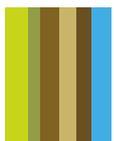




ENCORE

Aligning financial portfolios
with biodiversity goals:

How to use the ENCORE biodiversity module



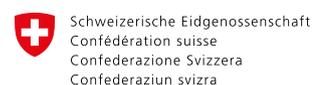
**Natural Capital
Finance Alliance**

Finance sector leadership on natural capital

Secretariat



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Swiss Confederation

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The case for finance sector action on biodiversity

The loss of biodiversity, and society's response to it, creates material risks and opportunities for financial institutions. This goes hand-in-hand with climate change which is both driven by and exacerbates nature loss in a vicious circle. This guide will help financial institutions to identify their key biodiversity risks, and explain how the ENCORE biodiversity module can improve the finance sector's understanding of their impact on biodiversity. The module provides evidence for financial institutions to better align their activities with biodiversity goals through more robust management and engagement practices, for nature, climate and economy.

Banks, asset owners, asset managers and insurers are exposed to biodiversity-related risks through investment in and provision of banking and insurance services to companies and projects that depend on and impact on biodiversity. Financial institutions are exposed to four primary types of biodiversity-related risks:

- **Legal and regulatory risk** results from stricter regulations for biodiversity protection.
- **Market risk** arises from a shift in market or consumer preferences away from products and services that have a negative impact on biodiversity.
- **Physical risk** occurs when businesses depend directly on biodiversity for operations or supply chains.
- **Reputational risk** arises from the way a company's biodiversity-related activities or overall brand are perceived by key stakeholders (e.g. customers, shareholders, society).

Additionally, systemic risk occurs when any of the above risks hits a wide range of companies or projects simultaneously. The COVID-19 pandemic is a pertinent example of a systemic biodiversity-related risk, as the destruction of natural habitats increases the probability of transmission of viruses from animals to humans. Halting and reversing biodiversity loss is also essential to tackle the climate crisis: nature-based solutions can contribute up to 37% of the greenhouse gas emission reductions needed to meet global climate targets.¹ Nature and climate can combine, through different mechanisms, to drive the same business risks, compounding them significantly.²

1 The Nature Conservancy (2017) [How Nature Can Get Us 37 Percent of the Way to the Paris Climate Target](#)

2 Finance for Biodiversity (F4B) (2021). [The Climate-Nature Nexus: Implications for the Finance Sector.](#)

On the opportunity side, financial institutions can facilitate capital flowing to companies that provide solutions to help halt and reverse biodiversity loss. Scaling investments in solutions is essential to create meaningful impact.

84% of investors are now very concerned about biodiversity loss. Most see it as an urgent challenge: 55% believe biodiversity loss must be addressed in the next 24 months.³

Biodiversity, natural capital, or ecosystems?⁴

Biodiversity includes the variety of all living things, from genes, through species and populations, to habitats and ecosystems. An ecosystem is a community of living organisms in conjunction with the non-living components of their environment, interacting as a system such as oceans, wetlands and drylands. Biodiversity is the living component of what we call natural capital stocks, which also include non-living elements such as geology, air and water. The presence of, and interactions between, natural capital stocks generate a flow of goods and services; these goods and services create value through the benefits they provide to business and society. Biodiversity and ecosystems are an integral part of natural capital and underpin the goods and services that natural capital generates.

More than 50% of the global economy is reliant on biodiversity

US\$44 trillion of economic value generation—over half the world’s total GDP—is moderately or highly dependent on nature and its services.⁵ As the world’s ecosystems have declined in size and condition by 47% globally compared to estimated baselines,⁶ financial institutions face escalating biodiversity risks.

Biodiversity risk goes beyond primary industries like agriculture. All industries are exposed: even those with little exposure to direct risks are indirectly exposed through their supply chains. In its 2021 Global Risks report, the World Economic Forum ranks biodiversity loss and ecosystem collapse as one of the top five risks to the global economy in the next 10 years.⁷

3 Credit Suisse and Responsible Investor (2021) [Unearthing Investor Action on Biodiversity](#)

4 Capitals Coalition and Cambridge Conservation Initiative (2020) [Integrating biodiversity into natural capital assessments](#)

5 World Economic Forum (2020) [Nature Risks Rising](#)

6 IPBES (2019) [Global Assessment Report on Biodiversity and Ecosystem Services](#)

7 World Economic Forum (2021) [The Global Risks Report 2021](#)

Biodiversity loss is rising up the policy agenda—including among financial regulators and finance ministries

In 2020, De Nederlandsche Bank (DNB), became the first central bank and regulator to highlight biodiversity as a material financial risk.⁸ Eight governments and regulators joined the initiative to bring together a Taskforce on Nature-related Financial Disclosures (TNFD).⁹ Building on the successful Task Force on Climate-related Financial Disclosures (TCFD), the TNFD Informal Working Group includes 74 organisations, of which 49 are financial institutions and corporates.¹⁰

Nature is rising further up the agenda in 2021. The TNFD itself was launched in June 2021. February saw the launch of the Dasgupta Review on the Economics of Biodiversity, an extensive study commissioned by the UK government's economic and finance ministry, which recommends urgent changes to our economies and financial system.¹¹ In early March 2021, the EU Sustainable Finance Disclosure Regulation (SFDR) began to apply, while a new decree from the French financial regulator now requires financial institutions to disclose both biodiversity- and climate-related risks and impacts.¹² In April 2021, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) launched a research project on biodiversity and financial stability.

Later in the year, the world's governments are expected to negotiate internationally-agreed targets for biodiversity under the Convention on Biological Diversity (CBD). The climate- and biodiversity agendas will increasingly merge, with nature-based solutions expected to gain prominence at the COP26 climate summit at the end of the year.

Increased policy action on biodiversity strengthens the imperative for financial institutions to understand their own impacts and dependencies on biodiversity, as stronger government action will alter the expectations and requirements placed on corporates and financial institutions.

36% percent of the portfolios of the Dutch financial institutions are exposed to physical biodiversity risk

Estimate from the Dutch Central Bank and financial regulator using the ENCORE tool.

8 De Nederlandsche Bank (2020) [Indebted to Nature](#)

9 The Initiative Bringing Together a Taskforce on Nature-related Financial Disclosures (2021) [Who We Are](#)

10 The Initiative Bringing Together a Taskforce on Nature-related Financial Disclosures (2021) [Who We Are](#)

11 UK Government (2021) [The Economics of Biodiversity: The Dasgupta Review](#)

12 The Initiative Bringing Together a Taskforce on Nature-related Financial Disclosures (2021) [France's Article 29: biodiversity disclosure requirements sign of what's to come](#)

Increasing expectations for financial institutions to act

Leading financial institutions are increasingly stepping up their action on biodiversity. Biodiversity is dubbed the next frontier for sustainable finance: S&P Global identified nature and biodiversity as one of the key Environmental, Social and Governance (ESG) trends in 2021.¹³ Just as financial institutions are now expected, and even required in many cases, to take ambitious climate action, expectations to take action on biodiversity will continue to mount.

13 S&P Global (2021) [Seven ESG Trends to Watch in 2021](#)

Introducing the ENCORE biodiversity module

Biodiversity underpins natural capital and the goods and ecosystem services that they generate. In an age of ecosystem collapse and biodiversity loss, it is challenging for financial institutions to comprehend the full extent of impacts and dependencies on biodiversity for their business. For financial institutions to identify their biodiversity risks and opportunities, they need to know how their portfolios depend on and impact biodiversity.

“All the banks want to familiarise themselves with biodiversity now. The challenge is how you gather all the information and data you need to assess that risk.”

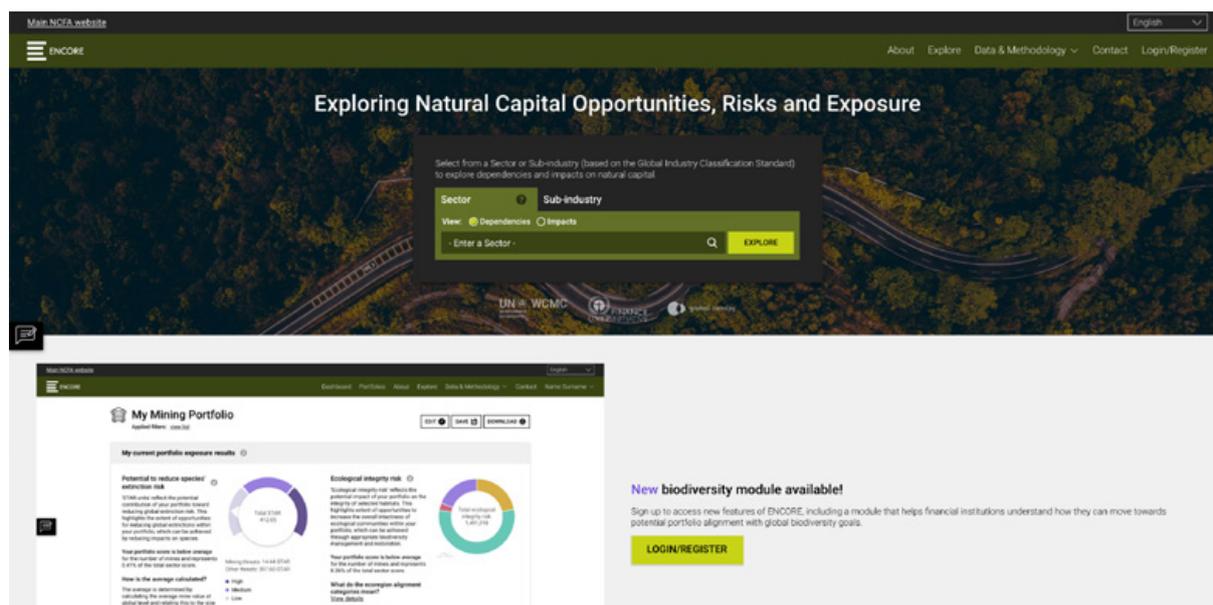
Nehru Pillay, General Manager, Research and Intelligence at Land Bank

Understanding exposure to biodiversity and natural capital-related financial risks enables financial institutions to identify opportunities for mitigation and adaptation. The existing ENCORE platform allows the finance sector to explore potential impacts and dependencies on natural capital.

What is ENCORE?

ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) is a web-based platform that assists financial institutions in understanding, assessing and integrating natural capital risks in their financing activities. By focusing on the goods and services that nature provides to enable economic production, ENCORE guides users in understanding how businesses across all sectors of the economy impact and depend on nature, how this varies by geography, and how these impacts and dependencies might represent a business risk if environmental degradation disrupts them. Using ENCORE is a first step for financial institutions to explore natural capital-related risks within their activities and integrate these into risk management processes.

Figure 1. ENCORE landing page¹⁴



“ENCORE is one of the tools helping us deliver on the commitments we made under the Principles for Responsible Banking.”

Nehru Pillay, General Manager, Research and Intelligence at Land Bank

What is the biodiversity module?

While the broader ENCORE platform assists the finance sector in understanding and visualising the links between the economy and nature, the new biodiversity module within ENCORE enables users to explore the potential alignment of financial activities in selected sectors with a nature-positive future. Due to their high material impacts and dependencies on nature, mining and agriculture have been selected as the two initial priority sectors in the module.

“Biodiversity is high on the agenda for us at APG, and we need tools that will enable us to identify and manage the risks and opportunities effectively. The ENCORE biodiversity module will help us advance our screening processes and engagement on biodiversity.”

Melisa Simić, Senior Responsible Investment and Governance Specialist, APG Asset Management

14 <https://encore.naturalcapital.finance/en>

Approach

Insights derived from the module can assist financial institutions by moving from interventions that focus on reducing negative impacts towards those that focus on increasing positive impacts for biodiversity.

The post-2020 global biodiversity framework from the Convention on Biological Diversity (CBD) will provide the basis for a global commitment to net gain of biodiversity by 2030, which provides new momentum for the finance sector to become a critical enabler of transformative change at a strategic level.

To facilitate financial institutions to have a net positive impact on biodiversity, the biodiversity module in ENCORE considers the state of biodiversity in relation to two proposed priority economic sectors for target-setting, namely mining and agriculture. More sectors are expected to follow as the module is further enhanced.

The module aims to help financial institutions work towards answering the following questions related to biodiversity impacts in their portfolios:

- **What is my current portfolio's potential to reduce species' extinction risk and ecological integrity risk?**
- **What are potential pathways for positive impacts within my agriculture or mining portfolio?**
- **What types of actions can I take to increase the alignment of my portfolio with global biodiversity goals?**

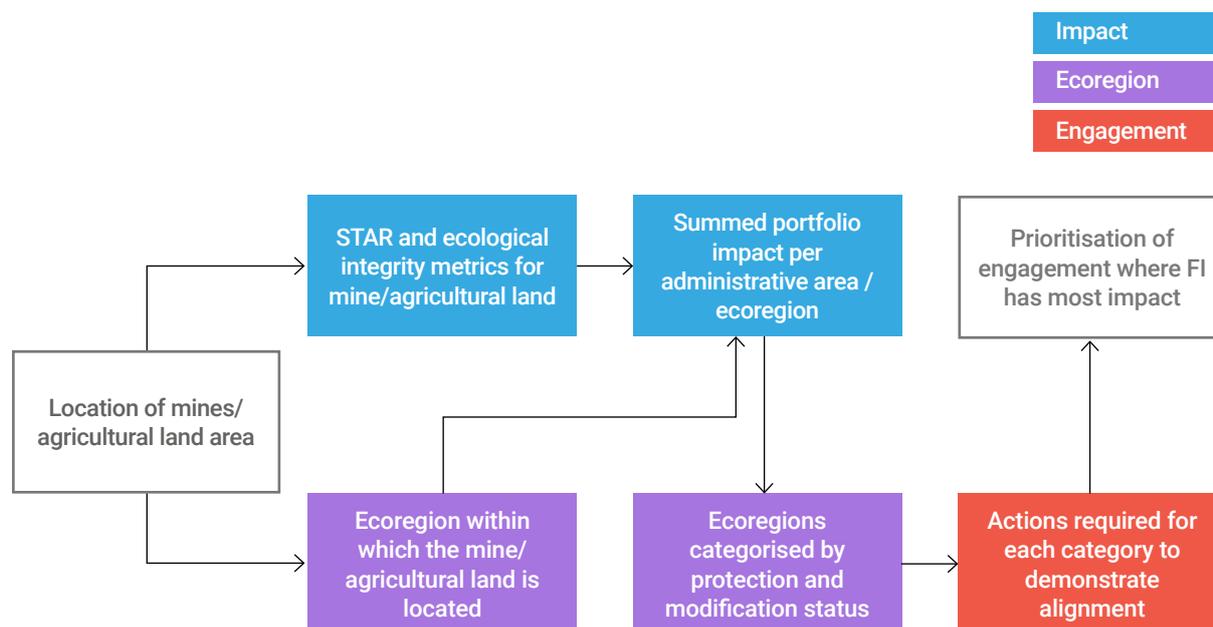
Broadly, biodiversity performance of a portfolio and alignment with global biodiversity goals is determined through exploring a portfolio's impact on ecological integrity and its potential to reduce species' extinction risk.

The ENCORE biodiversity module is based on the principle that the contribution of financial portfolios towards meeting global biodiversity goals will be determined by three main factors:

- 1. The scale and magnitude of the potential impact on biodiversity of the companies within the portfolio**
- 2. The current alignment status of the ecoregions in which the companies operate**
- 3. The biodiversity management practices applied by the companies**

ENCORE's biodiversity module quantifies the first two elements of the approach (see figure 2 below). This feeds into the third element: engagement guidance on the minimum level of biodiversity management practices required in order to be considered aligned with global goals. The approach is summarized below. A more extensive explanation of the methodology underpinning the module can be found [here](#).

Figure 2: High level conceptual framework underpinning ENCORE's biodiversity module



Scale and magnitude of the company's potential impact

Within ENCORE's biodiversity module, potential impacts are quantified through two portfolio-level metrics (for agriculture and mining), which cover two key aspects of the developing post-2020 global biodiversity framework – ecological integrity and species extinction risk. The metrics were chosen following an extensive scoping exercise (see full methods document available [here](#) for further details).

Ecological integrity risk metric

The indicator applied for the potential impact of portfolios on ecological integrity is expressed through the 'Mean Species Abundance (MSA)' metric. In the absence of site-specific data, modelled global MSA coefficients¹⁵ provide a 'best available' estimate of the potential impact of a given company's operations on ecological integrity. Within ENCORE, MSA coefficients for the impact of infrastructure, and land use are applied to mining and agriculture (cropland/pastureland), respectively. It should be recognised that impacts are unlikely to completely degrade biodiversity in all instances. Partial degradation may occur instead, and can be spread across larger areas within a landscape. However, for simplicity MSA is expressed as the equivalent area where biodiversity is reduced to zero. Following the approach from CISL's Biodiversity Impact Metric¹⁶ this area is then considered in the context of the size and level of human-induced modification of the ecoregion in order to quantify the potential contribution that could be made to increasing ecological integrity. Higher values represent a greater opportunity to increase ecological integrity by implementing appropriate management practices.

¹⁵ Available through the [GLOBIO model](#)

¹⁶ Cambridge Institute for Sustainability Leadership (2020) Measuring business impacts on nature: A framework to support better stewardship of biodiversity in global supply chains

Potential to reduce species' extinction risk metric

An indication of the potential opportunity for portfolios to contribute to reducing species extinction risk is provided through the Species Threat Abatement and Restoration (STAR) metric. This metric was developed by [IUCN](#) and will be made available through the Integrated Biodiversity Assessment Tool.¹⁷ The metric combines information on species ranges and threat assessments to quantify the potential contribution to reducing global extinction risk made by reducing pressures in a specific location. Reducing pressures on species in an area with high numbers of geographically constrained and threatened species has a higher contribution to reducing overall global extinction risk than reducing pressures in areas with low numbers of non-threatened species with large distribution ranges.

Within the ENCORE biodiversity module, STAR scores are summed over mine assets and agricultural land occupation associated with the portfolio. Higher values represent a greater opportunity to reduce species extinction risk by implementing appropriate management practices.

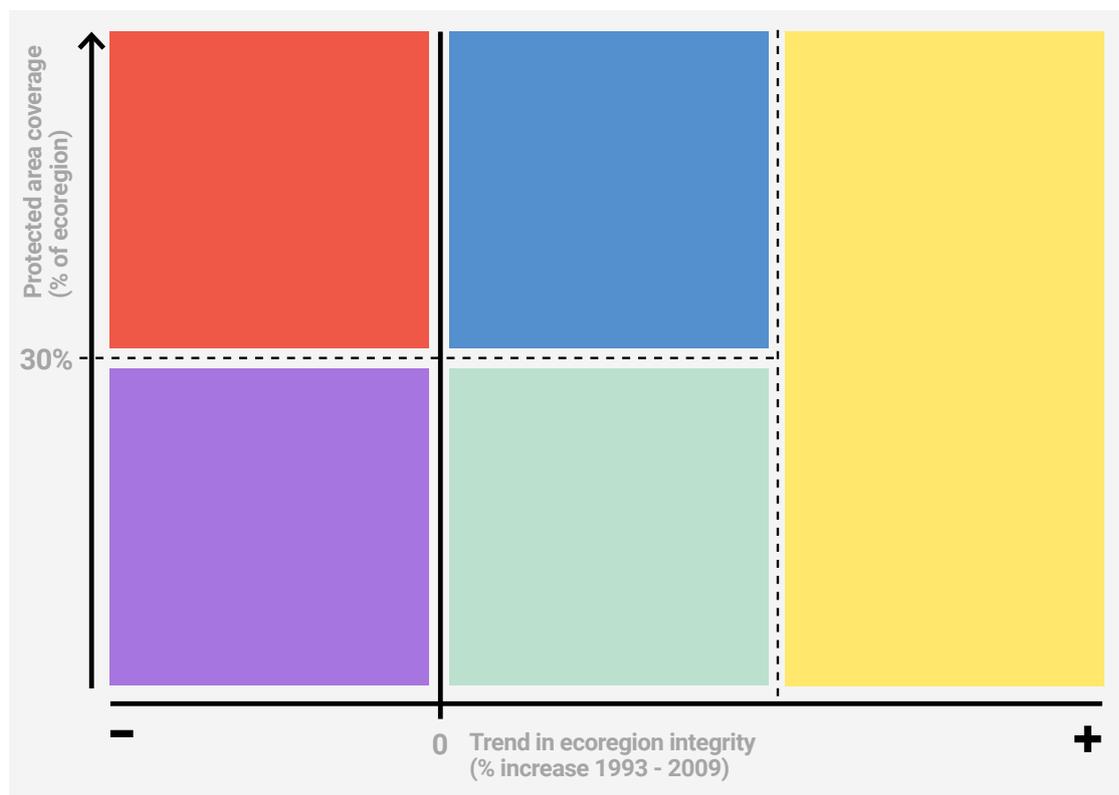
1. Current alignment status of focal ecoregions

In order to align with the current draft goals of the developing post-2020 global biodiversity framework, ecological integrity globally needs to improve significantly. Ecological integrity trends at the ecoregion level¹⁸ in the ENCORE biodiversity module assigns ecoregions into broad categories that represent their likelihood of meeting biodiversity goals. Ecoregions that are not increasing in integrity, but have increasing trends in protected area coverage, have higher potential for alignment than those where protected area coverage is not increasing. The ENCORE biodiversity module uses these two factors to assign five categories of ecoregion alignment. The total portfolio ecological integrity risk is apportioned into these five categories (see Figure 3 below).

17 [IBAT](#)

18 Using data from Beyer et al. (2019)

Figure 3. Ecoregion alignment categories used in ENCORE's biodiversity module



- (A) On track to meet target
- (D) Integrity declining but protection increasing
- (B) Protected and integrity stable or improving
- (E) Integrity declining and insufficiently protected
- (C) Stable or improving but insufficiently protected

2. Biodiversity management practices applied

In the first component of the ENCORE biodiversity module, the sub-section titled “Portfolio breakdown by ecoregion status” outlines a set of minimum management actions required to achieve alignment with global biodiversity goals.

This helps recognise that alignment with the global biodiversity goals will also be determined by the biodiversity management practices put in place by the companies in that portfolio to mitigate biodiversity-related risks.

Different levels of ambition in management practices will be required to align with goals in different ecoregions depending on their current alignment status. For example, for a company operating in ecoregions where ecological integrity is improving and protected area coverage is at target levels, commitments to avoid operating within protected areas and a structured application of the mitigation hierarchy to manage their impacts may be a sufficient contribution to achieving alignment with the global goals. However, for a company with operations in ecoregions where ecological integrity is decreasing and protected area coverage is low, they would likely need to take more ambitious actions, such as committing to achieving net gain for biodiversity for those operations in order to achieve alignment with the global goals. Financial institutions could then engage with

companies to ensure their portfolio meets net gain objectives and can be considered aligned with global biodiversity goals.

As company and site-specific biodiversity management information is not readily available, users will need to build on this knowledge presented in the module by engaging with companies within their portfolio. The information included in the ENCORE biodiversity module on potential biodiversity impact exposure and ecoregion alignment guides users in identifying appropriate engagement strategies. This would help refine the assessment of portfolio alignment based on company and site level management, as well as drive positive change in areas where companies have the greatest opportunity to contribute to achieving global biodiversity goals.

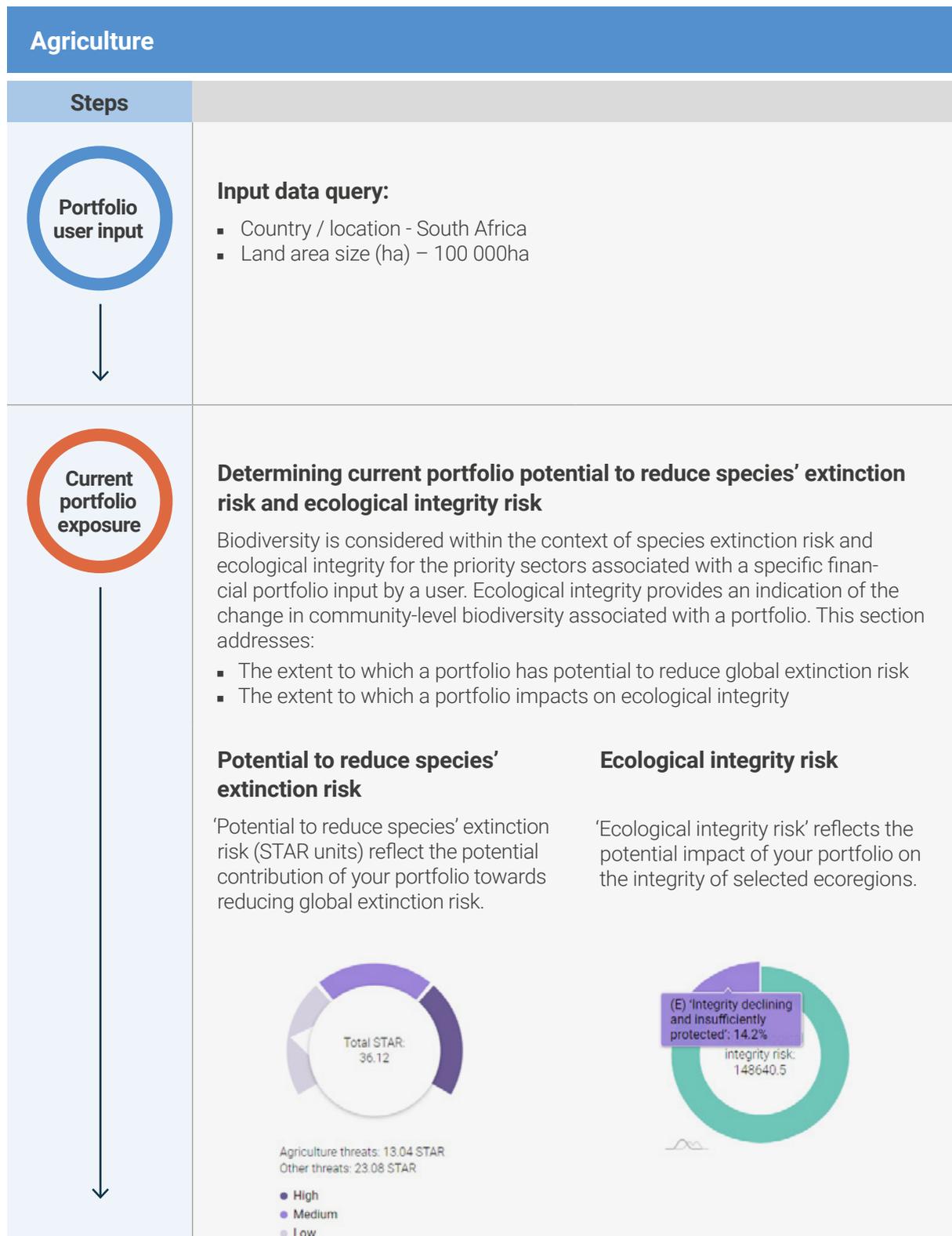
Module features

The key biodiversity features in the module are illustrated by the following agricultural portfolio, and mining asset-based analysis (see figures 4 and 5).

“For ING, addressing biodiversity is essential to retain our position as a climate leader. The new ENCORE biodiversity module will help us understand the risks and opportunities in our portfolio in more detail, and enable us to integrate biodiversity alongside climate in our risk management and engagement processes.”

Sandra Schoonhoven, Head of Sustainability, ING Group

Figure 4. Agricultural application in ENCORE's biodiversity module



Steps

Ecoregion alignment

Alignment of portfolios with ecoregion targets

- Displays the ecoregion categories associated with the input portfolio. Ecoregions were assessed for their trend in ecological integrity and protected area coverage—and then assigned an alignment category based on these combined values.

What do the ecoregion alignment categories mean?
[View details](#)

Ecoregion alignment

- (A) 'On track to meet target': 0%
- (B) 'Protected and integrity improving': 0%
- (C) 'Improving but insufficiently protected': 85.8%
- (D) 'Integrity declining but protection increasing': 0%
- (E) 'Integrity declining and insufficiently protected': 14.2%

Global exposure

Global exposure

Global overview of current portfolio exposure—Ecoregion alignment

The overview provides a more granular view of the aggregated metrics for potential to reduce species' extinction risk and ecological integrity risk at the portfolio level. For species' extinction it provides a breakdown by administrative units within countries associated with the portfolio. For ecological integrity it provides a breakdown by ecoregion associated with the portfolio.

Identifying hotspots of opportunity/risk in agricultural portfolios.

Determining the level of portfolio alignment based on the alignment status of associated ecoregions.

Provides an additional layer of granularity by displaying results per representative ecoregion and country.

Assists in identifying highest risk ecoregions and administrative units within countries.

Potential to reduce species' extinction risk

This table provides a breakdown of STAR values across the different sub-national administrative units for countries associated with your input portfolio.

Country	Pasture land & Cropland <small>Type: All</small>	Administrative boundary <small>Type: Representative</small>	Potential to reduce species' extinction risk (STAR)
Algeria	Cropland	Tiaret	2.26e-02
Canada	Pasture land	Alberta	5.69e-03
Madagascar	Cropland	Toamasina	35.37

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Options for increasing alignment

This section explains what management actions and interventions are required to move an organisation towards alignment with global biodiversity goals and provides guidance on engagement strategies which contribute towards increasing alignment. More specifically it provides advice on:

- Structuring and framing the level and type of engagement guidance required to increase the alignment of portfolios with global biodiversity goals and targets.
- Understanding what types of actions can be taken towards potential portfolio alignment with global biodiversity goals.
- Provides guidance on engagement strategies to contribute towards further alignment.

Engagement depth ▾ Engagement scope ▾ SBTN Action ▾ Biodiversity metric ▾ Future scenario ▾

Screening and assessment process

Does the company follow best practice guidance for identifying and managing environmental risks?

[More info >](#)

High priority

Avoiding protected areas

Does the company avoid farming within protected areas?

High priority

Avoiding protected areas

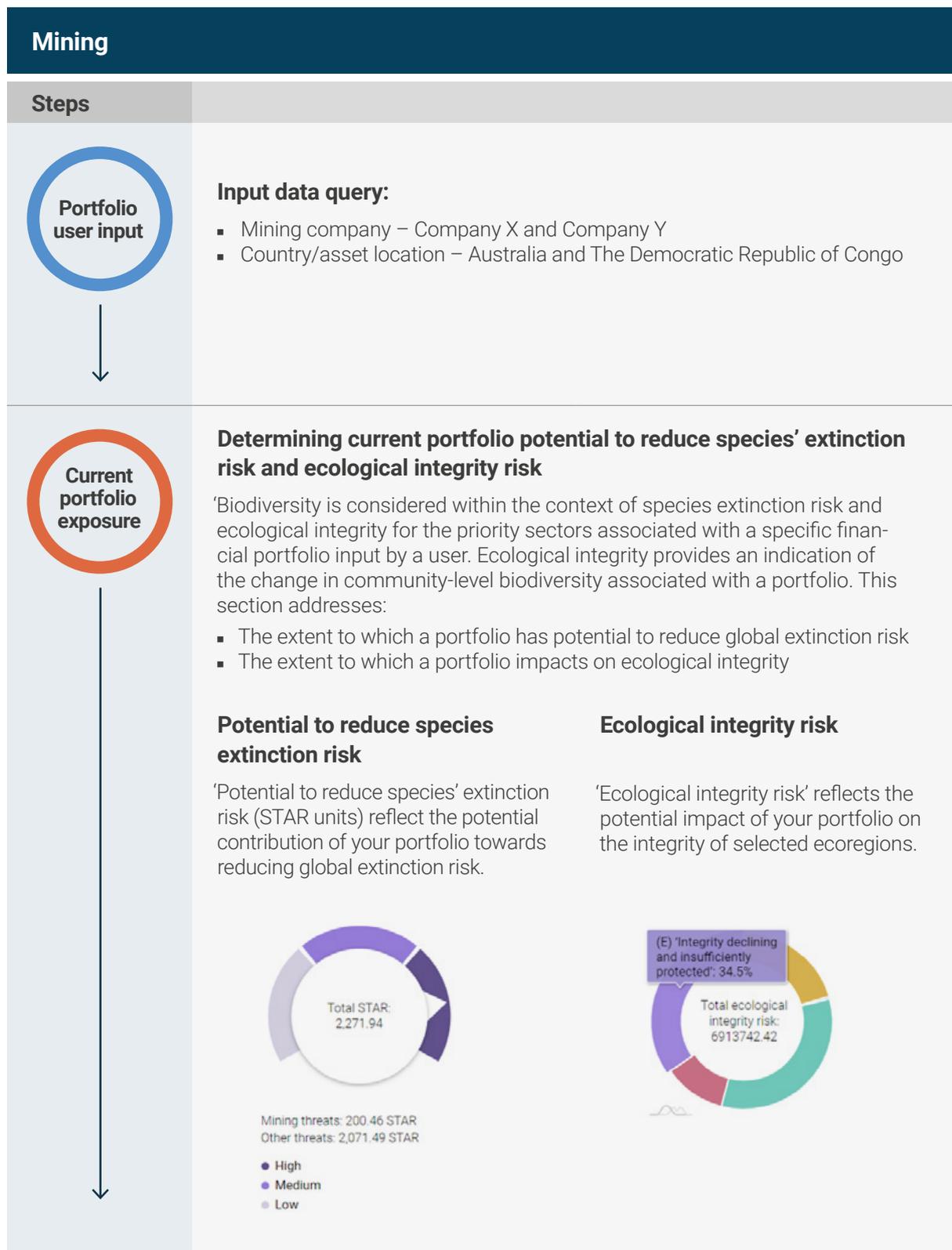
Does the company acknowledge risk of farming on the boundaries of protected areas?

High priority

(E) 'Integrity declining and insufficiently protected'

- Commitment to avoid operating in protected areas
- Structured treatment of the mitigation hierarchy throughout biodiversity management
- Adoption of Net Gain targets for biodiversity management

Figure 5. Mining application in ENCORE's biodiversity module



Steps

Ecoregion alignment

Alignment of portfolios with ecoregion targets

- Displays the ecoregion categories associated with the input portfolio. Ecoregions were assessed for their trend in ecological integrity and protected area coverage - and then assigned an alignment category based on these combined values.

Ecoregion alignment

- (A) On track to meet target: 19.5%
- (B) Protected and integrity stable or improving: 0.4%
- (C) Stable or improving but insufficiently protected: 35.4%
- (D) Integrity declining but protection increasing: 10.6%
- (E) Integrity declining and insufficiently protected: 34.1%

Global exposure

Global overview of current portfolio exposure – Ecoregion alignment

The overview provides a more granular view of the aggregated metrics for potential to reduce species' extinction risk and ecological integrity risk at the portfolio level. For species' extinction it provides a breakdown by administrative units within countries associated with the portfolio. For ecological integrity it provides a breakdown by ecoregion associated with the portfolio.

- Identifying portfolio-level mining impacts influenced by possible subsets in the larger mining portfolio.
- Determining the level of portfolio alignment with global and regional ecoregions
- Provides an indication of the average and range of potential to reduce species extinction risk and ecological integrity risk within a portfolio, also compared to a sector average.



Sector-level scenario exposure

Potential future biodiversity exposure

This section within the Biodiversity Module considers and presents future scenarios and their associated biodiversity impacts, as well as future sector scenarios and what their associated biodiversity impacts will be. This helps financial institutions to identify:

- Potential pathways to increase positive impacts within mining portfolios.
- Transitioning mining portfolios to a low energy future.

Portfolio commodity overview

Lists the commodities associated with the portfolio. It indicates whether these commodities have been assessed as required to support the energy transition.

Explore each commodity

Average and range of potential direct impacts on biodiversity of each commodity can be explored. Estimated at the sector-level and cover both existing and potential future exploitation locations.

Portfolio commodity overview

This breakdown shows the different commodities associated with your portfolio. It highlights whether these commodities have been assessed as required to support the energy transition, meaning demand for them is likely to increase in future.

Supporting Energy Transition	Not Supporting Energy Transition	Not Assessed
Bauxite Copper Gold Iron Ore Manganese Nickel Tin Vanadium Zinc	Chromite Coal Diamonds Ilmenite Potash	

Explore each commodity

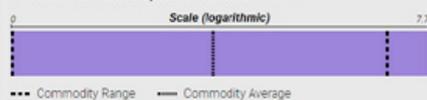
Here, the average and range of potential direct impacts on biodiversity of each commodity can be explored. These are estimated at the sector level and cover both existing and potential future exploitation locations.

Bauxite

[View details](#)

Bauxite

Potential to reduce species' extinction risk



Ecological integrity risk





Options for increasing alignment

This section explains what management actions and interventions are required to move an organisation towards alignment with global biodiversity targets and provides guidance on engagement strategies which further contribute towards alignment. More specifically it provides advice on:

- Structuring and framing the level and type of engagement guidance required to increase the alignment of portfolios with global biodiversity goals and targets.
- Understanding what types of actions can be taken towards potential portfolio alignment with global biodiversity goals.
- Provides guidance on engagement strategies to contribute towards further alignment.

Actions towards potential portfolio alignment

Use this section to understand what types of actions you can take towards potential portfolio alignment with global biodiversity goals. These questions can be used in engagement discussions with companies.

Engagement depth ▾ Engagement scope ▾ SBTN Action ▾ Biodiversity metric ▾ Mitigation Hierarchy ▾

World Heritage sites and legally designated protected areas

Does the company have policies and strategies in place to avoid operating in and/or impacting World Heritage Sites and protected areas?

[More Info >](#)

High priority

Screening and assessment process

Does the company follow best practice guidance for identifying and managing environmental risks?

[More Info >](#)

High priority

Species protection

Does the company have any measures in place to assess the presence of IUCN Red List species in the project area?

[More Info >](#)

High priority

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(D) 'Integrity declining but protection increasing'

- Commitment to avoid operating in protected areas
- Structured treatment of the mitigation hierarchy throughout biodiversity management
- Adoption of Net Gain targets for biodiversity management

(E) 'Integrity declining and insufficiently protected'

- Commitment to avoid operating in protected areas
- Structured treatment of the mitigation hierarchy throughout biodiversity management
- Adoption of Net Gain targets for biodiversity management

(A downloadable pdf version is available [here](#) for further details).

Hypothetical case studies

The following case studies present potential approaches and applications for the ENCORE biodiversity module. The first case study looks at how a bank might analyse its global agriculture portfolio, while the second study focuses on how an investor could engage with its holdings in the mining sector.



Case Study Application 1

User profile: Private bank

Organisational focus: Agriculture portfolio

country_iso	Crop_area	Crop_turnover	Pasture_area	Pasture_turnover
CAN	191523845			
MYS		8061973		
PNG	14843948			
AZE		7231110		
MDG	157103254			
GAB		8335596		
LKA	173993053			
BRN		687453		
BLZ	120323391			
CHE				7841436
SWZ			67386640	
MRT				8337550
SAU			65774048	
LCA				9483645
CHL			186352182	
JAM				5714631
COL			82872100	
MKD				7166050

Products and services:

- Project finance (loans to public and private sector, including small and medium-sized enterprises – SMEs)
- Guarantees (partial credit)
- Corporate loan book

Environmental, Social, Governance priorities

- Actively engaging in global sustainability initiatives
- Align with global environmental goals (e.g. Paris Climate Agreement, Sustainable Development Goals), and specifically the upcoming goals under the Post-2020 Global Biodiversity Framework
- Signatory to the Principles for Responsible Banking

Action plans

- Set organisation-wide policies for engagement with sectors on sustainability issues, particularly relating to biodiversity
- Increase access of financial services and products for SMEs involved in biodiversity-positive business actions

- Invest in biodiversity-positive activities, such as wildlife conservation or renewable energy
- Set biodiversity net gain policy across the bank

Desired outcome

The bank wishes to set up a nature-positive biodiversity strategy for their agriculture portfolio in line with the developing Post-2020 Global Biodiversity Framework.

Step 1: Map exposure to high-risk areas

The bank inputs its global holdings of agricultural assets by country into the ENCORE biodiversity module. The module will produce a portfolio analysis of which administrative units within countries and which ecoregions show the highest opportunity/risk. For each country and ecoregion, the module will show the overall average, together with the average value for cropland and pasture land within that country and ecoregion, to enable identification of the type of agriculture which has the highest opportunity/risk. This could be followed up using tools such as Trase which can help identify high-risk regions and commodities. Most developed countries will have a low potential to reduce species' extinction risk, while ecological integrity risk may be more varied.



Portfolio details

Country name: Australia
Cropland (area): 100000 ha
Pasture land (area): 200000 ha

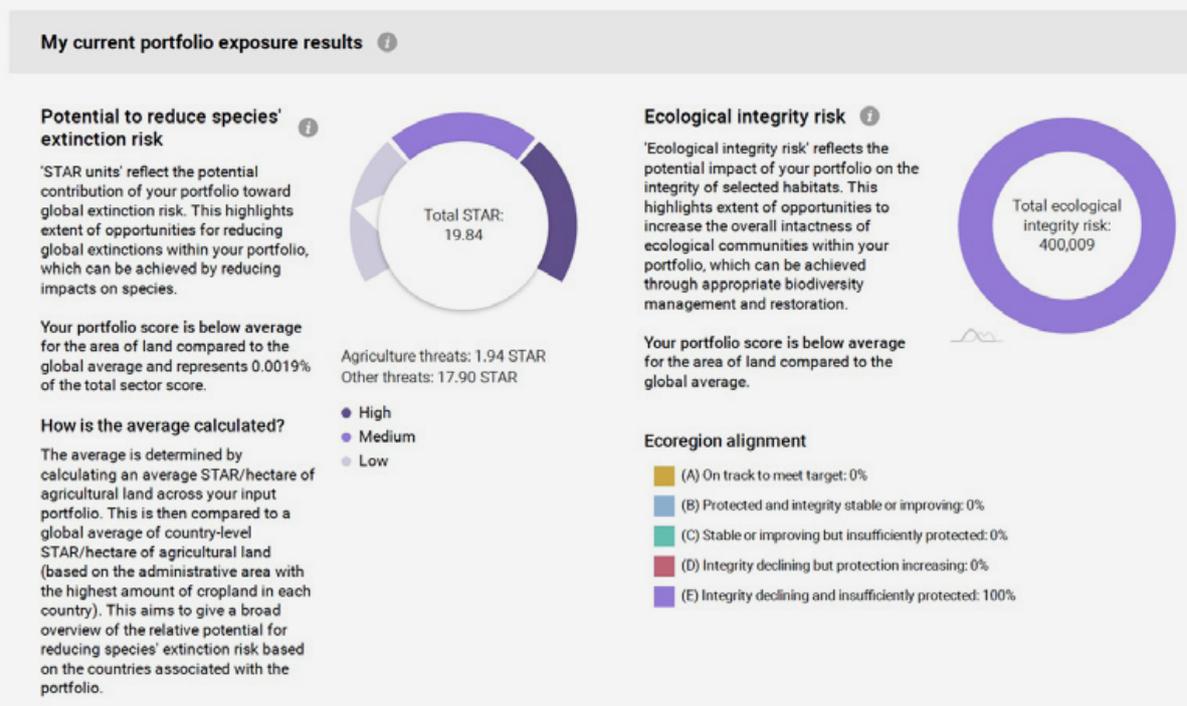


Figure 6: Portfolio analysis example with high Category E percentage.

The bank sees that most of the portfolio’s impact falls in Category E ecoregions for the ecological integrity risk metric (i.e. the least aligned). This means their activities really need to achieve Net Gain in order to be considered aligned. Using the second component of the module, the bank also sees that its activities in cropland have a higher potential exposure for the biodiversity goal relevant metrics than its activities in pasture land. This suggests that it should focus initially on crops.

Step 2: Target setting

The bank takes this information and feeds it back to internal stakeholders. The bank decides to set a nature-positive target by 2030, with the aim of being nature-positive for all crops in its high priority geographies by 2025. The bank publishes this target along with a roadmap to achieve it.

Step 3: Formulate engagement strategy

Using the outputs from Step 1, the bank identifies which holdings are most material, based on potential exposure to biodiversity risk and the size of the holding. The bank uses the engagement guidance from the biodiversity module to formulate an engagement strategy, starting with the most material holdings. The guidance includes a checklist of various management actions and commitments that could be implemented in order to work towards alignment with global biodiversity goals.

Actions towards potential portfolio alignment

Use this section to understand what types of actions you can take towards potential portfolio alignment with global biodiversity goals. These questions can be used in engagement discussions with companies.

[View filter definitions](#)

Avoiding protected areas

Does the company avoid farming within protected areas?

Avoiding protected areas

Does the company acknowledge risk of farming on the boundaries of protected areas?

Screening and assessment process

Does the company have a robust screening process for potential sites (e.g. use of the Integrated Biodiversity Assessment Tool)?

[More info >](#)

Screening and assessment process

Does the company take the various IUCN Protected Area Management Categories into consideration regarding allowable farming production processes?

[More info >](#)

Screening and assessment process

Does the company follow best practice guidance for identifying and managing environmental risks?

[More info >](#)

Measurement

How does the company measure levels of biodiversity impact avoidance?

Figure 7: Excerpt of Engagement Guidance for agricultural portfolio analysis as per figure 6 above

Step 4: Implement engagement strategy

The bank works with stakeholders in these high priority areas to adapt production practices with the aim of making them nature-positive. The investor works with management to establish a time frame to implement each of the actions.

Once all high priority areas have been assessed and there is confidence that robust management actions are in place, the bank works down the priority list to eventually cover all activities.

Step 5: Check and report on progress

The bank updates its portfolio in the biodiversity module annually to ensure it is still looking at the highest priority areas.

The bank regularly reports on its progress towards the target and the implementation of its nature-positive roadmap.

Other applications:

The strategy could also be used by investors to engage with their equity, fixed income or real asset portfolios.

Case Study Application 2

User profile: Institutional investor

Organisational focus: Mining portfolio

company_name	country_isos
Glencore	AUS, ZAF
BHP Group	AUS, ZAF, BRA
Rio Tinto	AUS, BRA
Vale SA	BRA
Southern Copper Corp	PER
Anglo American	AUS, ZAF
Jiangxi Copper Co Ltd	CHN
Fresnillo	MEX
Teck Resources	CAN
Vedanta	AUS, ZMB
AngloGold Ashanti	AUS, TZA
Freeport-McMoRan	CHL

Products and services:

- ESG investment funds

Environmental, Social, Governance priorities

- Actively engaging in global sustainability initiatives
- Align with global environmental goals (e.g. Paris Climate Agreement, Sustainable Development Goals), and specifically the upcoming goals under the Post-2020 Global Biodiversity Framework
- Signatory to the Principles for Responsible Investment and Climate Action 100+

Action plans

- Set organisation-wide policies for engagement with sectors on sustainability issues, particularly relating to biodiversity
- Shift portfolio holdings towards companies involved in climate positive and biodiversity-positive business actions
- Set net-zero emissions target for the investment funds
- Set biodiversity net gain policy for the investment funds

Desired outcome

The investor wants to create a nature-positive engagement strategy for its investments in the mining sector.

Step 1: Map exposure to high-risk areas

The investor inputs its holdings of mining companies into the biodiversity module. This highlights which administrative units within countries and which ecoregions are associated with the mining companies (based on the locations of their mines) and their associated biodiversity risk. It will also highlight which commodities are potentially positive contributors to the transition to a low carbon economy.

Step 2: Cross-reference biodiversity risk and transition risk

The investor gathers external data from companies or third-parties to analyse those companies in high-risk regions to identify exactly where its mines are, and what commo-

ties they are mining. Mining assets can be arranged into a matrix which assesses potential exposure to biodiversity risk (using the species extinction and ecological integrity metrics) and transition risk (using the commodity contribution to transition data) and identifies those mines which are high risk in one or both areas.

Step 3: Formulate engagement strategy

The investor formulates an engagement strategy, starting with the most material holdings from both a transition risk and potential exposure to biodiversity risk perspective. The guidance includes a checklist of various management actions and commitments that should be implemented to move towards alignment with global biodiversity goals.

Step 4: Implement engagement strategy

Where a company is operating in a high-risk region but is mining commodities which may support the low-carbon transition, the investor works with the company to ensure the appropriate management actions are being implemented, using the biodiversity module engagement guidance. There is also an opportunity for investor groups such as Climate Action 100 to run collaborative engagements with high-priority mining companies.

Where a company is operating in a high-risk region and mining commodities which are not contributing to the low-carbon transition, the investor engages with the company to assess the viability of such mining assets. Where the company is not following best practice, the investor prioritises engagement and may decide to reduce its holding in the company over time.

Other companies and mines are subject to engagement according to priorities, with those mines producing commodities which help the transition and are in improving biodiversity regions being the lowest priority.

Step 5: Check and report on progress

The investor updates its portfolio in the biodiversity module annually to ensure it is still looking at the highest priority areas.

The investor runs annual checks to ensure that management actions are being taken in line with agreed timeframes and engaging where this is not the case.

The bank regularly reports on its progress towards the target and the implementation of its nature positive strategy.

Other applications:

The strategy could also be used by banks to engage with their project finance and corporate loan books.

Summary and next steps

Financial institutions play a pivotal role in halting and reversing biodiversity loss. A key next step for financial institutions is to set targets for reducing biodiversity impacts of the companies they lend to, invest in or insure.

An increasing number of financial institutions are setting biodiversity targets in various forms. ASN Bank¹⁹ has declared they will have a net positive effect on biodiversity by 2030.²⁰ Storebrand aims to have an investment portfolio that does not contribute to deforestation by 2025.²¹ Federated Hermes says biodiversity is now a stewardship priority²², and the investor is encouraging companies they invest in to commit to having a net-positive impact on biodiversity throughout their operations and supply chains. Insurers are gathering through the Principles for Sustainable Insurance (PSI) to consider what a Nature Positive goal would look like for the insurance sector. Thirty leading banks are working together on guidance for biodiversity target-setting via the Principles for Responsible Banking (see box).

Approximately 37 financial institutions with EUR4.8 trillion of assets under management have signed the Finance for Biodiversity Pledge.²³ The Pledge represents a commitment to collaborate and engage on biodiversity with companies they finance, assess their own biodiversity impacts, set targets and report publicly on their biodiversity performance by 2024 at the latest.

The ENCORE biodiversity module can assist in laying the foundation for biodiversity-related target-setting by the finance sector in the priority sectors of agriculture and mining.

19 https://ec.europa.eu/environment/biodiversity/business/assets/pdf/Biodiversity_accounting_to_monitor_for_net_gain_target_at_portfolio_level.pdf

20 <https://www.asnbank.nl/over-asn-bank/duurzaamheid/biodiversiteit/biodiversity-in-2030.html>

21 <https://www.storebrand.no/en/asset-management/sustainable-investments/exclusions/deforestation-policy/>

22 <https://www.hermes-investment.com/eos-insight/eos/our-commitment-to-nature/>

23 <https://www.financeforbiodiversity.org/>

Principles for Responsible Banking and Biodiversity

The Principles for Responsible Banking (PRB) has identified biodiversity as a key impact area from banking and is due to release guidance on biodiversity target-setting in mid-2021. A group of 30 geographically-diverse PRB Signatories have come together with UNEP FI, UNEP-WCMC and the Science-based Targets Network to develop the guidance. The group has prioritised headline targets on important themes where banking can make a difference: nature-positive financial flows, nature-based solutions to climate change, and deforestation free portfolios and sustainable blue economy.

A key message of the guidance is that if banks are to make a meaningful contribution towards reversing biodiversity loss by 2030, and help restore nature by 2050, they should be prepared to set and deliver on interim targets to ensure they achieve their goals. While work continues on the post-2020 Global Biodiversity Framework, and data and metrics for biodiversity targets, there are many immediate measures that financial institutions can take to better align their portfolios with Sustainable Development Goals 14 and 15 (protect marine and terrestrial ecosystems), including using tools such as ENCORE. The guidance contains a number of practical case studies synthesised from leading banks and example KPIs which help banks visualize practical next steps - individually and as a group of Signatories. It includes a detailed technical annex with further resources for banks to successfully align their portfolios with the forthcoming post-2020 Global Biodiversity Framework.

Guidance available via: [Principles for Responsible Banking – UN Environment Programme – Finance Initiative \(unepfi.org\) on 24 June 2021.](#)

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UNEP-WCMC

The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) is a global Centre of excellence on biodiversity. The Centre operates as a collaboration between the UN Environment Programme and the UK-registered charity WCMC. Together we are confronting the global crisis facing nature.

unep-wcmc.org

UNEP FI

The UN Environment Programme Finance Initiative (UNEP FI) is a partnership between UNEP and the global financial sector to mobilize private sector finance for sustainable development. UNEP FI works with more than 350 members—banks, insurers, and investors—and over 100 supporting institutions—to help create a financial sector that serves people and planet while delivering positive impacts.

unepfi.org

Global Canopy

Global Canopy is an innovative environmental organisation that targets the market forces destroying tropical forests. Since 2001, we have been testing new approaches to tackling deforestation, and guiding companies, investors and governments worldwide to think differently about our planet's forests.

globalcanopy.org

About the Natural Capital Finance Alliance

The Natural Capital Finance Alliance (NCFA) is a finance sector led initiative, providing expertise, information and tools on material aspects of natural capital for financial institutions. The NCFA secretariat is run jointly by UNEP FI, Global Canopy and UNEP-WCMC. They work to support financial institutions in integrating natural capital considerations into decision-making.

naturalcapital.finance



ENCORE

encore.naturalcapital.finance