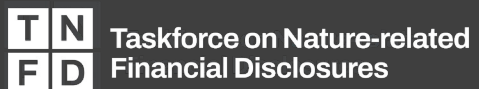


# CEOS SIT-29

## TNFD Data Initiatives

Cathrine Armour,  
Director Data Initiatives  
April 2024



# Agenda

**Introduction and background**



**TNFD Recommendations including approach**



**Kunming-Montreal Global Biodiversity Framework**



**TNFD Data Initiatives**



**The recommended disclosures**



**The approach to measurement – metrics and targets**



**Closing Remarks**

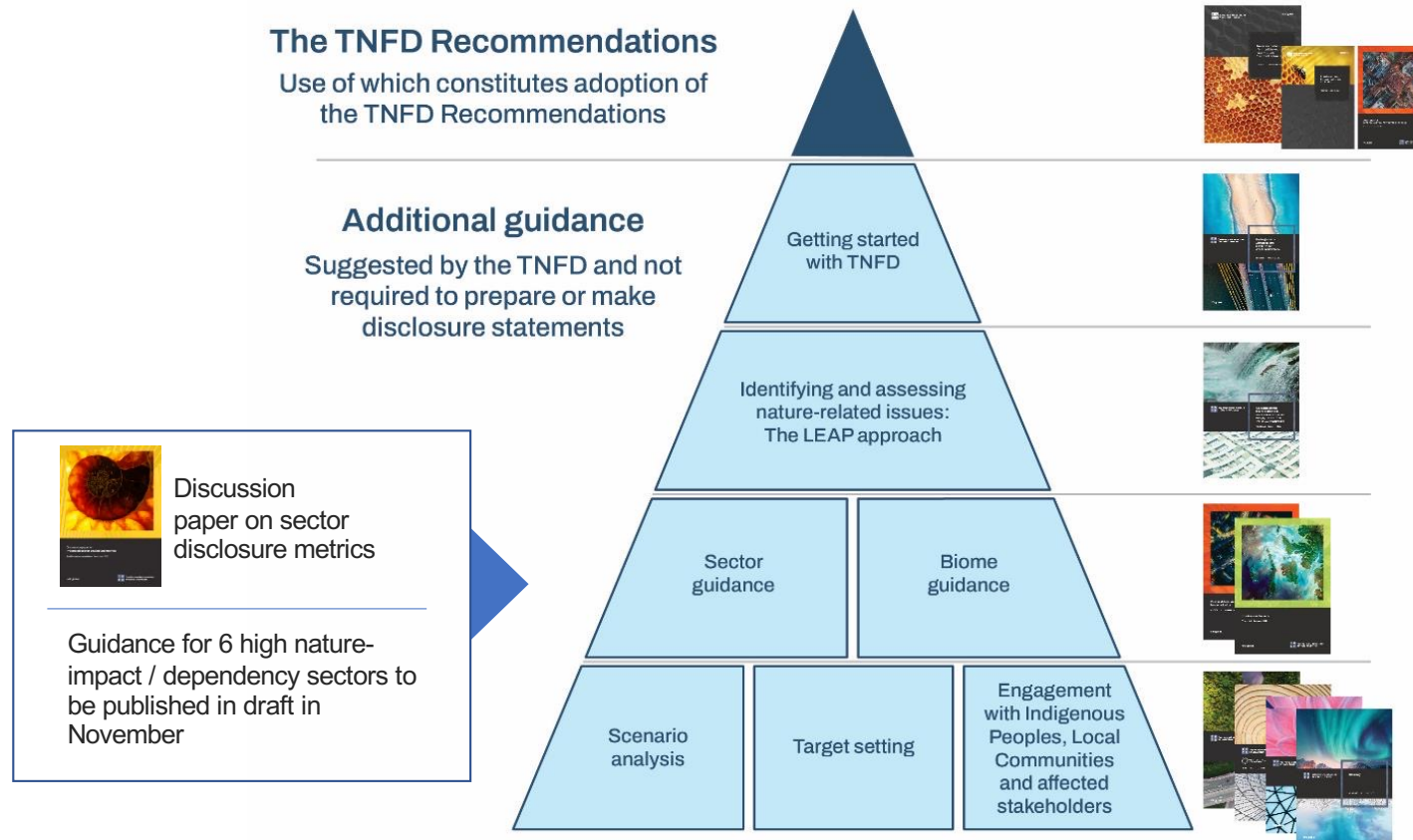


# Introduction and background

The TNFD aims to enable organisations, companies and financial institutions and broader Taskforce for Nature-related Financial Disclosures (TNFD) stakeholders to effectively manage the dependencies and impacts of nature related risks and opportunities through a portfolio of data-centric initiatives that align with and support the adoption and active use of the TNFD Framework.

- The TNFD recommendations enable businesses and financial institutions to identify, assess, disclose/report and act on their nature-related risks, impacts, dependencies, and opportunities, with the ultimate-aim of supporting the realignment of global financial flows towards nature positive outcomes.
- Access to reliable, verified, nature-related data that is fit for purpose and able to be made available on a global scale hinders the adoption and effectiveness of the Framework.
- The portfolio of TNFD-led data initiatives will seek to facilitate access and availability of data, and associated tools and support on which to base analysis, gain insights and integrate the TNFD Framework into active decision-taking.

# TNFD Recommendations and supporting publications



**The TNFD Recommendations**  
Use of which constitutes adoption of the TNFD Recommendations

**Additional guidance**  
Suggested by the TNFD and not required to prepare or make disclosure statements

Getting started with TNFD

Identifying and assessing nature-related issues:  
The LEAP approach

Sector guidance

Biome guidance

Scenario analysis

Target setting

Engagement with Indigenous Peoples, Local Communities and affected stakeholders



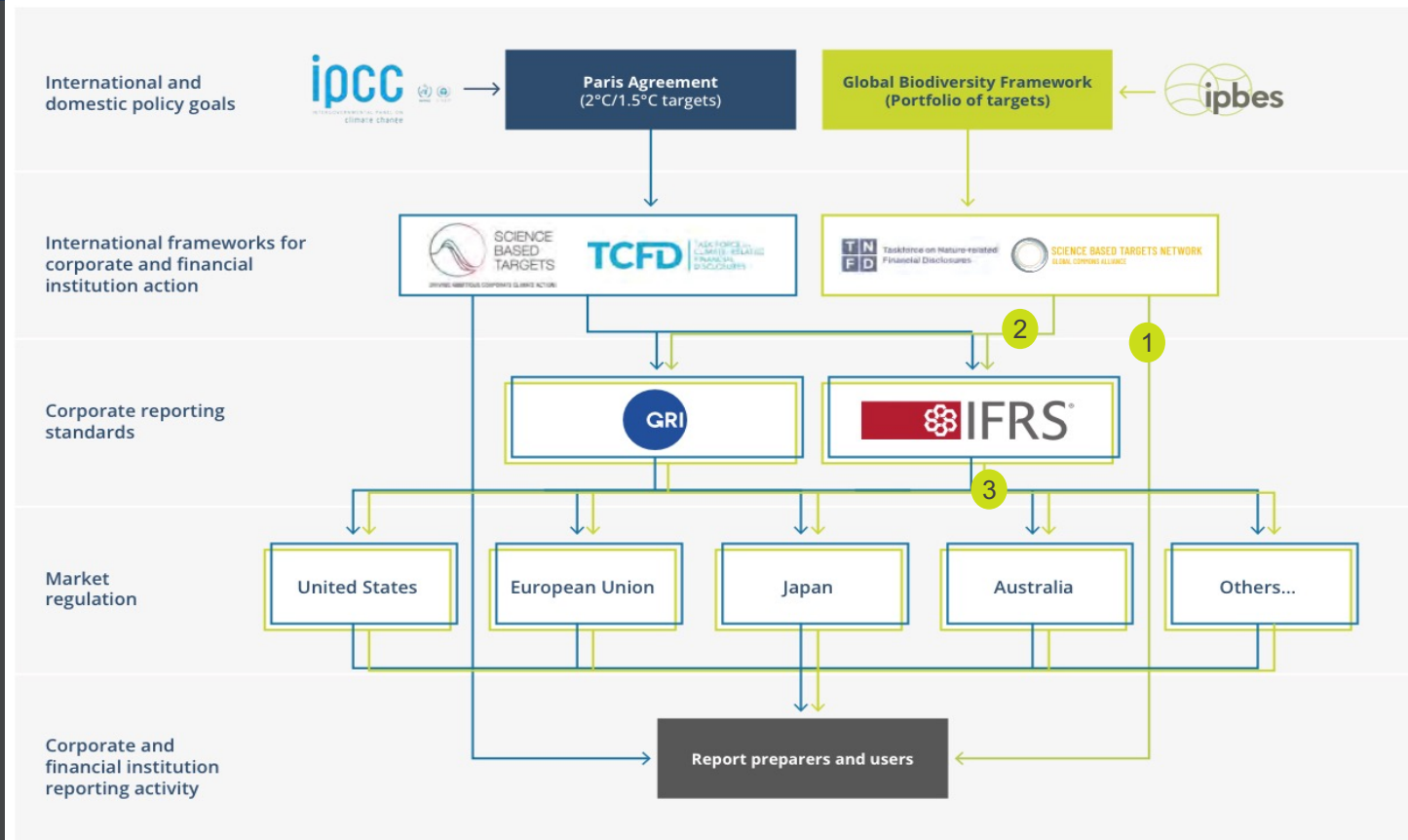
Discussion paper on sector disclosure metrics

Guidance for 6 high nature-impact / dependency sectors to be published in draft in November

# Emerging standards and regulation coming into place

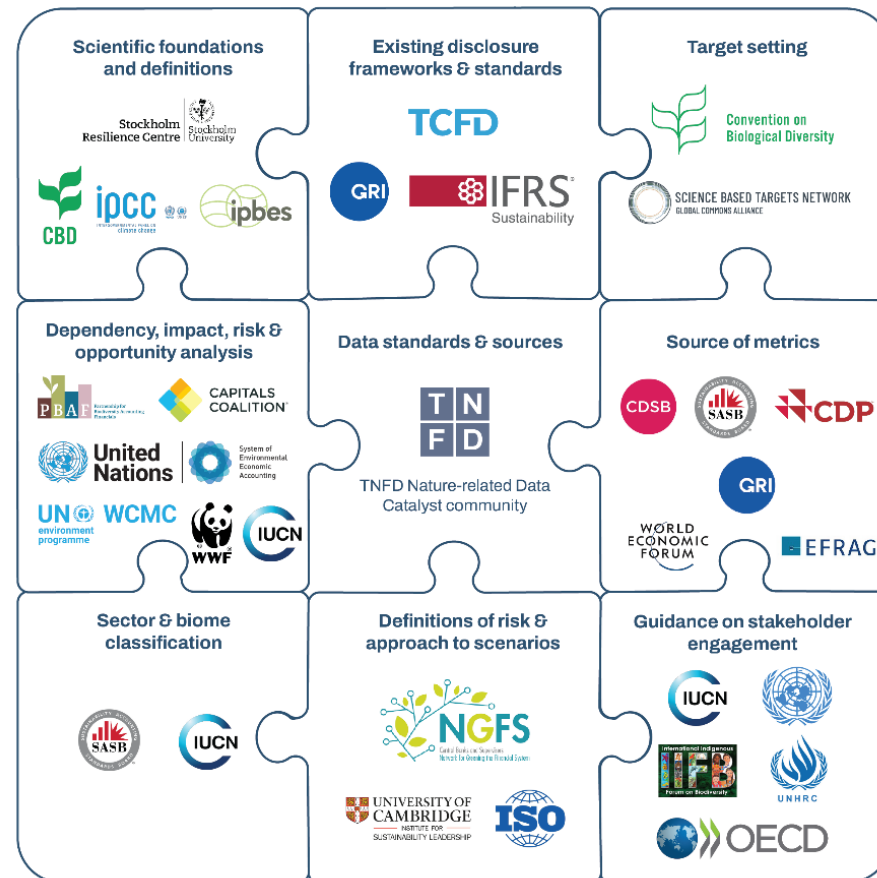
## Pathways to adoption

- 1 Companies start adopting on a voluntary basis while nature-disclosure standards develop further
- 2 TNFD recommendations inform further standards development
- 3 TNFD recommendations inform regulatory developments

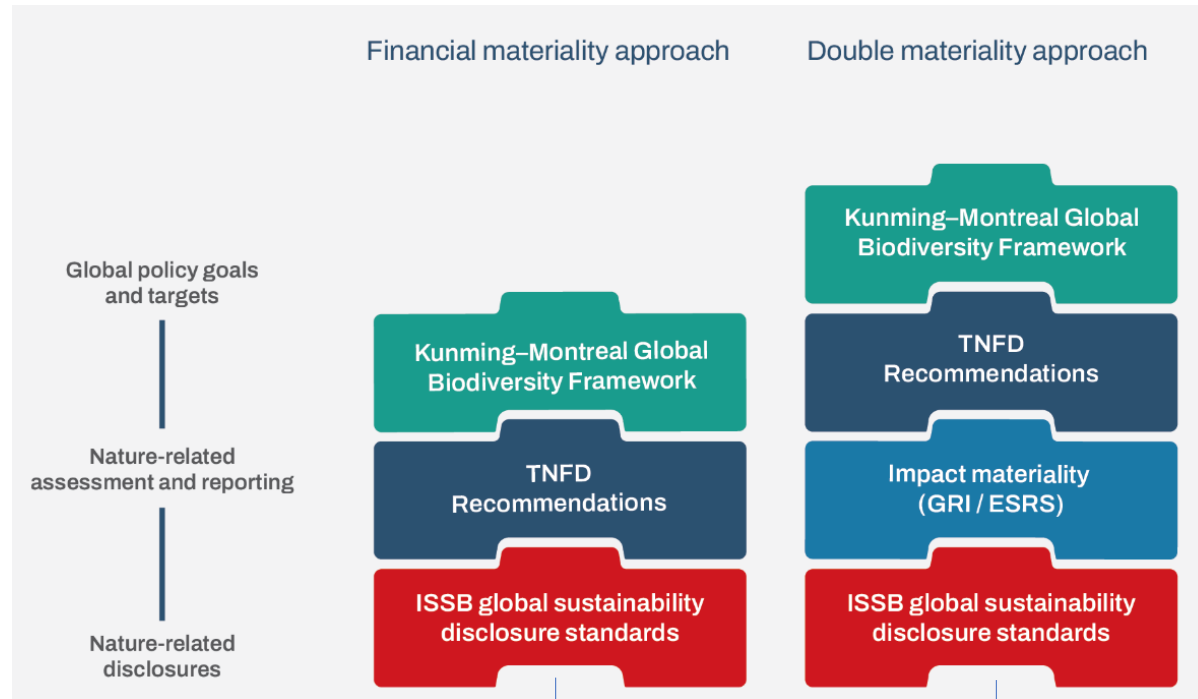
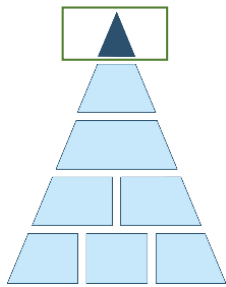


## Our Approach: Building on existing frameworks, tools and metrics

The Taskforce would like to thank its 19 core knowledge partner organisations and the many other individual experts and organisations that have contributed their expertise to support the development of the TNFD's recommendations and guidance.



# Enabling the materiality needs of report preparers

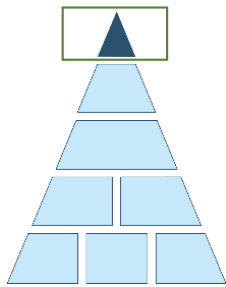


Meeting the material information needs of capital providers consistent with the ISSB's IFRS Standards and the TCFD recommendations, with a focus on risk management and how dependencies and impacts on nature create risks and opportunities for an organisation's financial position and prospects.

Meeting the material information needs of stakeholders focused on impacts, aligned with a broader materiality approach, reporting against both the ISSB and the GRI standards.



# 14 recommended disclosures aligned to TCFD & ISSB



## TNFD recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.

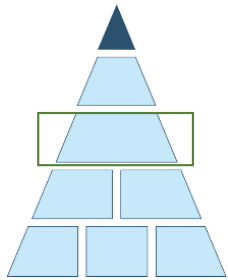
Recommended disclosures	Recommended disclosures	Recommended disclosures	Recommended disclosures
<ul style="list-style-type: none"> <li><b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</li> <li><b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</li> <li><b>C.</b> Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</li> </ul>	<ul style="list-style-type: none"> <li><b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</li> <li><b>B.</b> Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</li> <li><b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</li> <li><b>D.</b> Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</li> </ul>	<ul style="list-style-type: none"> <li><b>A(i)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</li> <li><b>A(ii)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</li> <li><b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</li> <li><b>C.</b> Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</li> </ul>	<ul style="list-style-type: none"> <li><b>A.</b> 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.</li> <li><b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</li> <li><b>C.</b> Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</li> </ul>

## Highlights

- All 11 TCFD recommended disclosures carried over
- Three further disclosures added, covering important areas for nature:
  - Engagement
  - Sensitive locations
  - Value chains
- Language of disclosures and guidance aligned to TCFD and IFRS S1 & S2



# A 'how to' assessment approach – the LEAP approach



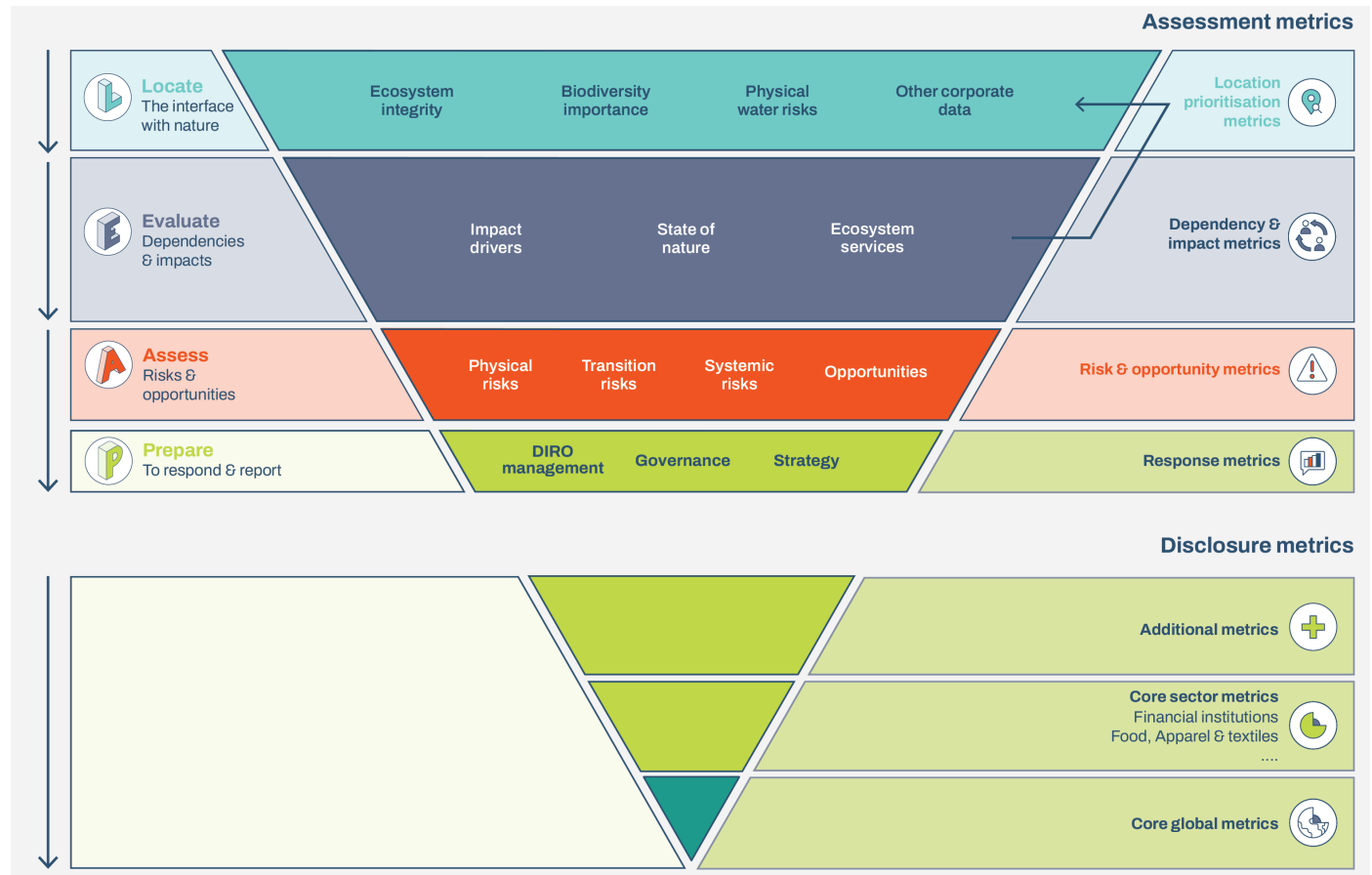
## Highlights

- Suggested guidance – not required to make TNFD disclosures
- Extensive market feedback and pilot tested by over 240 institutions across sectors, geographies and biomes
- Designed as a reference manual for an internal assessment team to inform management and board decision making

# A metrics architecture for nature-related issues

## Highlights

- No GHG Protocol equivalent for nature
- Market user concerns about metrics in use today – time lags, consistency and comparability
- Adopted a 'Leading indicators' approach
- Extensive input from knowledge partners and market participants



# Agenda

**Introduction and background**



**TNFD Recommendations including approach**



**Kunming-Montreal Global Biodiversity Framework**



**TNFD Data Initiatives**



**The recommended disclosures**



**The approach to measurement – metrics and targets**



**Closing Remarks**



# COP15 UN Convention on Biological Diversity

COP15 UN Convention on Biological Diversity (December 2022) saw the adoption of a new set of international goals for biodiversity called the **Kunming-Montreal Global Biodiversity Framework (GBF)**. A total of 188 governments agreed to the GBF and committed to address the ongoing loss of terrestrial and marine biodiversity.

The role of CEOS and member Agencies is critical in achieving the commitments made at COP15 under the overarching commitment to a Global Biodiversity Framework (GBF).

Specifically, as relevant to TNFD:

[TARGET 15: Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts](#)

[TARGET 19: Mobilize \\$200 Billion per Year for Biodiversity From all Sources, Including \\$30 Billion Through International Finance](#)

[TARGET 21: Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action](#)

# TNFD Phase 1: [Global nature-related data study](#)

Recognizing that a lot of nature-related data already exists because of the efforts of a wide range of national and international institutions, conservation organisations and businesses in highly regulated sectors over many years, in our view, a global nature-related public data facility can deliver the most added value by:

- Connecting existing but disparate nature data sets to a shared point of access to enhance accessibility for all data users;
- Improving the consistency of that data by supporting the creation of, and promoting, a set of common global state of nature data methodologies and standards;
- **Working with existing organisations and supporting national capabilities to address data gaps that are aligned with those methodologies and standards;** and
- Enhancing data access and encouraging the development of public and private sector analytics that would sit on top of the foundational data stack to enable more robust, repeatable and transparent assessment and decision-making by data users.

# Overview TNFD data initiatives

A portfolio of activity to address the need for Nature-related data, analysis and insights

## Nature-related Public Data Utility (input)

Addressing the shared need for State of Nature data and establishing a focal point for collating and connecting data that already exists across disparate sources and networks.

- enhancing accessibility for all data users;
- supporting the creation of, and promoting, a set of common global state of nature data methodologies and standards;
- working with existing organisations and supporting national capabilities to address data gaps; and
- enhancing data access and encouraging the development of public and private sector analytics to enable more robust, repeatable and transparent assessment and decision-making by data users.

## Nature-related Data Catalyst

A community of expert knowledge holders, providers, users and facilitators to engage with and share practice on the access and use of nature-related data and analytics.

## Nature-related Tools Catalogue

An enhanced catalogue and directory providing data users with signposts and links to recommended nature-related tools and datasets to help assess nature-related issues and aligned with the TNFD's LEAP approach. Structured to enable discovery by relevant use case criteria and thematic and/or sector area of interest.

## Nature Data Labs

Connecting, accelerating, problem-solving and supporting the development of data-centric tools, products and services to address the State of Nature.

## Demonstrator: Supply Chain Passport (output)

Meeting the need for standardised, verifiable, compiled value chain data from suppliers. Providing interoperable data across the supply chain based on the TNFD Framework.



# TNFD Nature-related Public Data Utility

## **A distributed access public data facility:**

A global entry point to a federated/decentralised data exchange that connects nature related data products and services provided by contributing organisations, both public and private, whose data sets meet the defined 'data principles' - certain methodological and quality standards, providing a 'single source of truth' on nature-related data.

## **Aims**

Facilitate public and broad access to high-quality, robust nature-related data, with the participation of a wide range of public and private data providers as contributors;

Align the methodologies and data needs of the latest guidance for nature-related assessments, including those now being developed and deployed by the TNFD, by the SBTN; and

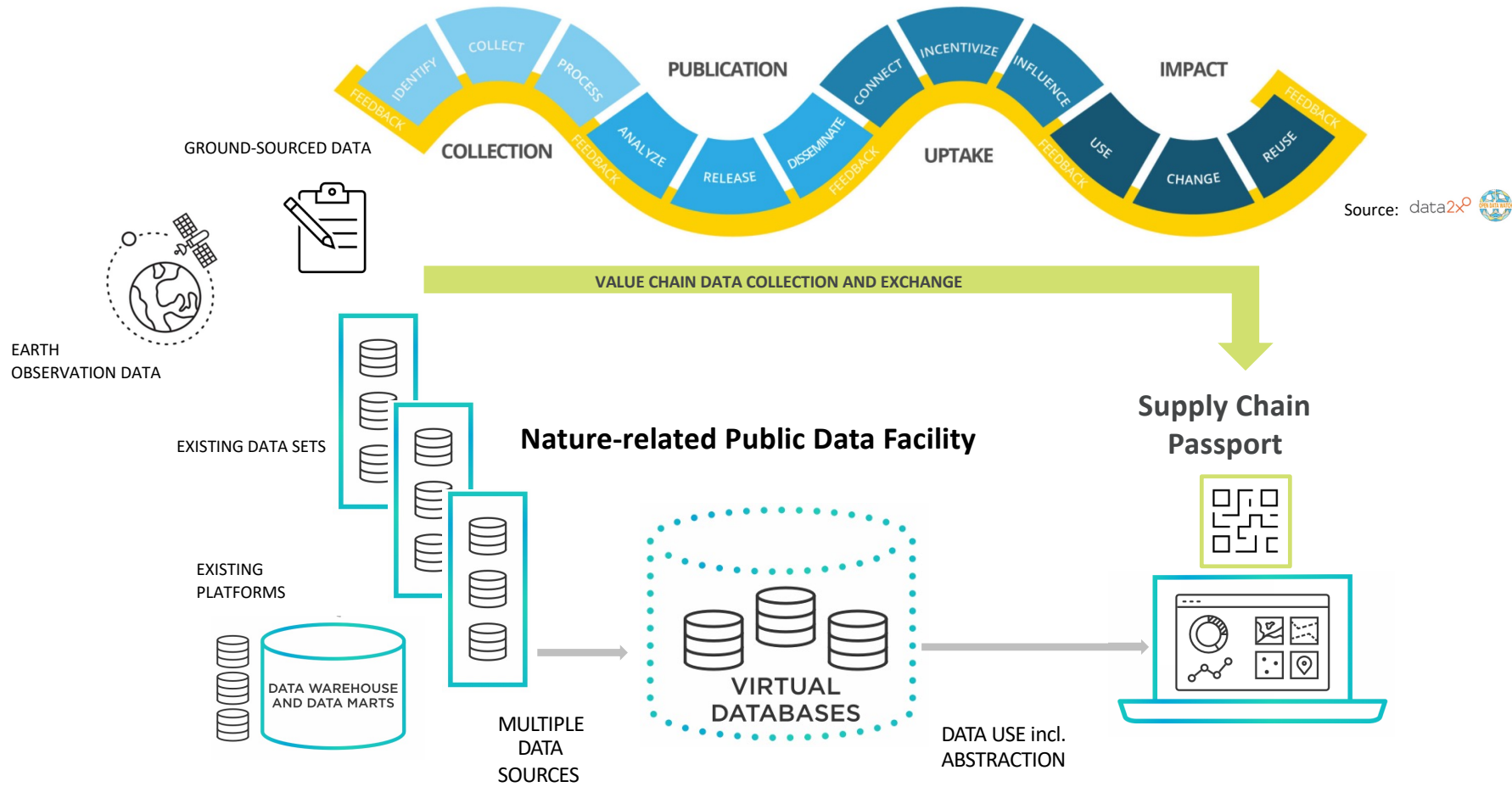
Support the rapid acceleration of further data generation aligned with an agreed set of common global standards for state of nature data collection.

Maintain data sovereignty by leaving data ownership and responsibility in the hands of data and product owners, including national governments and other local stakeholders, which a centralised database would not;

Be scalable and expandable over time as it does not rely on a central data model and can grow as data sets are enhanced and operational costs can be spread as use cases are extended; and

Most effectively provide the foundation for the development and delivery of more advanced data, insights and analytics capabilities that would enhance the foundational open access data stack provided by the facility.

### Nature-related DATA VALUE CHAIN model



# Agenda

**Introduction and background**



**TNFD Recommendations including approach**



**Kunming-Montreal Global Biodiversity Framework**



**TNFD Data Initiatives**



**The recommended disclosures**



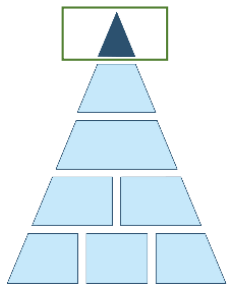
**The approach to measurement – metrics and targets**



**Closing Remarks**



## Approach: Aligned to GBF Target 15 requirement



### Global Biodiversity Framework Target 15

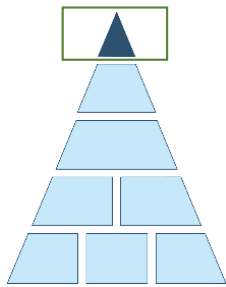
“Encourage and enable business [to]... regularly monitor, assess and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios.”



### Highlights

- Adopted in December 2022 with the support of almost 200 countries
- Goals and targets for halting and reversing nature loss by 2030
- Calls for governments to introduce requirements to enable assessment and disclosure of risks, dependencies & impacts
- Risks, dependencies and impacts all covered by the TNFD recommendations

# The recommended disclosures: Summary



## TNFD recommended disclosures

### Governance

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

#### 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.

**C.** Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.

### Strategy

Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.

#### 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 dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.

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

**D.** Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.

### Risk & impact management

Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

#### Recommended disclosures

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

**A(ii)** Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).

**B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.

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

### Metrics & targets

Disclose the metrics and targets used to assess and manage material 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.

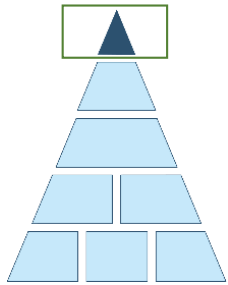
**B.** Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.

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

## Highlights

- 14 recommended disclosures
- Same structure, language and approach as TCFD
- Organised around four pillars:
  - Governance
  - Strategy
  - Risk and Impact Management
  - Metrics and Targets

# The recommended disclosures: Alignment with TCFD



## TNFD recommended disclosures

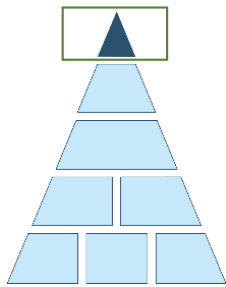
Governance	Strategy	Risk & impact management	Metrics & targets
<p>Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <ul style="list-style-type: none"> <li><b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</li> <li><b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</li> <li><b>C.</b> Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</li> </ul>	<p>Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.</p> <p><b>Recommended disclosures</b></p> <ul style="list-style-type: none"> <li><b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</li> <li><b>B.</b> Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</li> <li><b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</li> <li><b>D.</b> Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</li> </ul>	<p>Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <ul style="list-style-type: none"> <li><b>A(i)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</li> <li><b>A(ii)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</li> <li><b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</li> <li><b>C.</b> Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</li> </ul>	<p>Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <ul style="list-style-type: none"> <li><b>A.</b> 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.</li> <li><b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</li> <li><b>C.</b> Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</li> </ul>

## Highlights

- All 11 TCFD recommended disclosures carried-over to:
  - Build on existing market practice
  - Encourage integrated (climate+nature) reporting



# The recommended disclosures: New recommended disclosures



## TNFD recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.

- | Recommended disclosures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Recommended disclosures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Recommended disclosures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Recommended disclosures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li><b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</li> <li><b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</li> <li><b>C.</b> Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</li> </ul> | <ul style="list-style-type: none"> <li><b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</li> <li><b>B.</b> Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</li> <li><b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</li> <li><b>D.</b> Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</li> </ul> | <ul style="list-style-type: none"> <li><b>A(i)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</li> <li><b>A(ii)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</li> <li><b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</li> <li><b>C.</b> Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</li> </ul> | <ul style="list-style-type: none"> <li><b>A.</b> 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.</li> <li><b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</li> <li><b>C.</b> Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</li> </ul> |

### Highlights

- All 11 TCFD recommended disclosures carried over
- Three further disclosures added, covering three important areas for nature:
  - Engagement
  - Sensitive locations
  - Value chains

# The recommended disclosures: The engagement disclosure

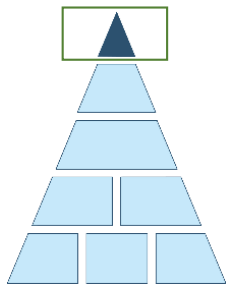


## TNFD recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
<p>Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</p> <p><b>C.</b> Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</p>	<p>Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</p> <p><b>B.</b> Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</p> <p><b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</p> <p><b>D.</b> Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</p>	<p>Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A(i)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</p> <p><b>A(ii)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</p> <p><b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</p> <p><b>C.</b> Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</p>	<p>Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> 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.</p> <p><b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</p> <p><b>C.</b> Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</p>

“Describe the organisation’s human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation’s assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.”

# The recommended disclosures: The priority locations disclosure

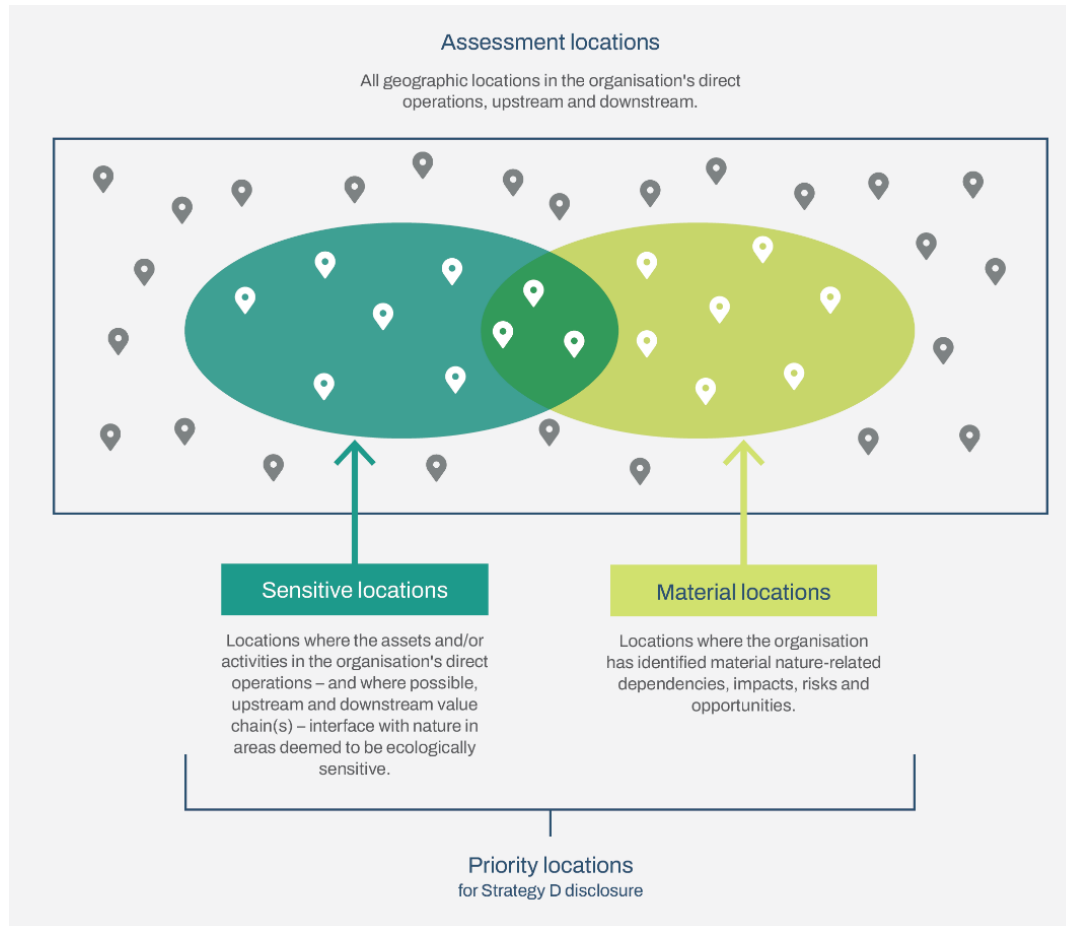


## TNFD recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
<p>Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</p> <p><b>C.</b> Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</p>	<p>Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</p> <p><b>B.</b> Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</p> <p><b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</p> <p><b>D.</b> Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</p>	<p>Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A(i)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</p> <p><b>A(ii)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</p> <p><b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</p> <p><b>C.</b> Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</p>	<p>Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> 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.</p> <p><b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</p> <p><b>C.</b> Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</p>

“Disclose the locations of assets and/or activities in the organisation’s direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.”

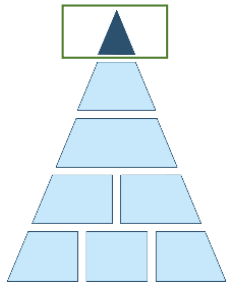
## Criteria for priority locations disclosure



### Criteria for sensitive locations:

- Areas important for biodiversity
- Areas of high ecosystem integrity
- Areas of rapid decline in ecosystem integrity
- Areas of high physical water risks; and/or
- Areas of importance for ecosystem service provision, including benefits to Indigenous Peoples, Local Communities and stakeholders.

# The recommended disclosures: The value chains disclosure



## TNFD recommended disclosures

### Governance

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

#### 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.

**C.** Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.

### Strategy

Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.

#### 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 dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.

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

**D.** Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.

### Risk & impact management

Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

#### Recommended disclosures

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

**A(ii)** Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).

**B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.

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

### Metrics & targets

Disclose the metrics and targets used to assess and manage material 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.

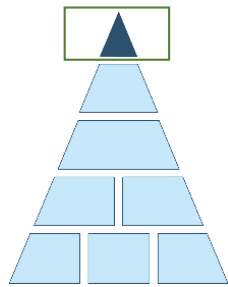
**B.** Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.

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

"Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s)."



# The recommended disclosures: Value chain disclosure



## TNFD recommended disclosures

### Governance

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

#### 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.

**C.** Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.

### Strategy

Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.

#### 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 dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.

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

**D.** Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.

### Risk & impact management

Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

#### Recommended disclosures

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

**A(ii)** Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).

**B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.

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

### Metrics & targets

Disclose the metrics and targets used to assess and manage material 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.

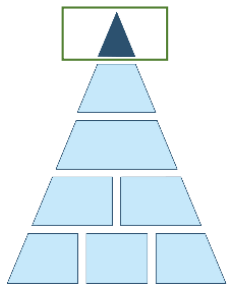
**C.** Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.

## Highlights

- Taskforce recognises that value chain assessment and disclosure may take time depending on the sector and business model
- Discussion paper published with draft guidance on approach to analysis of value chains
- Released in draft for feedback to inform further guidance development



# The recommended disclosures: Guidance for financial institutions



## TNFD recommended disclosures

### Governance

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

#### 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.

**C.** Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.

### Strategy

Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.

#### 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 dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.

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

**D.** Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.

### Risk & impact management

Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

#### Recommended disclosures

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

**A(ii)** Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).

**B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.

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

### Metrics & targets

Disclose the metrics and targets used to assess and manage material 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.

## Highlights

- Additional disclosure guidance for financial institutions for each recommended disclosure, where appropriate
- Two draft core disclosure metrics proposed and open for consultation and feedback

# Agenda

**Introduction and background**



**TNFD Recommendations including approach**



**Kunming-Montreal Global Biodiversity Framework**



**TNFD Data Initiatives**



**The recommended disclosures**



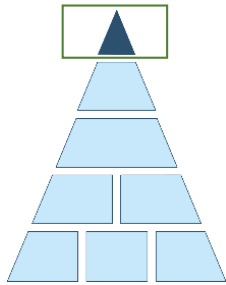
**The approach to measurement – metrics and targets**



**Closing Remarks**



# Metrics and Targets – Principles



## TNFD recommended disclosures

### Governance

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

#### 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.

**C.** Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.

### Strategy

Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.

#### 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 dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.

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

**D.** Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.

### Risk & impact management

Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

#### Recommended disclosures

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

**A(ii)** Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).

**B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.

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

### Metrics & targets

Disclose the metrics and targets used to assess and manage material 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.

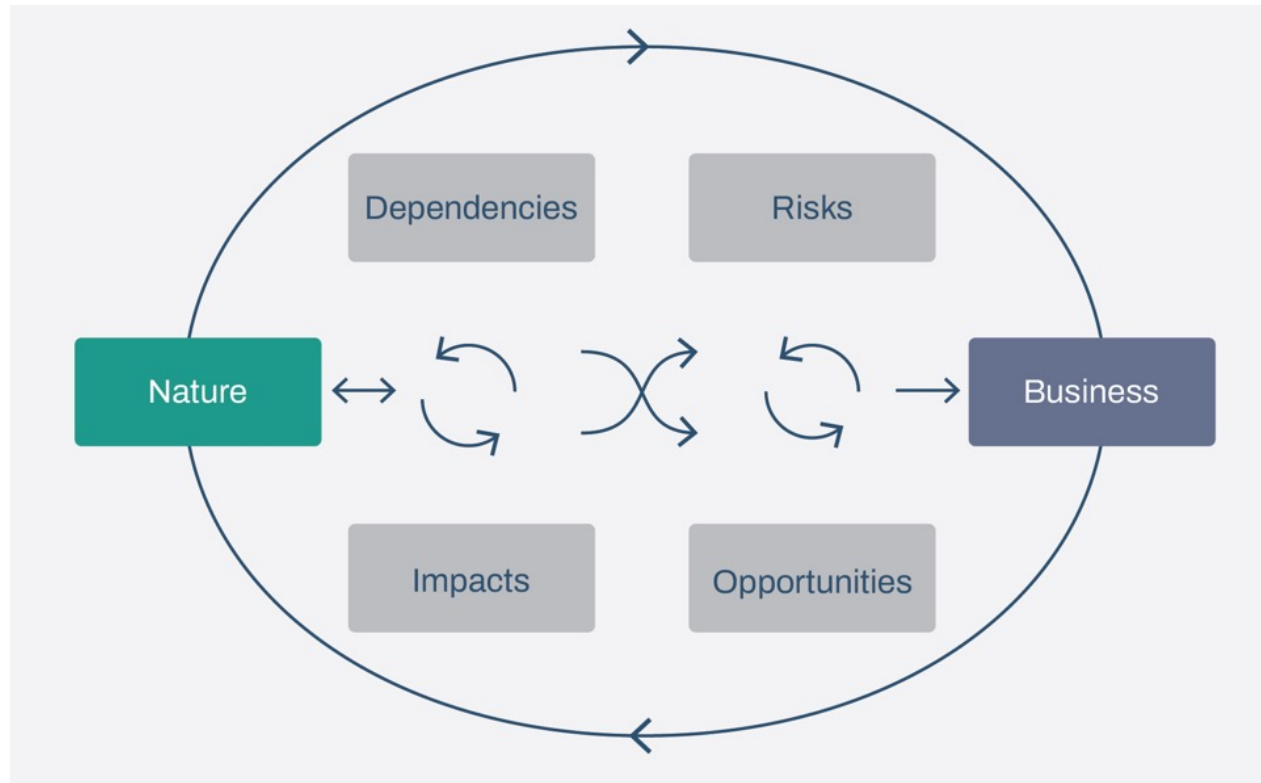
**C.** Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.

## Highlights

Goal to provide quantitative data that are:

- Science-based
- Practical to collect at reasonable cost
- Decision-useful
- Able to support cross-sector and sector-specific comparison
- Assurable on an annual reporting basis
- Aligned with the GBF goals and targets

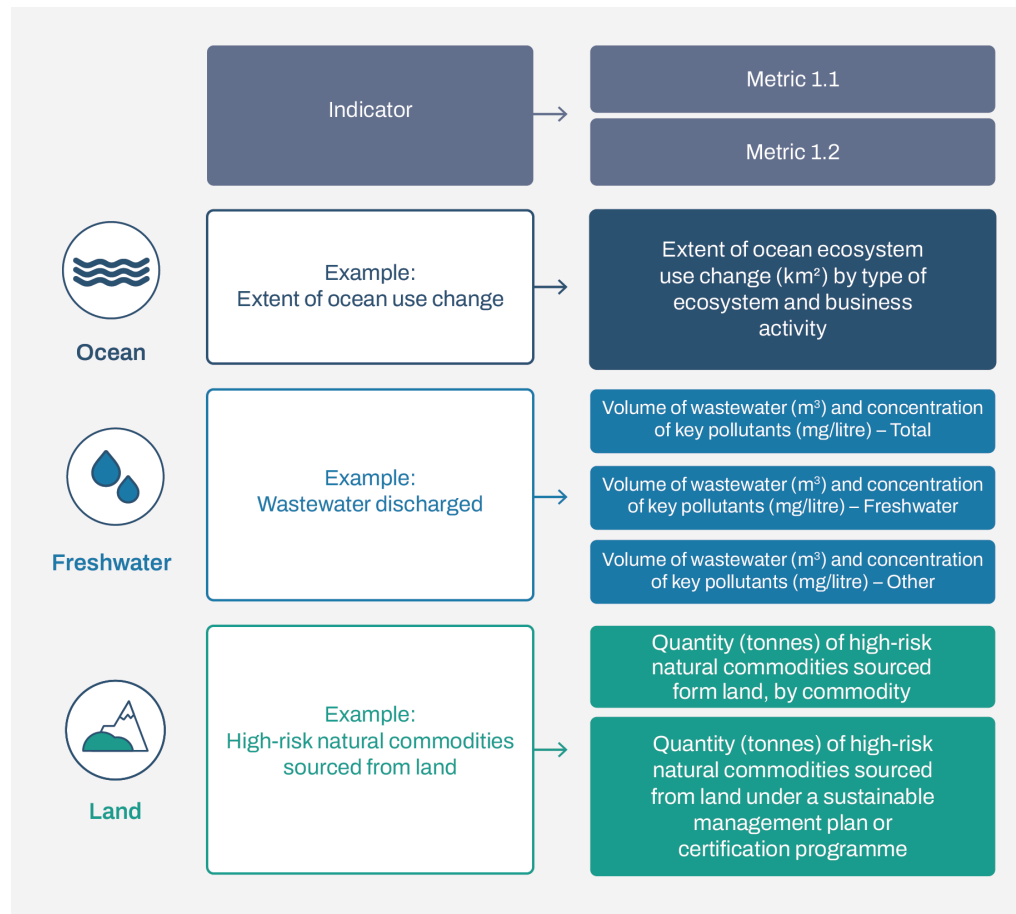
# The challenges of measuring nature-related issues



## Highlights

- Identified over 3,000 nature-related metrics from the standards, developed and collected over many decades
- Relatively few measures of dependency
- No widely accepted measures for nature-related risks and opportunities to an organisation

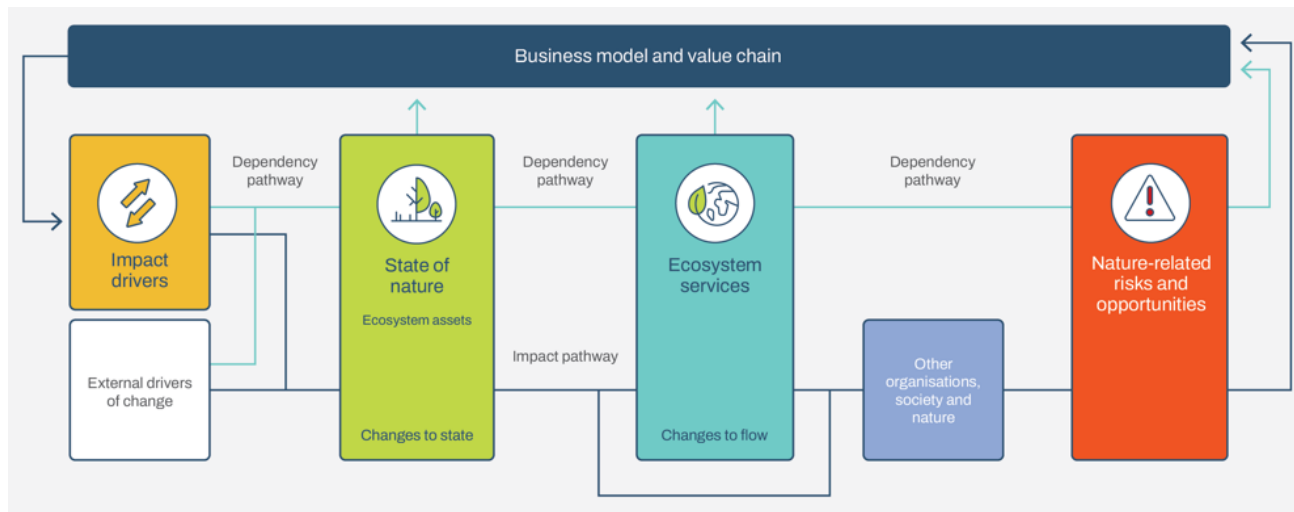
## Our approach: Organised around indicators and metrics



### Highlights

- Specific, measurable 'metrics' (the measurement) ...
- ... grouped by 'indicator' (what is being measured)

## Our approach: Focused on identified drivers of change

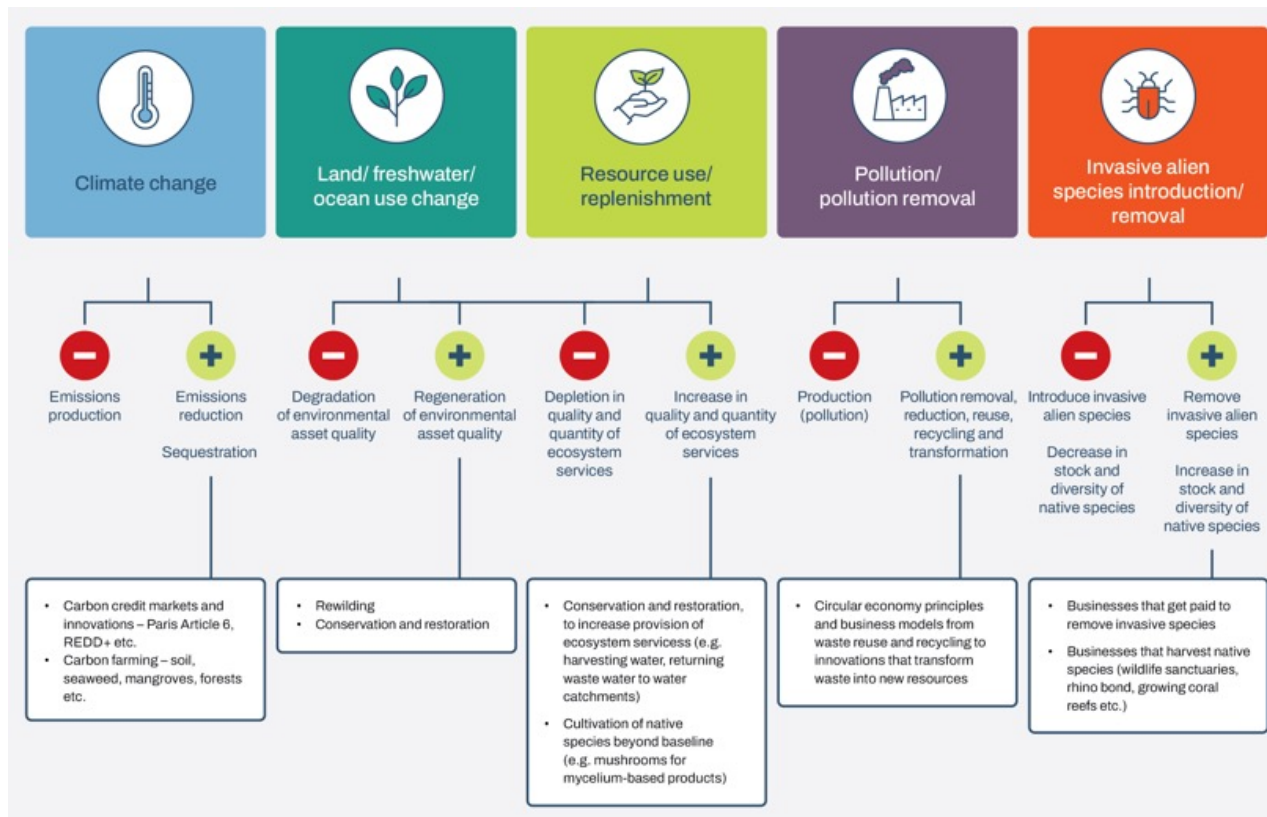


### Highlights

- Difficult today for business and finance to access data on (or measure directly) changes in state of nature around the world against a baseline or reference condition consistently and on an annual assurance basis
- Measurement of drivers of change is easier to start with and attributable directly to business and finance



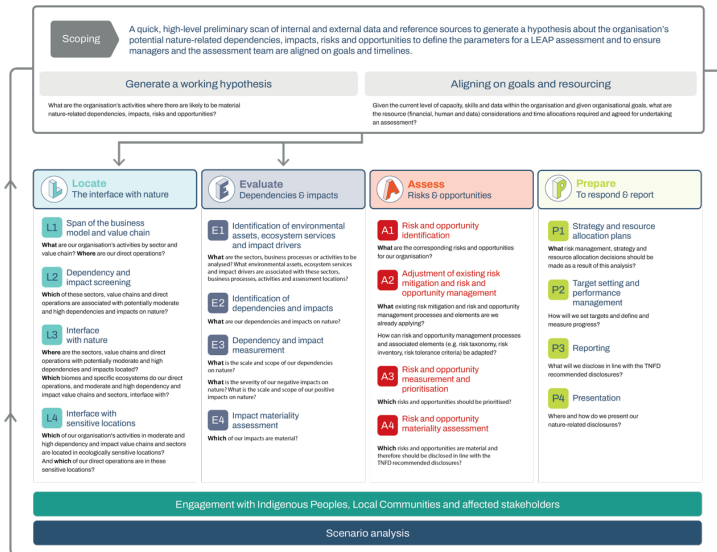
## Our approach: Acknowledging both negative and positive impacts



### Highlights

- Distinction between mitigating negative impacts... and contributing to positive impacts on nature
- Separate reporting of negatives and positives (no net reporting)
- Recognise new products and business models and contributions to nature positive outcomes

# Our approach: Assessment metrics & disclosure metrics



Supports preparation of the following TNFD recommended disclosures

Strategy D

Strategy A  
Strategy D  
Risk and Impact Management A (i and ii)  
Risk and Impact Management B  
Metrics and Targets B

Strategy A  
Strategy C  
Strategy D  
Risk and Impact Management A (i and ii)  
Risk and Impact Management B  
Risk and Impact Management C  
Metrics and Target A  
Metrics and Targets B

Governance A  
Governance B  
Governance C  
Strategy D  
Strategy C  
Metrics and Targets C

Metrics for internal assessment

## TNFD recommended disclosures

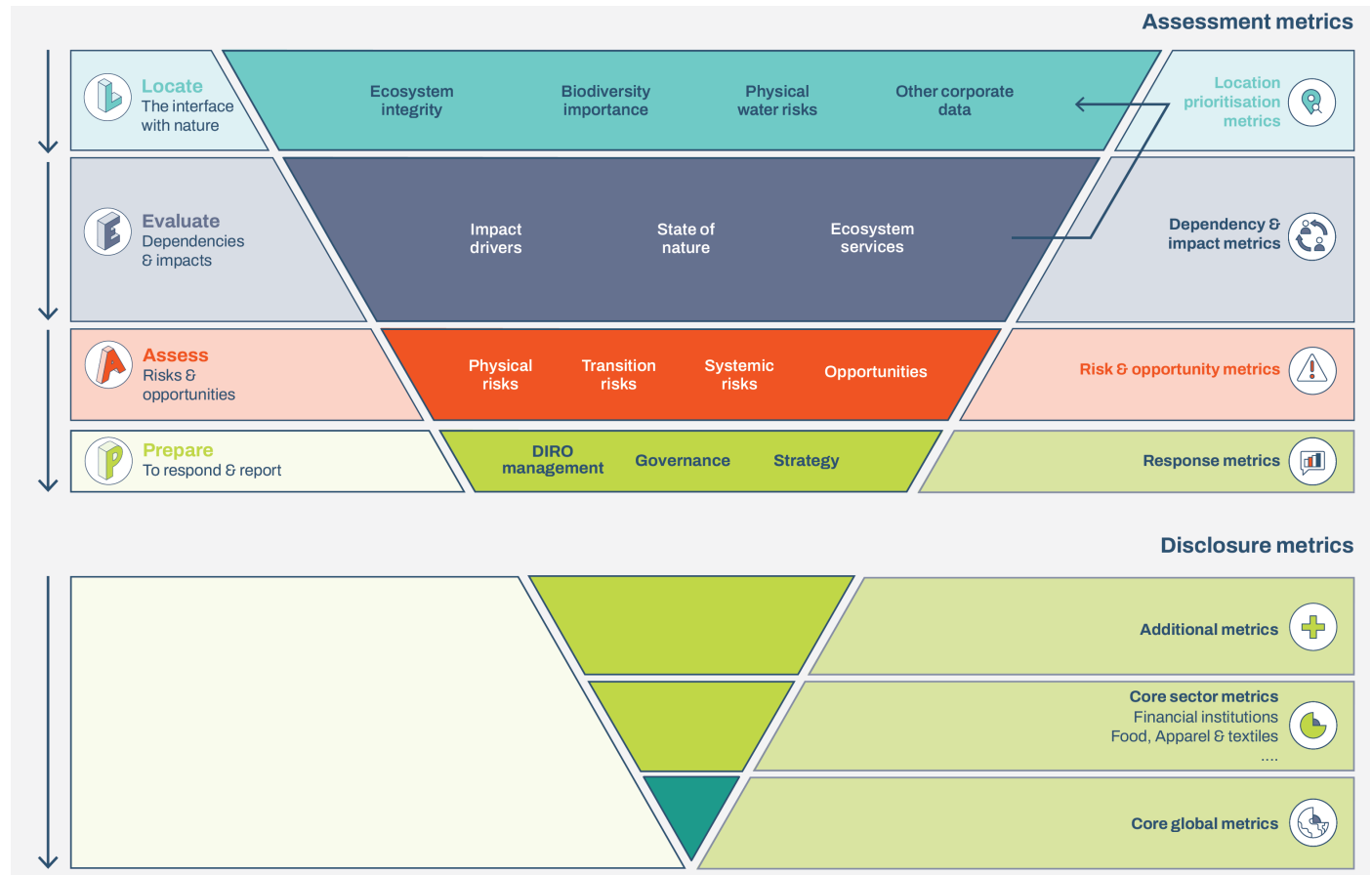
Governance	Strategy	Risk & impact management	Metrics & targets
<p>Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</p> <p><b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</p> <p><b>C.</b> Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</p>	<p>Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</p> <p><b>B.</b> Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</p> <p><b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</p> <p><b>D.</b> Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</p>	<p>Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A(i)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</p> <p><b>A(ii)</b> Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</p> <p><b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</p> <p><b>C.</b> Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</p>	<p>Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.</p> <p><b>Recommended disclosures</b></p> <p><b>A.</b> 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.</p> <p><b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</p> <p><b>C.</b> Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</p>

Metrics for external disclosure

# Providing a focused & flexible set of ‘leading indicators’

## Highlights

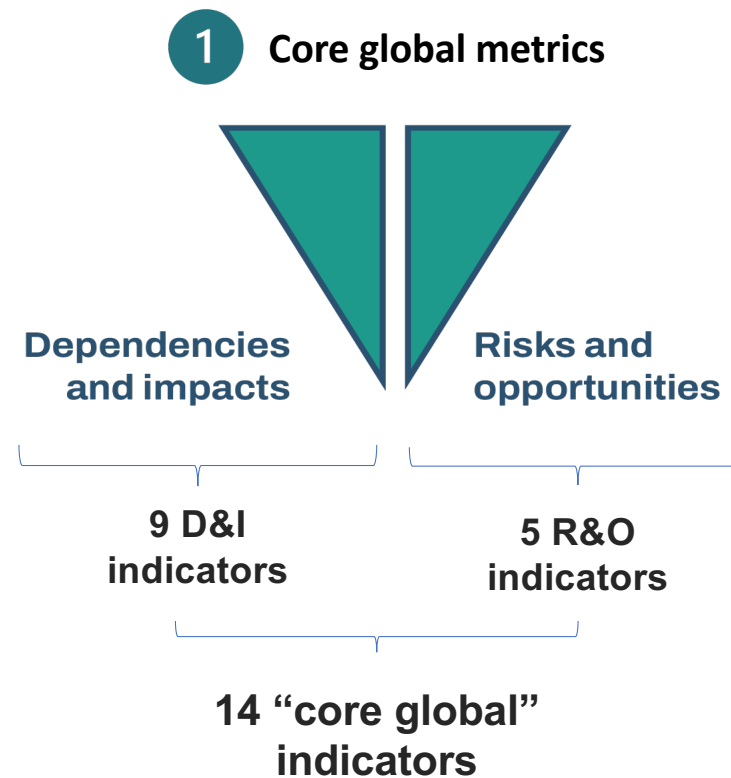
- Market user concerns about metrics in use today – time lags, consistency and comparability
- ‘Leading indicators’ approach necessary for disclosure – as with company financial accounts and national economic accounts
- Extensive input from knowledge partners



# Recommended disclosures – Core global metrics

## Highlights

- 14 Core Global Indicators and specific metrics for each
- Chosen because they apply to most business models across most sectors (like GHG emissions for climate reporting)
- Reported on a comply or explain basis
- **Included as Annex 1 in the final report**



# Core global metrics – Impacts and dependencies

## Highlights

- 9 core global impact and dependency indicators organised around the 5 drivers of change identified by IPBES
- Aligned to goals and targets of GBF
- Refer to TCFD and IFRS S2 for climate change mitigation metrics
- 5 risk and opportunity metrics recommended by TNFD for all organisations

Driver of nature change	Indicator
Land/freshwater/ ocean-use change	1. Spatial footprint 2. Extent of land/freshwater/ocean-use change
Pollution/pollution removal	3. Pollutants released to soil split by type 4. Wastewater discharged 5. Waste generation and disposal 6. Plastic pollution 7. Non-GHG air pollutants
Resource use/ replenishment	8. Water withdrawal and consumption from areas of water scarcity 9. Quantity of high-risk natural commodities sourced from land/ocean/freshwater
Climate change	GHG emissions
Placeholder: Invasive alien species and other	Measures against unintentional introduction of invasive alien species
Placeholder: State of nature	Ecosystem condition Species extinction risk

# Core global metrics – risks and opportunities

## Highlights

- 5 risk and opportunity metrics recommended by TNFD for all organisations

Risk/Opportunity	Metric
Risk	1. Value of assets, liabilities, revenue and expenses that are assessed as vulnerable to nature-related transition risks (total and proportion of total)
	2. Value of assets, liabilities, revenue and expenses that are assessed as vulnerable to nature-related physical risks (total and proportion of total)
	3. Description and value of significant fines/penalties received/litigation action in the year due to negative nature-related impacts
Opportunity	4. Amount of capital expenditure, financing or investment deployed towards nature-related opportunities, by type of opportunity, with reference to a government or regulator green investment taxonomy or third-party industry or NGO taxonomy, where relevant
	5. Increase and proportion of revenue from products and services producing demonstrable positive impacts on nature with a description of impacts

# Closing Remarks