President Stakeholder Affairs & Strategic Partnership

Michel HR Santos, Bunge Ltd, Senior Director – Global Sustainability

Carrie Houtman, Dow INC, Global Sustainability Director for Climate

Santiago Martínez Ochoa, Ecopetrol, Sustainability & Decarbonization Manager

Sarah Dyson, GSK, Head of Corporate Responsibility

Renete Kaarvik, Grieg Seafood, Global Finance Officer

Renata Pollini, Holcim, Head of Nature

Alexandre Capelli, LVMH, LVMH Group Environment Deputy Director

Marcelo Behar, Natura & Co, VP Sustainability and Group Affairs

Alison Bewick, Nestlé, Head of Group Risk Management

David Croft, Reckitt, Group Head of Sustainability

Marcelo Pereira, Suzano, Environmental Manager

Patrick Ho, Swire Properties Ltd, Deputy Head, Sustainable Development

Koushik Chatterjee, Tata Steel, Executive Director & Chief Financial Officer





## **TNFD** development and timelines

March 2023 - TNFD Consortium has released 0.4 version of the framework

Various pilot applications of the framework are underway/have been completed

**Targeting Version 1 release in September 2023** 

Related to (but also parallel with) the development of Natural Capital Accounting

TNFD relies upon to having standards and tools underneath

- IFRS International Financial Reporting Standards
- GAAP Generally Accepted Accounting Principles



## More on accounting standards



https://www.ifrs.org/

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Home > News > International Sustainability Standards Board to issue IFRS S1 and IFRS S2

22 June 2023

## International Sustainability Standards Board to issue IFRS S1 and IFRS S2

The International Sustainability Standards Board will issue IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures on 26 June 2023.

When the Standards are issued on Monday, all users with a free ifrs.org account will be able to access the documents from the new IFRS Sustainability Standards Navigator and from the project pages.

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## IFRS is supported by standards setting board ISSB



### International Sustainability Standards Board

RESOURCES **MEMBERS** MEETINGS ABOUT

New standards released 26 June 2023 on reporting of climate / carbon and biodiversity assets.

#### About the International Sustainability Standards Board

The Trustees of the IFRS Foundation announced the formation of the International Sustainability Standards Board (ISSB) on 3 November 2021 at COP26 in Glasgow, following strong market demand for its establishment. The ISSB is developing—in the public interest—standards that will result in a highquality, comprehensive global baseline of sustainability disclosures focused on the needs of investors and the financial markets.

Sustainability factors are becoming a mainstream part of investment decision-making. There are increasing calls for companies to provide high-quality, globally comparable information on sustainabilityrelated risks and opportunities, as indicated by feedback from many consultations with market participants.

There is also a strong desire to address a fragmented landscape of voluntary, sustainability-related standards and requirements that add cost, complexity and risk to both companies and investors.

The ISSB has international support with its work to develop sustainability disclosure standards backed by the G7, the G20, the International Organization of Securities Commissions (IOSCO), the Financial Stability Board, African Finance Ministers and Finance Ministers and Central Bank Governors from more than 40 jurisdictions.

Rela

IFRS S1 General Requirements for Disclosure prior of Sustainability-related Financial Information and,

IFRS S2 Climate-related Disclosures

Clima

Cons

Co

https://www.ifrs.org/groups/international-sustainability-standards-board/



## What TNFD says about itself

What they say ....

The TNFD is a global, market-led initiative with the mission to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks and opportunities, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

the TNFD risk management and disclosure framework should be applicable to, and used by, business and financial institutions of different sizes, across sectors and jurisdictions, irrespective of their preferred or required approach to materiality

What I noted....

Explicitly intended to alter financial flows.

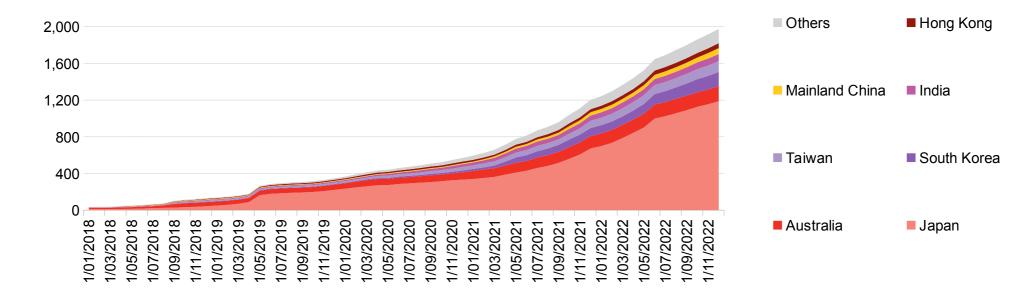
Risk management focus

Flexible overall framework can be used at different scales



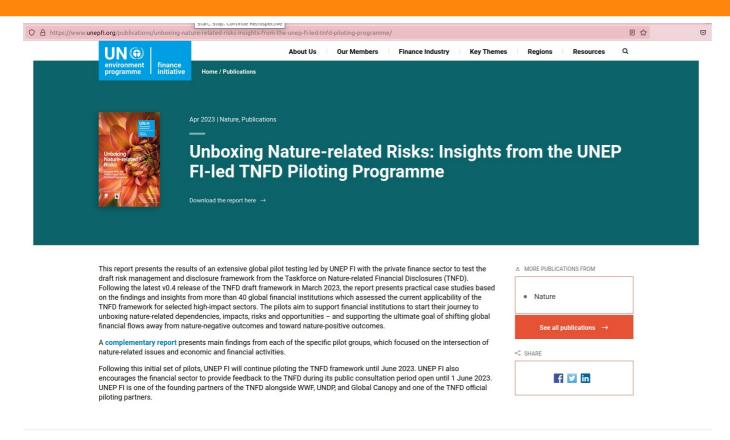
## Takeup of TNCD. BNEF

#### Companies





# Pilots were conducted in 2022 and the reports released in 2023

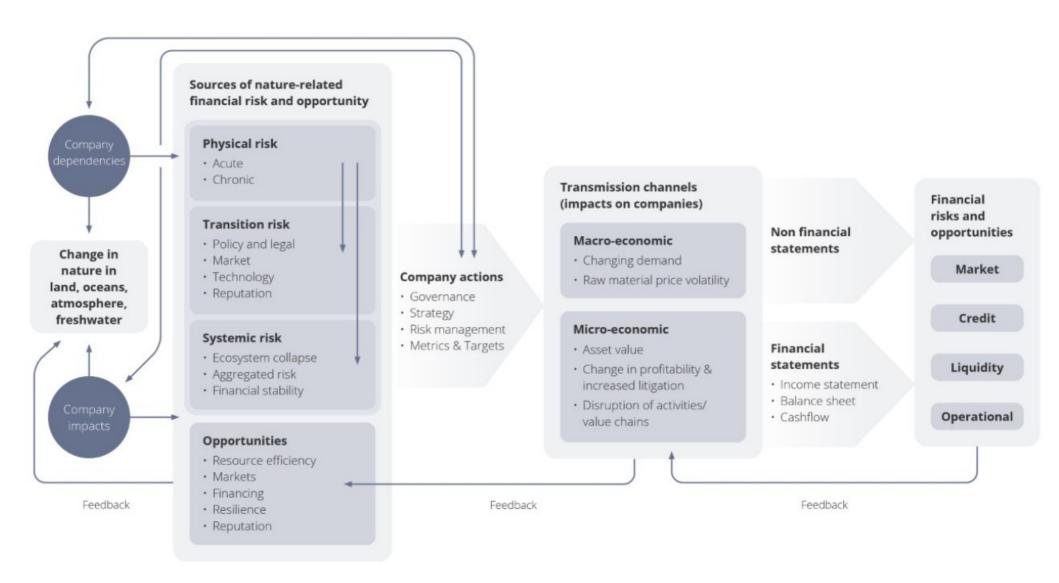


And a list of other pilots

https://framework.tnfd.global/piloting-the-framework/



Figure: Financial risks and opportunities emerging from nature loss





## LEAP

NEW

## Introduction to the TNFD nature-related risk and opportunity assessment approach: LEAP

Since the launch of the TNFD, market participants have indicated that simple, accessible guidance on how to understand and respond to nature-related risks and opportunities would be a welcome complement to a set of disclosure recommendations. In response, the TNFD has developed an integrated assessment process for nature-related risk and opportunity management called LEAP.

- Locate your interface with nature;
- Evaluate your dependencies and impacts;
- Assess your risks and opportunities; and
- Prepare to respond to nature-related risks and opportunities and report.

The LEAP approach is voluntary guidance intended to support internal, nature-related risk and opportunity assessments within corporates and financial institutions. LEAP is not a mandated process to adhere to the disclosure recommendations put forward by the TNFD. As such, not everything that is identified, assessed and evaluated using the LEAP approach is recommended by the TNFD to be disclosed.

Intention is that financial institutions will seek disclosures in this framework from their clients. (Which then flows up into the FI's own framework analysis)

In effect the entire supply chain ends up covered.



## Some examples from the Framework

#### TNFD Nature-related Disclosure Recommendations (v0.4)

Disclose the organisation's
governance around
nature-related
dependencies, impacts, risks
and opportunities.

Governance

#### Strategy

Disclose the actual and potential impacts of nature-related dependencies, impacts, risks and opportunitiess on the organisation's businesses, strategy and financial planning where such information is material.

#### Risk & Impact Management

Disclose how the organisation identifies, assesses and manages nature-related dependencies, impacts, risks and opportunities.

#### Metrics & Targets

Disclose the metrics and targets used to assess and manage relevant nature-related dependencies, impacts, risks and opportunities where such information is material.

#### Recommended Disclosures

 A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.

 B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.

#### Recommended Disclosures

A. Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium, and long term.

B. Describe the effect nature-related risks and opportunities have had and may have on the organisation's businesses, strategy, and financial planning.

C. Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.

D. Disclose the locations where there are assets and/or activities in the organisation's direct operations, and upstream and/or downstream and/or financed where relevant, that are in priority areas.

#### Recommended Disclosures

A. (i) Describe the organisation's processes for identifying and assessing nature-related dependencies, impacts, risks and opportunities in its direct operations.

A. (ii) Describe the organisation's approach to identifying nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s) and financed activities and assets.

B. Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities and actions taken in light of these processes.

C. Describe how processes for identifying, assessing and managing nature-related risks are integrated into the organisation's overall risk management.

D. Describe how affected stakeholders are engaged by the organisation in its assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.

#### Recommended Disclosures

A. Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.

B. Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.

C. Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.

D. Disclose the locations where there are assets and/or activities in the organisation's direct operations, and upstream and/or downstream and/or financed, where relevant, that are in:

- · High integrity ecosystems; and/or
- · Areas of rapid decline in ecosystem integrity; and/or
- · Areas of high biodiversity importance; and/or
- Areas of water stress; and/or
- Areas where the organisation is likely to have significant potential dependencies and/or impacts.



## **Processes and metrics**

Some of the disclosures recommended come to the governance processes.

Others involve use of metrics.

- Preparing metrics requires data and processing/analysis of data.
- There is a very wide range of possible data and tools that might be used, and they are providing a catalogue to assist with selection.

#### **Data Catalyst:**

https://tnfd.global/consultation-and-engagement/data-catalyst/

**Tools and Platforms** 

https://framework.tnfd.global/tools-platforms/



## TNFD "LEAP" approach

- Locate your interface with nature;
- <u>Evaluate</u> your dependencies and impacts;
- Assess your risks and opportunities; and
- Prepare to respond to nature-related risks and opportunities and report.

https://framework.tnfd.global/leap-the-risk-and-opportunity-assessment-approach/

There are separate guidance documents for corporates and for financial institutions.



## Impacts on valuations.

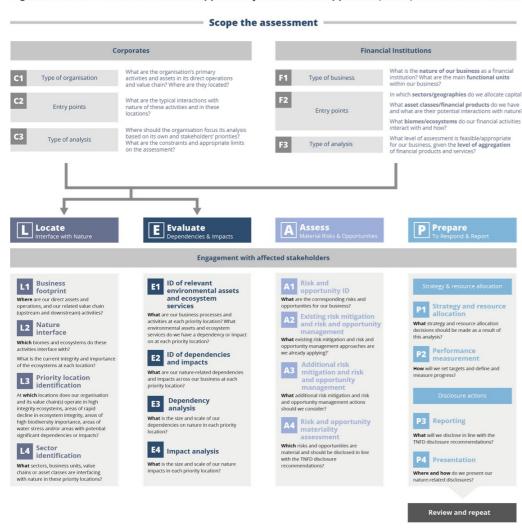
## A double materiality test:

- How might your activities impact nature?
- How might nature impact you?



## **Applying LEAP....**

Figure: The TNFD's revised risk and opportunity assessment approach (LEAP) in v0.4 of the beta framework



The LEAP approach is voluntary guidance intended to support internal, nature-related risk and opportunity assessments within corporates and financial institutions. LEAP is not a mandated process to adhere to the disclosure recommendations put forward by the TNFD. As such, not everything that is identified, assessed and evaluated using the LEAP approach is recommended by the TNFD to be disclosed.

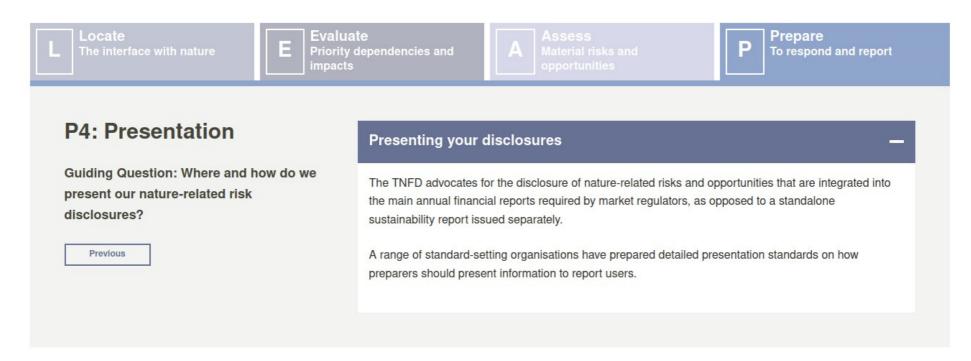


## Lets take a look at some of the tools...

https://framework.tnfd.global/leap-the-risk-andopportunity-assessment-approach/scoping/



## So what happens with the outputs ??



Well, where the results are presented depends on who needs them and why....

## Just a reminder about accounting standards....





https://www.ifrs.org/

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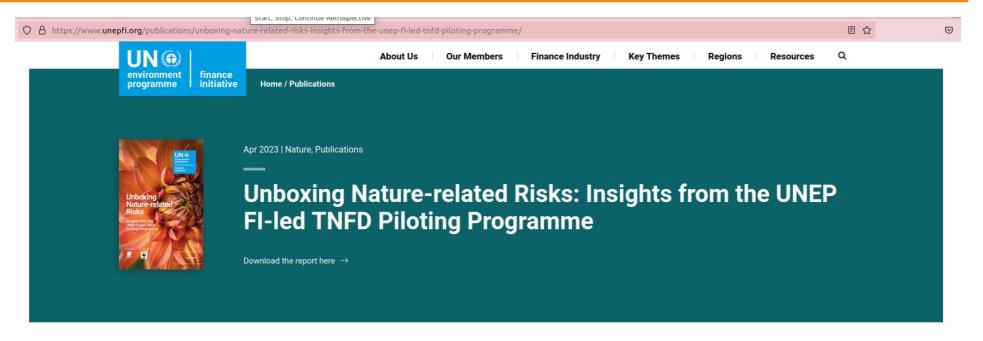
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This report presents the results of an extensive global pilot testing led by UNEP FI with the private finance sector to test the draft risk management and disclosure framework from the Taskforce on Nature-related Financial Disclosures (TNFD). Following the latest v0.4 release of the TNFD draft framework in March 2023, the report presents practical case studies based on the findings and insights from more than 40 global financial institutions which assessed the current applicability of the TNFD framework for selected high-impact sectors. The pilots aim to support financial institutions to start their journey to unboxing nature-related dependencies, impacts, risks and opportunities – and supporting the ultimate goal of shifting global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

A complementary report presents main findings from each of the specific pilot groups, which focused on the intersection of nature-related issues and economic and financial activities.

Following this initial set of pilots, UNEP FI will continue piloting the TNFD framework until June 2023. UNEP FI also encourages the financial sector to provide feedback to the TNFD during its public consultation period open until 1 June 2023. UNEP FI is one of the founding partners of the TNFD alongside WWF, UNDP, and Global Canopy and one of the TNFD official piloting partners.

•	Nature
	See all publications $\rightarrow$
SI	HARE

# Some of the key issues arising from the pilot studies...



- Data availability
- Tool availability
- Extent to which government or accounting standards etc mandate/approve particular tools or datasets.
  - Note DECCWA and the Data Agency
  - Accounting standards are increasingly moving into the space

## What sort of thing will be happening from here?



- Modification of internal credit analysis and pricing tools
  - Offering of discounted loans, insurance
  - (Already common in Australia for certain sorts of Agri loans)
- Data being collected as part of accounting packages
- Data being collected through a wide range of other tools
- Used as part of investment screening by funds (not just ESG funds, but more broadly)
- Used by policy makers, regulators and financial institutions more broadly

Bas Ruter, global head of the food system transition at Rabobank Food & Agribusiness, said it was "totally clear" that central bank nature-related stress testing was going to come "fast". TNFD is collaborating with the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) on the development of nature-related scenario analysis.

https://www.environmental-finance.com/content/news/tnfd-publishes-pilot-nature-scenario-narratives.html