



# Exploring the Taskforce on Nature-related Financial Disclosures (TNFD)

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## Rio Tinto

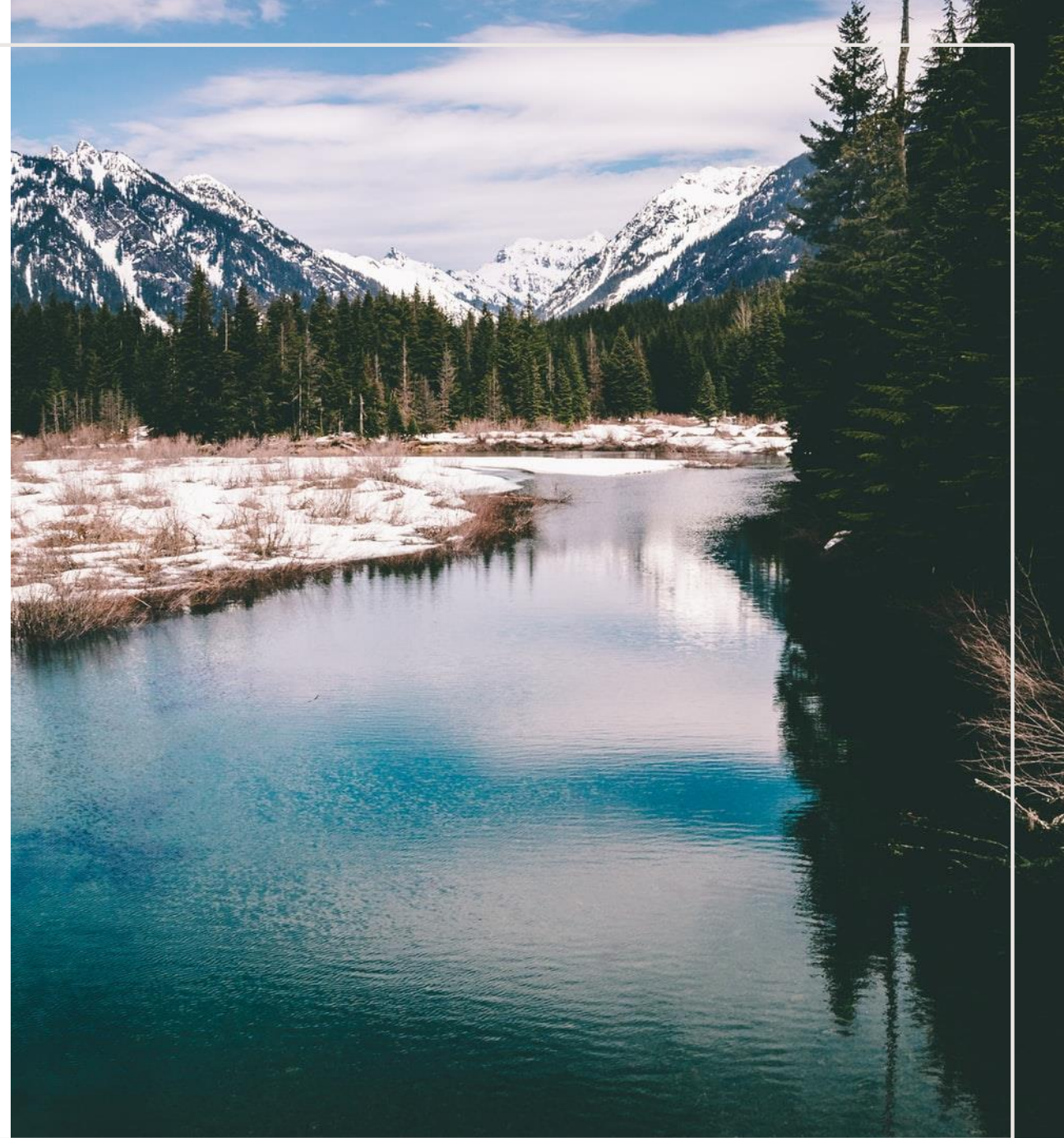
APRIL 2024

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# AGENDA

- The Proteus Partnership
- What is TNFD and why might it be useful for Rio Tinto
- Our pilot study on Simandou – the approach and findings
- Key takeaways and next steps





The Proteus Partnership

# THE PROTEUS PARTNERSHIP

## Vision:

- A planet where business contributes to a clean, healthy, resilient environment for all

## Mission:

- Support companies to contribute to nature-positive

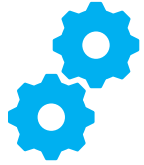
- 6<sup>th</sup> phase 2021-2025
- 16 partners
- Work programme deliverables tailored to the needs and interests of partner companies
- Providing access to global biodiversity data and tools and placing these in the context of company biodiversity management practices





What is TNFD and why might it be useful for Rio Tinto?

# WHY DISCLOSE ON NATURE?



**Operational Dependencies**  
Identifying and mitigating risks linked to interactions with nature could improve operations



**Policy and Regulation**  
The Kunming-Montreal Global Biodiversity Framework requires governments to directly address target 15 on business disclosures

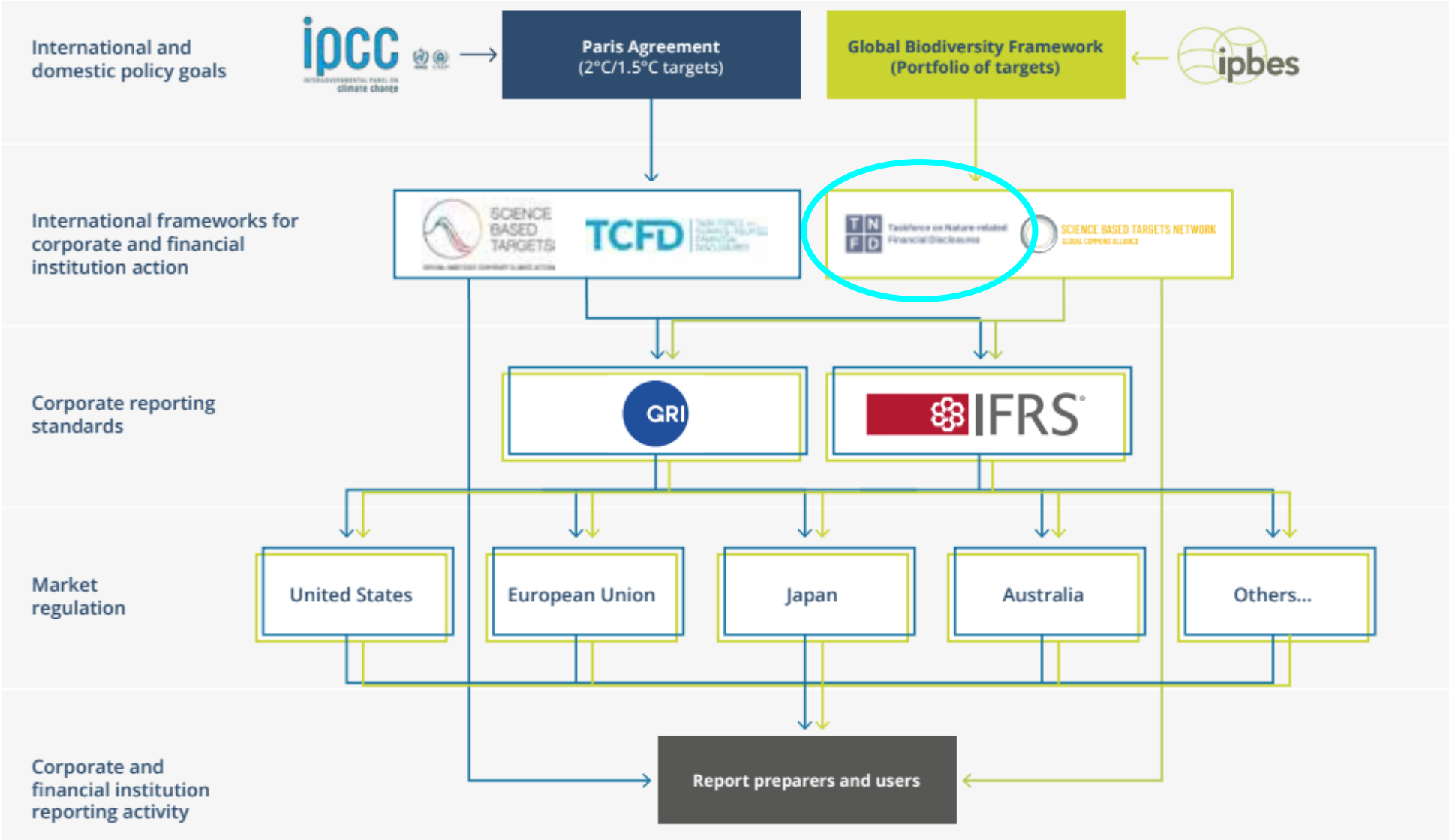


**Investors and customers**  
Providing clear information about performance on nature to key stakeholders could increase financial sustainability



**Competition**  
With peers becoming more aware of them, understanding nature-related risks and opportunities will be pivotal to maintain a competitive edge

# TNFD IN THE EMERGING REPORTING ARCHITECTURE

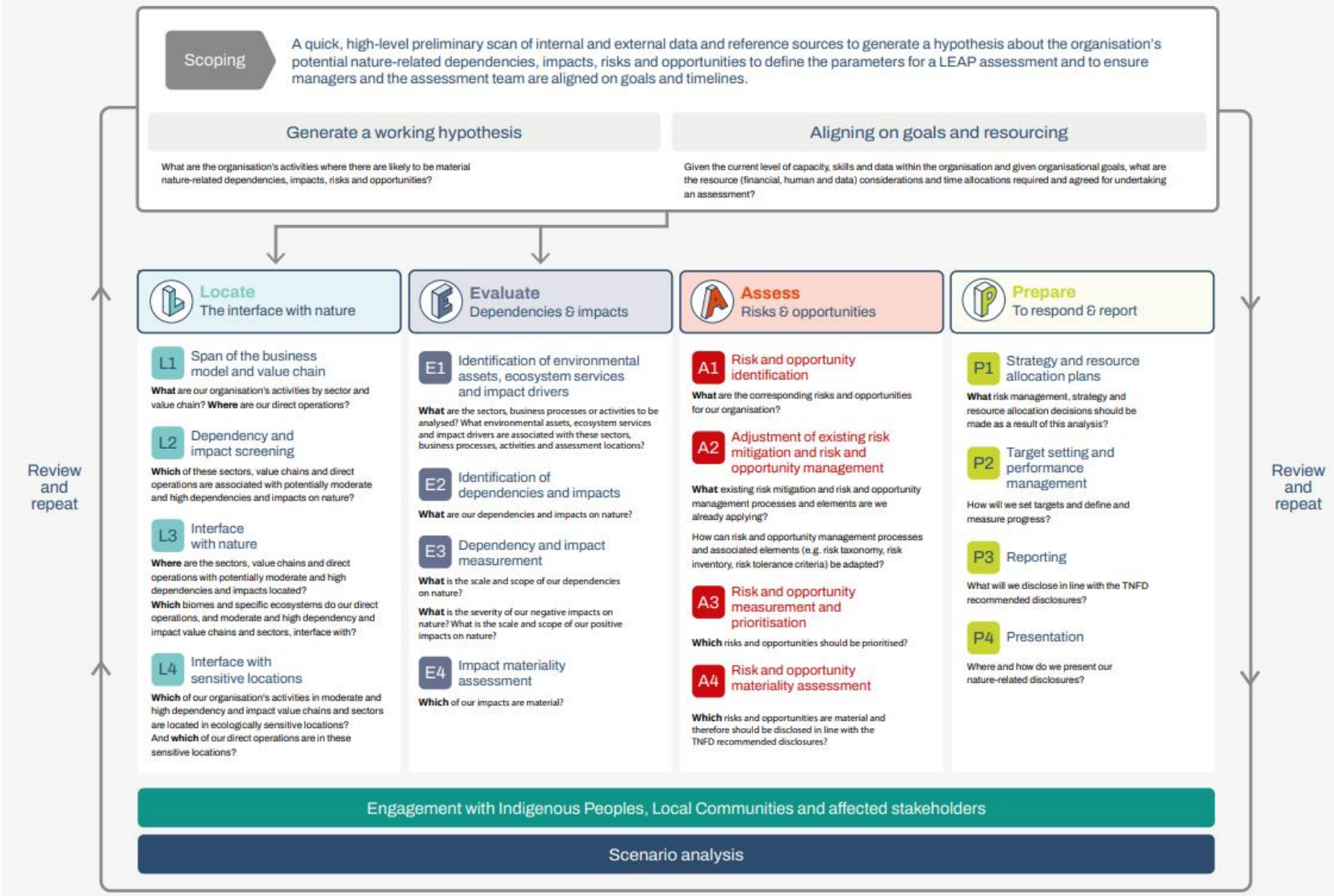


# TNFD DISCLOSURE RECOMMENDATIONS

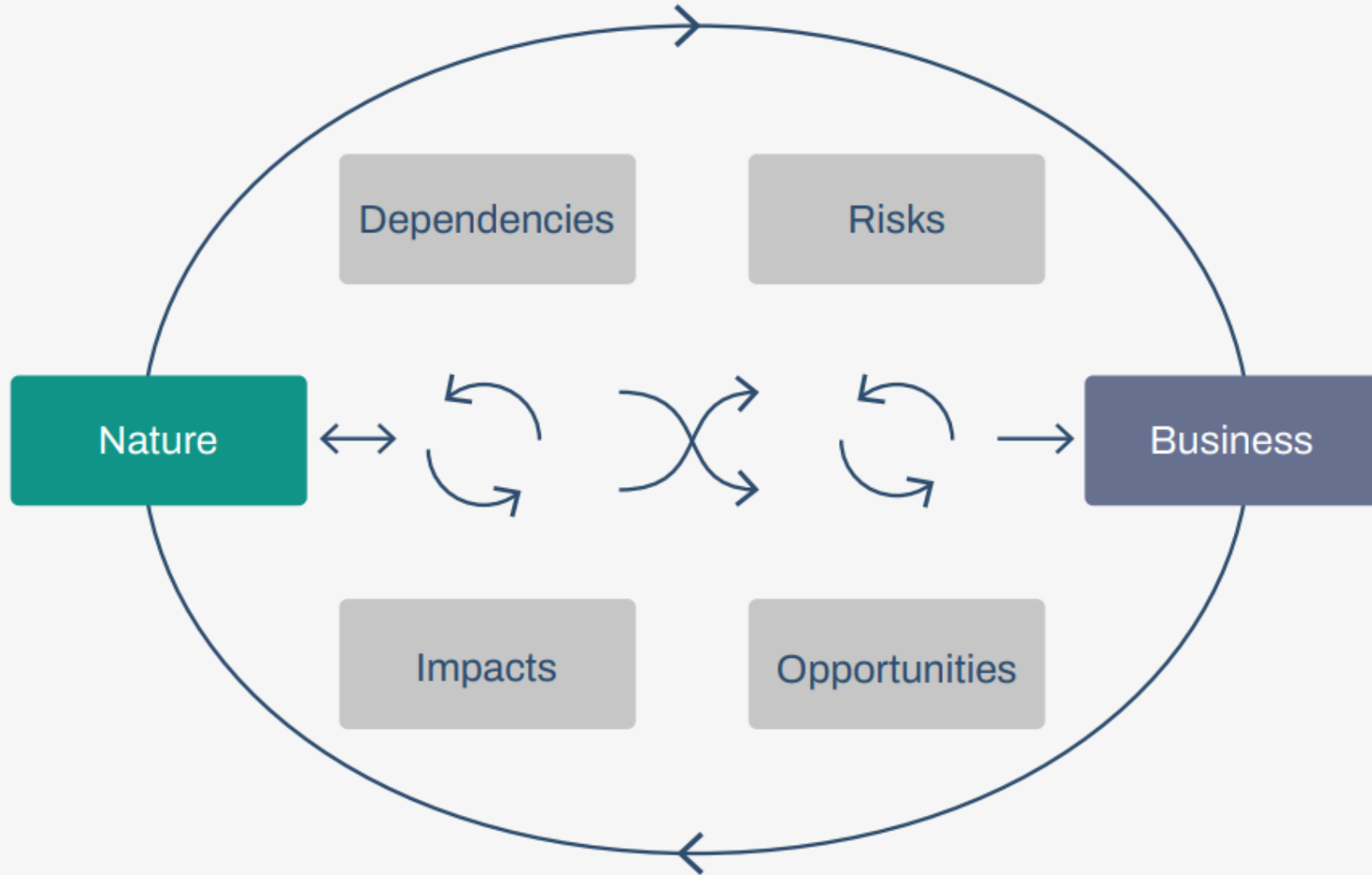
- TNFD is a leading risk management and disclosure framework for organisations to report and act on nature-related risks from operations and value chains
- Disclosure recommendations are closely aligned to those used by TCFD to ensure consistency in approach and language

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.
<b>Recommended disclosures</b>	<b>Recommended disclosures</b>	<b>Recommended disclosures</b>	<b>Recommended disclosures</b>
<b>A.</b> Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.	<b>A.</b> Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.	<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.	<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.
<b>B.</b> Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.	<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.	<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).	<b>B.</b> Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.
<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.	<b>C.</b> Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.	<b>B.</b> Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.	<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.
	<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.	<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.	

# THE LEAP APPROACH CAN HELP



# KEY INTERACTIONS BETWEEN NATURE AND BUSINESS



# EXAMPLES OF MINING IMPACTS ON NATURE



Use of land & freshwater (e.g. direct use, conversion or fragmentation of natural habitats)



Pollution (e.g. emissions of air, soil and water pollutants; solid waste)



Disturbances (e.g. seismic activity affecting species)



Climate change (e.g. emission of greenhouse gases by operations, machinery, vehicles)

# EXAMPLES OF MINING DEPENDENCIES ON NATURE



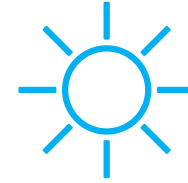
## Water flow maintenance

- Blasting
- Flotation
- Mineral transport
- Dust control
- Cooling and lubrication
- Tailings management



## Water quality

- Separation techniques
- Chemical reactions
- Corrosion and wear
- Energy efficiency
- Contamination Risk



## Climate regulation

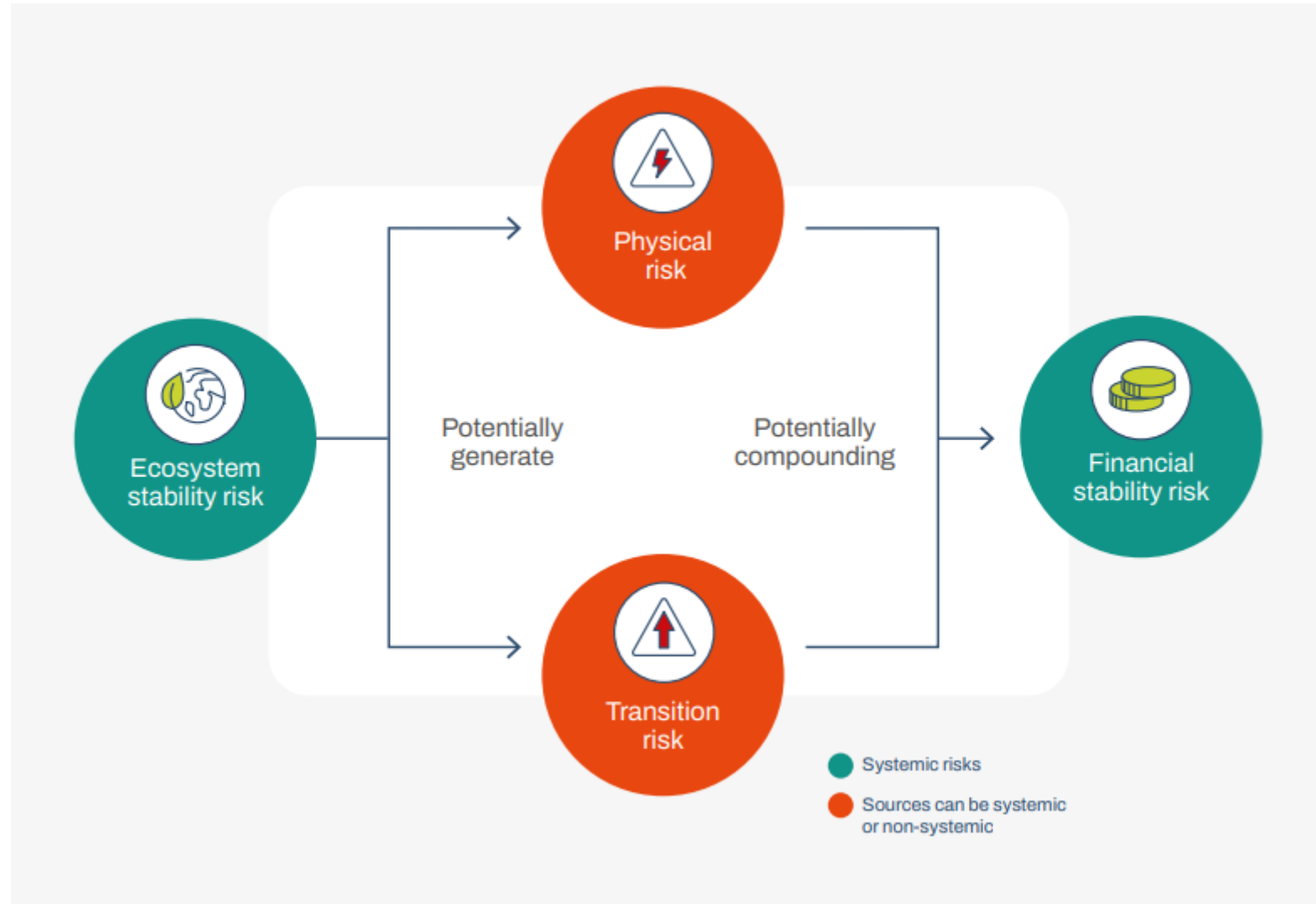
- Extreme weather
- Water availability
- Permafrost Thawing



## Mass stabilization

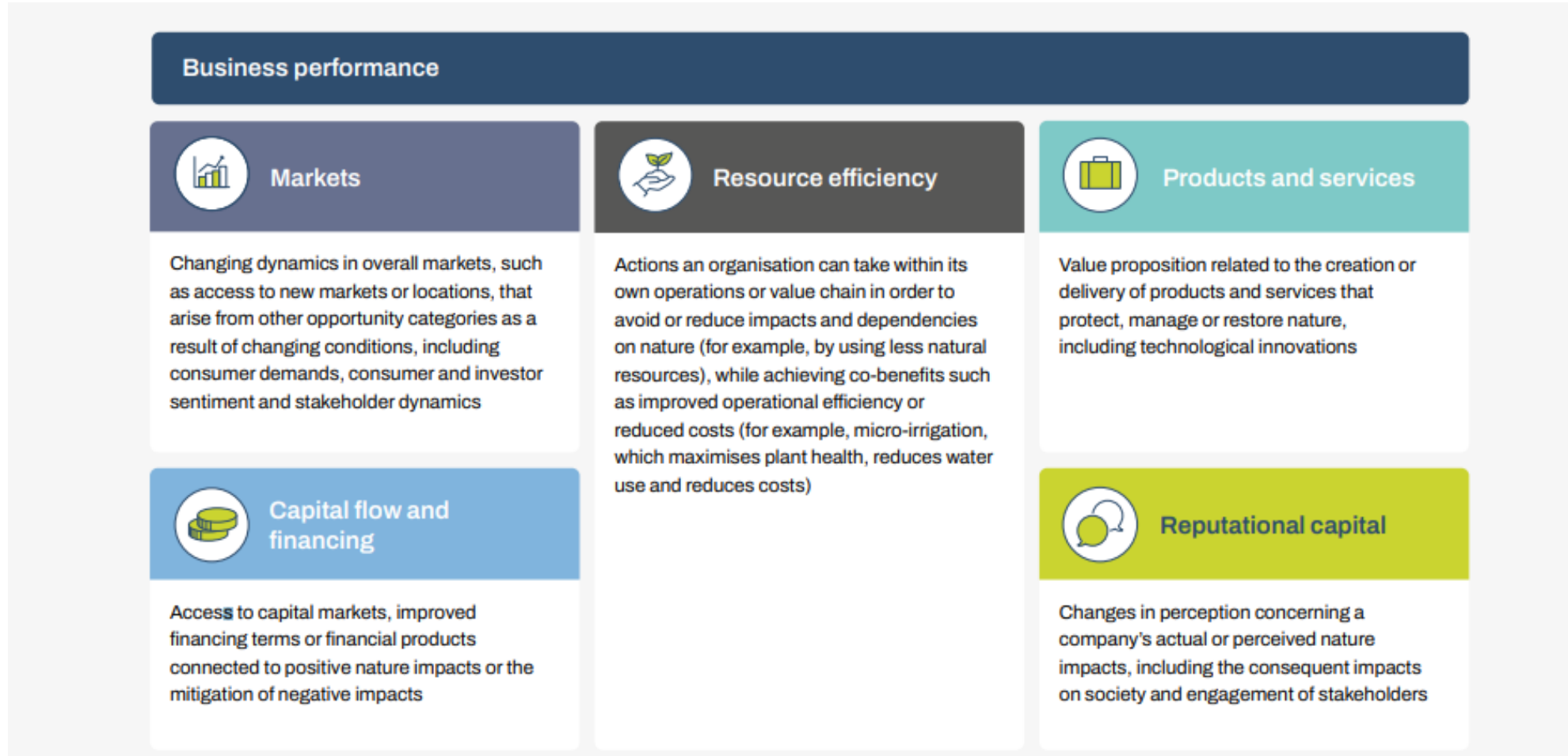
- Landslides
- Infrastructure damage
- Resource loss
- Contamination

# NATURE-RELATED RISKS



TNFD (2023)

# NATURE-RELATED OPPORTUNITIES





Our pilot study on Simandou – The approach

# SCOPE AND AIM

## AIM

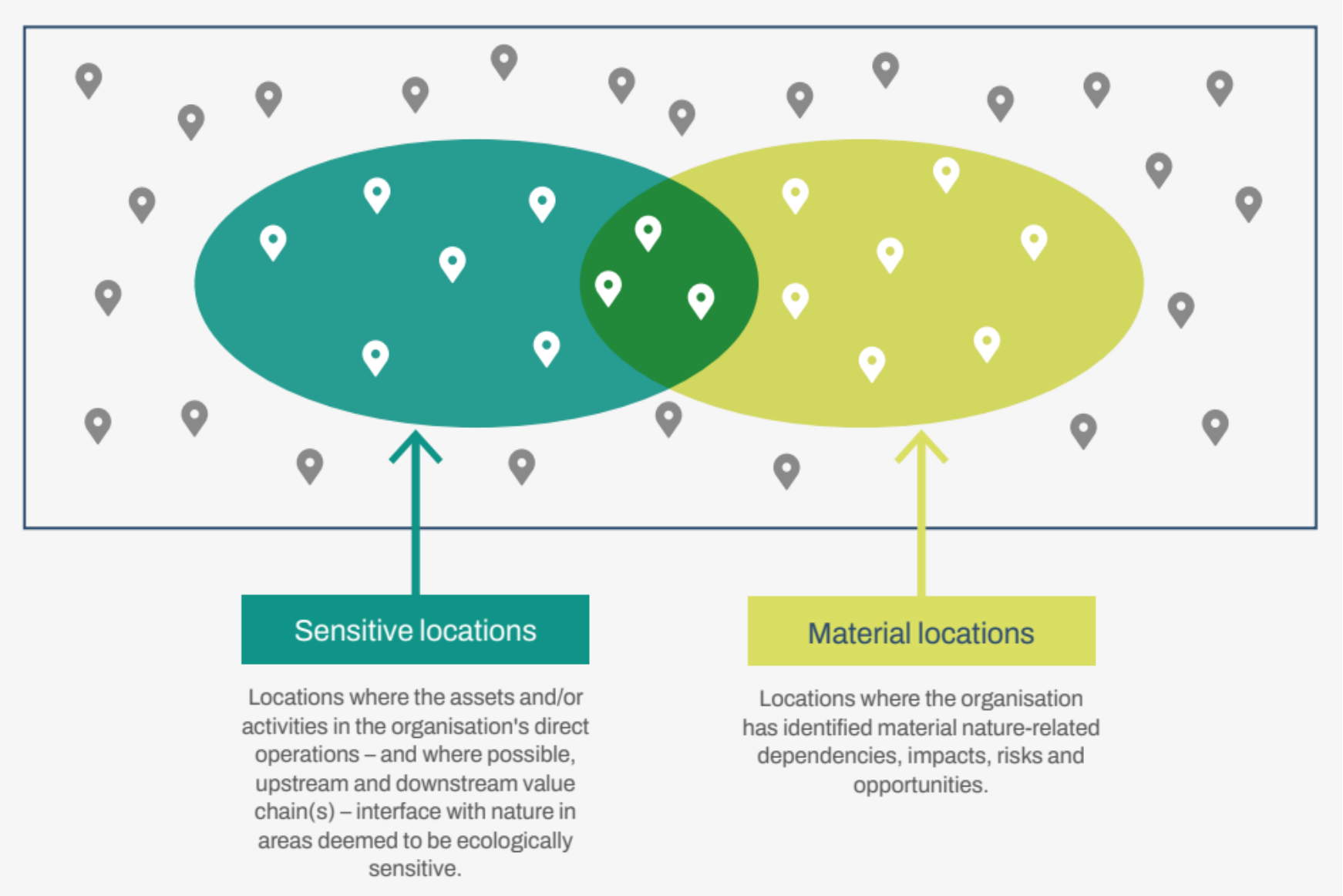
Support the work of TNFD and ICMM in developing the TNFD framework and its sector-specific guidance

Support Rio Tinto in understanding its readiness for disclosure aligned with the TNFD framework

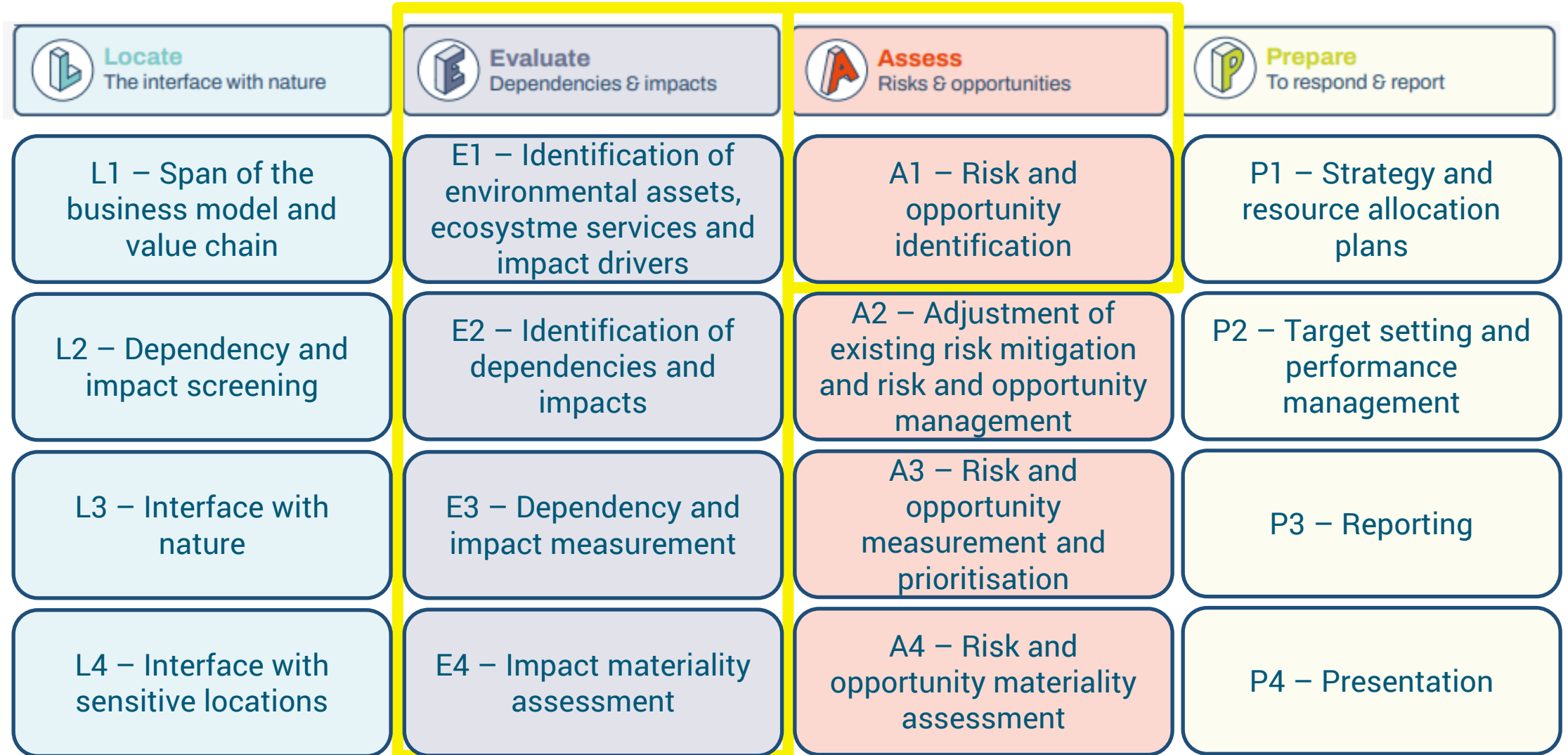
## SCOPE

- Piloting parts of TNFD Beta v0.4 to inform TNFD development (including sector guidance) and Rio Tinto understanding
- Focused on Rio Tinto's two concession areas in the Simandou mountain range
- Focused on direct impacts of mining operations

# SIMANDOU IS A PRIORITY LOCATION



# FOCUSING ON THE EVALUATE STAGE AND STEP A1



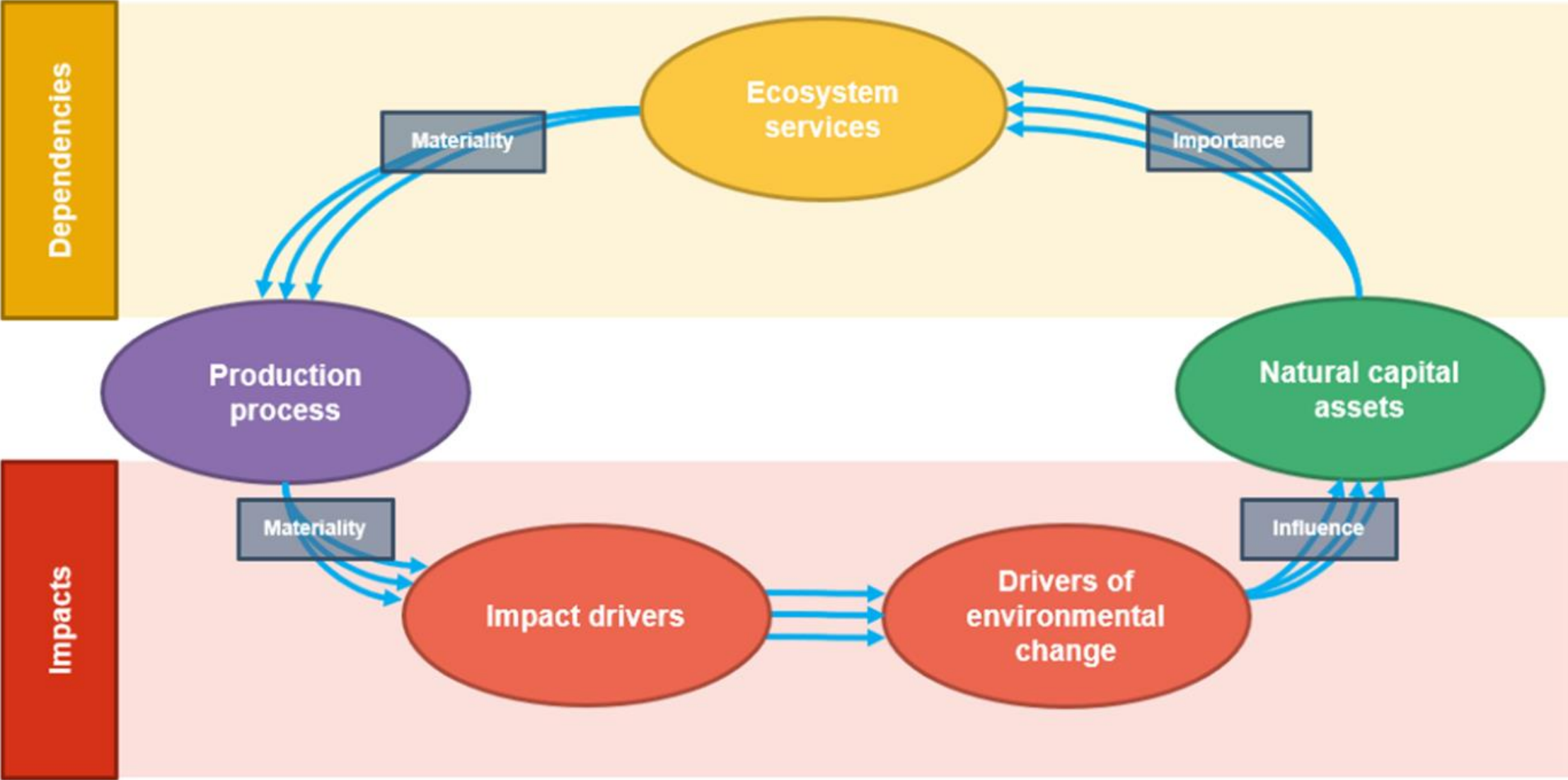
# ASSUMPTIONS AND LIMITATIONS

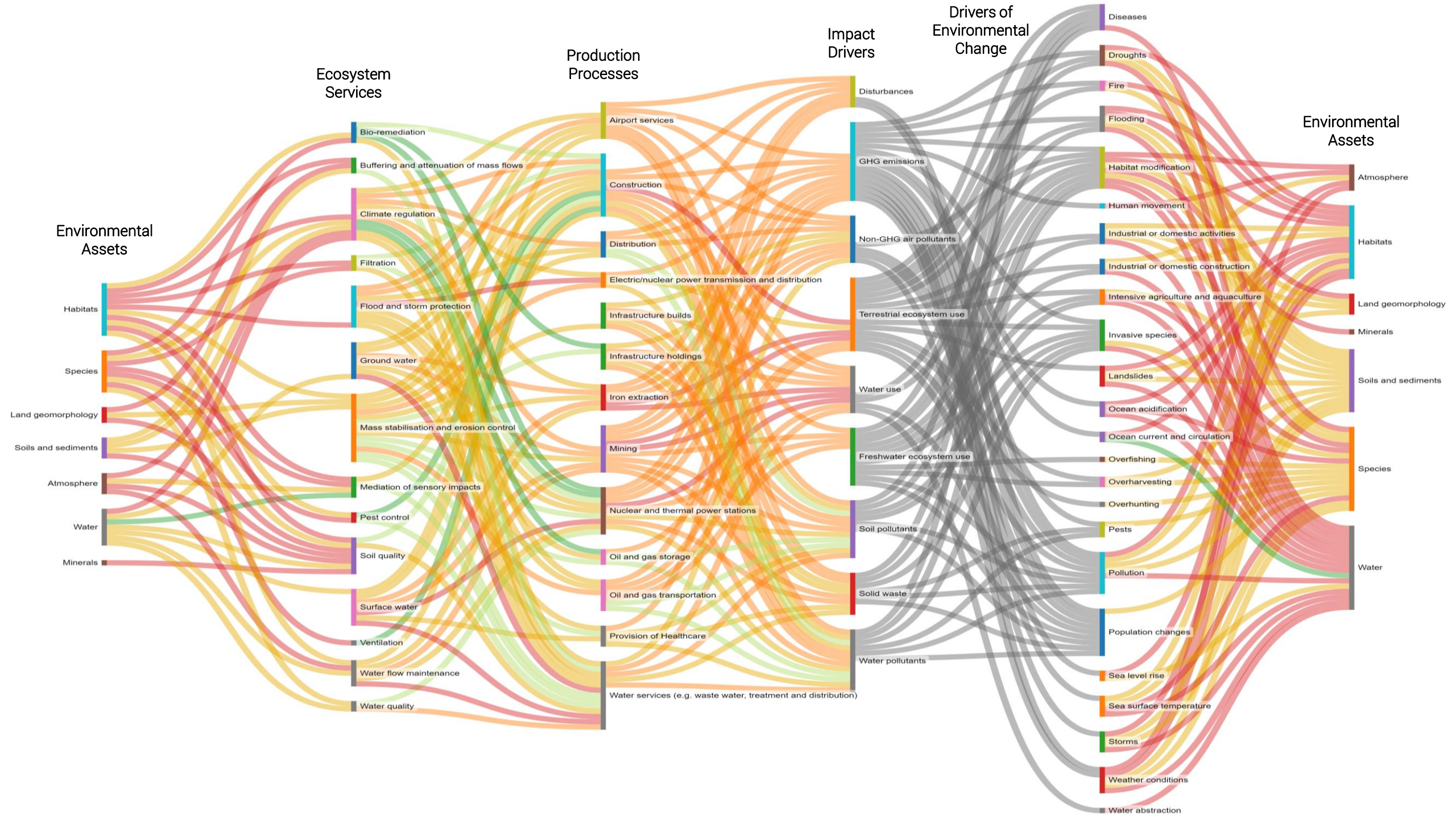
- Simandou being a greenfield site, the pilot considered expected rather than observed impacts, dependencies, risks, and opportunities
- The study was mainly carried out using information and data provided by Rio Tinto, drawing heavily on the ESIA from 2012
- The study is intended for use only as a TNFD pilot, and is not suitable for commercial decision making with respect to the Simandou site and its ESIA
- Additional tools and spatial datasets used in the pilot study were the latest versions available to Rio Tinto as of April 2023



Our pilot study on Simandou – The findings

# WE USED THE ENCORE TOOL AS A STARTING POINT





# FINDINGS – EXAMPLES OF IMPACTS, DEPENDENCIES, RISKS, & OPPORTUNITIES

Land-use  
Change

Water-use &  
Pollution

Disturbance

Impacts

Soil and  
Sediment  
Retention

Water Flow  
Regulation and  
Purification

Indirect  
Dependencies

Dependencies

Soil Erosion

Decreased Water  
Quality and  
Quantity

Loss of  
Provisioning  
Services

Risks

Products and  
Services

Business Models

Direct Action for  
Nature

Opportunities

# FINDINGS – AVAILABLE DATA FOR TNFD METRICS

	Impact Drivers	State of Nature	Ecosystem Services
Percentage of TNFD metrics sufficiently covered in the ESIA	<b>27.5%</b>	<b>20%</b>	<b>0%</b>
Metrics included in the ESIA and recommended to TNFD as potential additional metrics	<ul style="list-style-type: none"><li>• Light pollution levels</li><li>• Disease transmission events</li><li>• Soil sterilisation</li><li>• Animals hunted</li><li>• Habitat fragmentation and edge effects</li><li>• Collision events</li></ul>	<ul style="list-style-type: none"><li>• Global distribution of species present</li><li>• Status of species in the IUCN Red List</li><li>• Number of known sites globally for species present</li></ul>	<ul style="list-style-type: none"><li>• Amount of firewood and charcoal collected in the area</li><li>• Disease prevalence / outbreak frequency</li><li>• Areas of Critical Natural Assets</li></ul>

# FINDINGS – STAKEHOLDERS & SCENARIOS

## Stakeholder Mapping



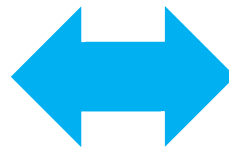
Key stakeholders:  
Local communities



Additional stakeholders:  
Local government & NGO



Deep understanding of  
social risks in the area



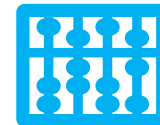
## Scenario Analysis



4 comprehensive, but not  
exhaustive scenarios



Useful for exploring  
interactions between risks

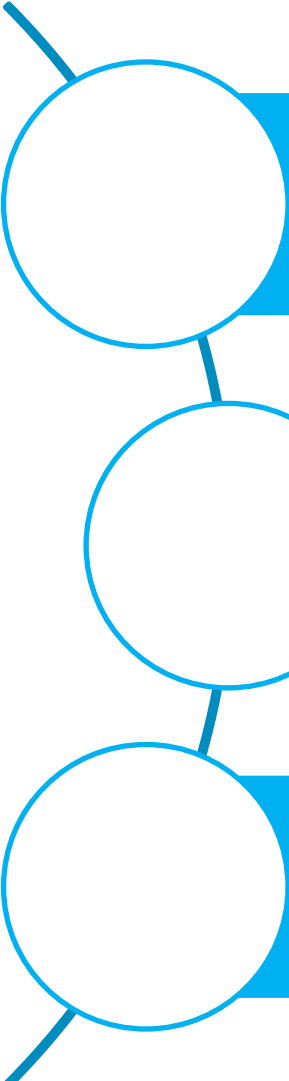


Standardisation guidance  
would aid consistency

A large, rounded rock formation, possibly a natural rock shelter or a natural rock overhang, sits atop a hill covered in dense, lush green forest. The rock is dark and has a weathered, layered appearance. In the background, there are rolling hills and mountains under a hazy sky. The overall scene is a natural, scenic landscape.

Key takeaways and next steps

# KEY TAKEAWAYS



Global datasets ensure that key issues are identified early, but site-level information provides granularity in the Evaluate stage

More quantitative information is required from the field on impact drivers, the state of nature, and ecosystem services

The mine and local communities are closely connected, so impacts to ecosystem services that they depend on are particularly material here

# NEXT STEPS

- 
- 1. Develop and implement robust impact mitigation plans for biodiversity and ecosystem services before and as the site is developed
  - 2. Establish data collection and monitoring processes to fill key gaps against TNFD metrics and allow reporting on performance
  - 3. Consider indirect dependencies, such as those linked to ecosystem services on which local communities and the workforce depend
  - 4. Continue evaluating developments of disclosure requirements, such as TNFD Metals and Mining sector guidance



Thank you

**UN**   
**environment  
programme**

**WCMC**