

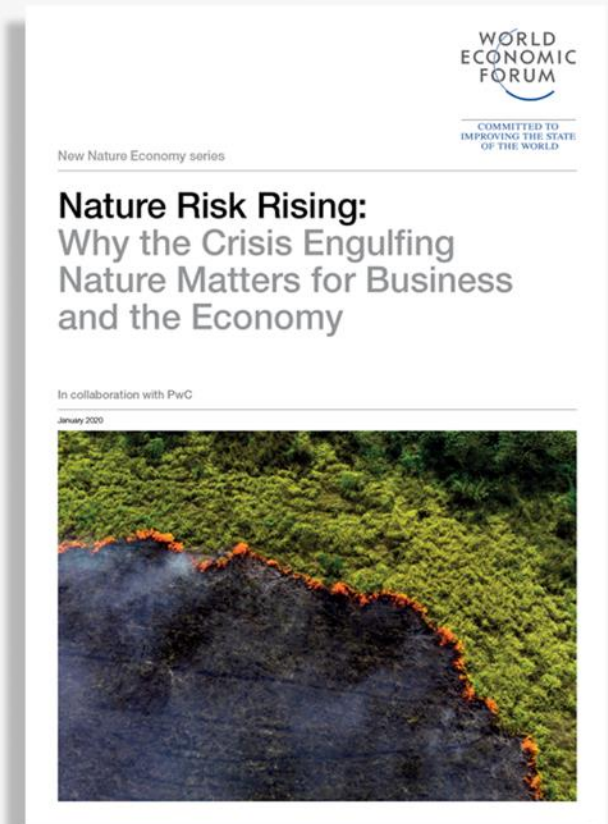


Embedding Natural Capital into Financial Decision-making Processes

During the last decade nature and biodiversity loss has gone from being predominately a medium to long term concern to being an everyday reality.

More than 50% of the global economy relies on biodiversity, about **USD 44 trillion**, is moderately or **highly dependent on nature** and its services, while the Global Futures Initiative estimates a business-as-usual scenario will see biodiversity loss cause financial losses of USD 10 trillion between 2011 and 2050.

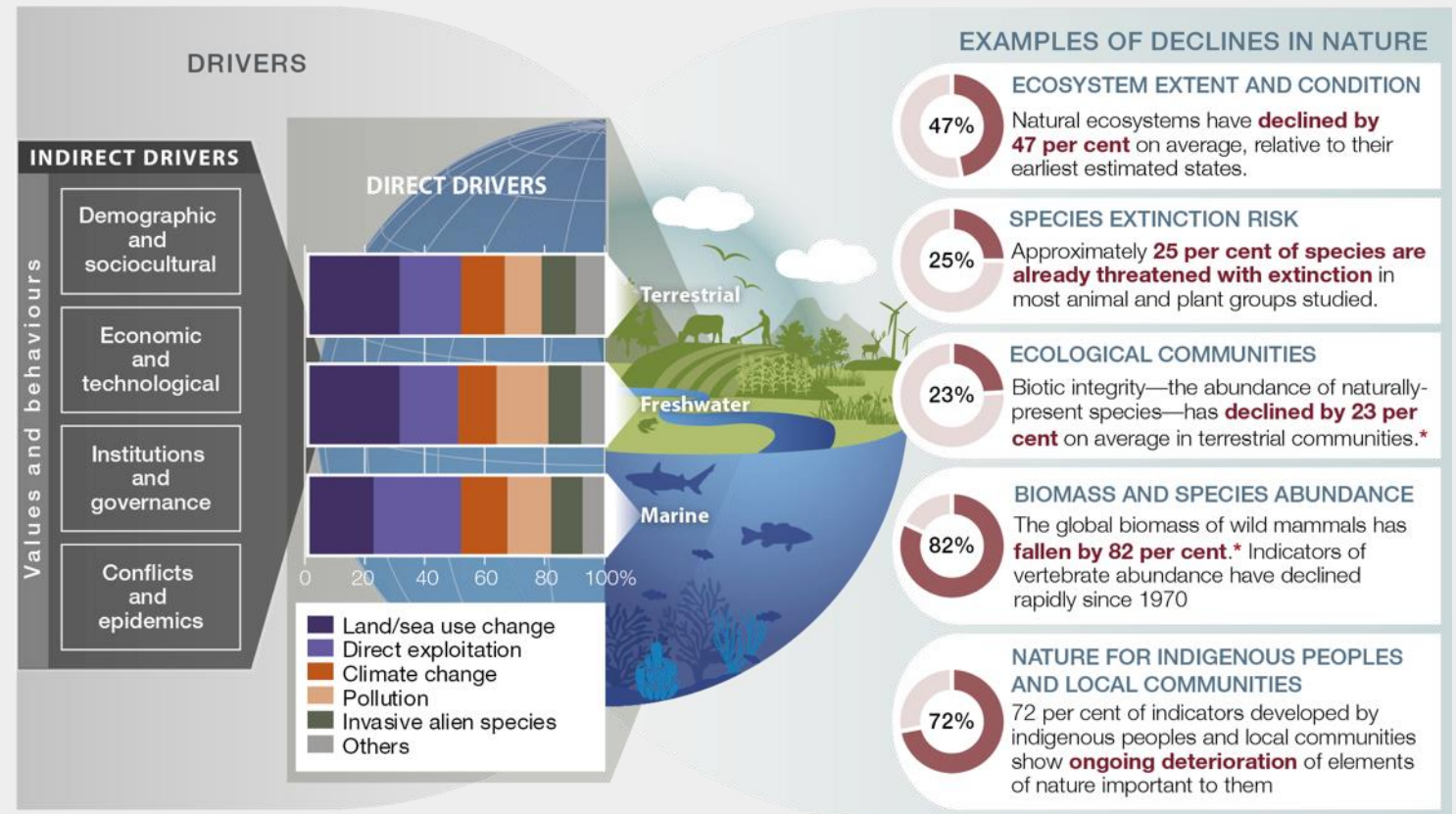
The emergence of zoonotic diseases and the COVID-19 pandemic outbreak, with its link to nature and wildlife, has made it increasingly evident that biodiversity impacts and risk should be on every business' risk radar.



Natural Capital related risks are material

The Global Assessment released by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) states that “much of nature has already been lost, and what remains is continuing to decline.” To date, 70% of land systems, 50% of freshwater, and 40% of oceans and seas have been significantly altered. Previous monetary values associated with this loss is estimated at USD 125-145 trillion/year in 2011.

<https://ipbes.net/global-assessment>



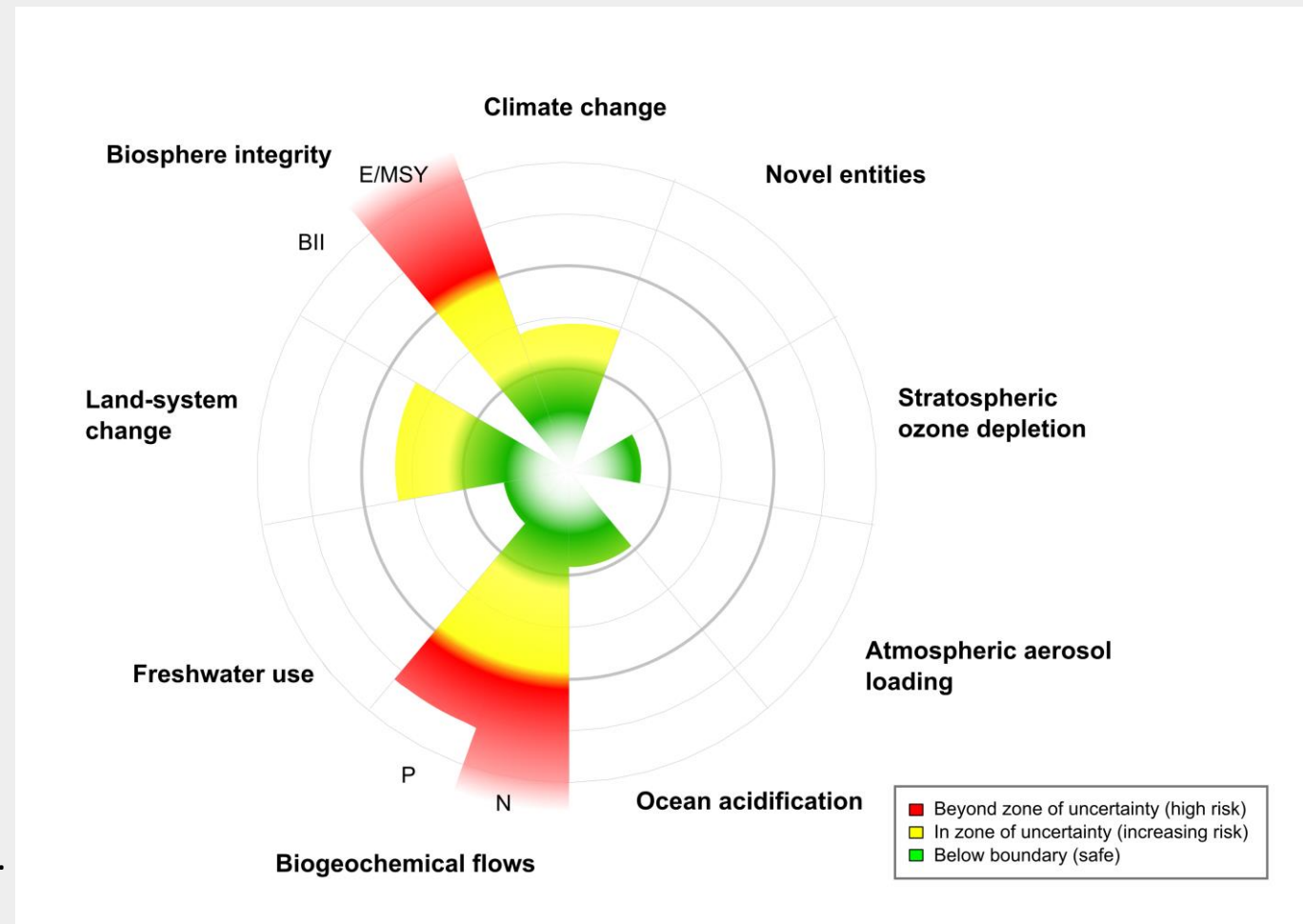
The 'Twin' Emergency

The Twin Emergency of Climate Change and Biodiversity loss is clearly illustrated by the Planetary Boundary Concept. Both are 'two sides of the same coin'. Biodiversity loss is inherently linked to climate change and achieving global goals for addressing one cannot go without achieving those of the other.

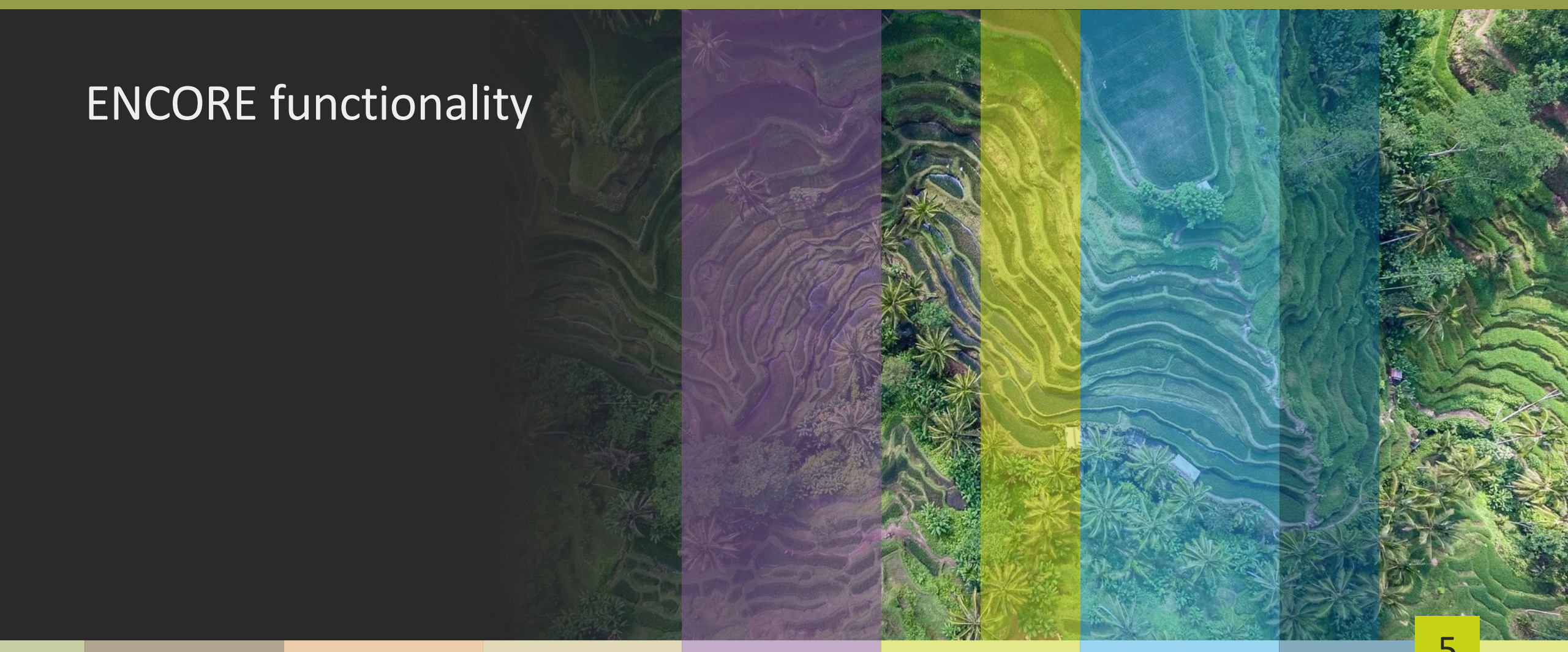
Climate change impacts on biodiversity will affect its ability to provide crucial ecosystem goods and services upon which business production processes depend, such as water and food security. In addition, climate change will affect ecosystem stability and resilience, and this is already being seen in both mining and agricultural production systems that are becoming less resilient to shocks and surprise, such as water shortages, pests and disease.

Biodiversity loss has become a systemic risk of yet unknown magnitude and there is at present too little action aiming to tackle both the interlinked biodiversity and climate change crisis.

IPBES, 2019
<https://www.stockholmresilience.org>



ENCORE functionality





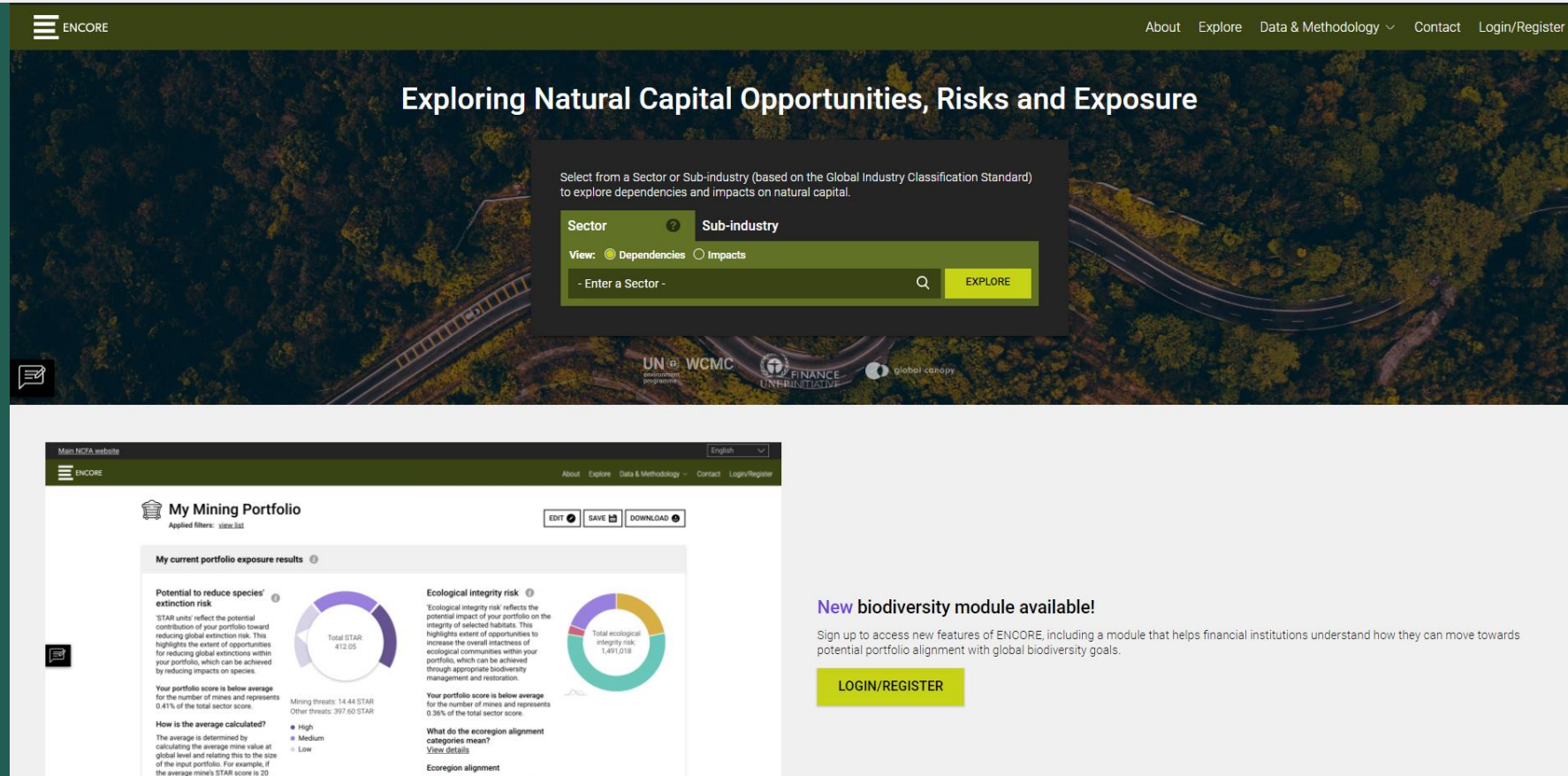
- Synthesises large body of literature on natural capital



- Helps users build understanding of dependencies and impacts



- Provides a foundation for further detailed analyses



The screenshot displays the ENCORE website interface. At the top, there is a navigation bar with the ENCORE logo and links for About, Explore, Data & Methodology, Contact, and Login/Register. Below the navigation bar is a large banner with the title "Exploring Natural Capital Opportunities, Risks and Exposure". A search bar is prominently featured, allowing users to select a Sector or Sub-industry (based on the Global Industry Classification Standard) to explore dependencies and impacts on natural capital. The search bar includes a "View" dropdown with options for Dependencies and Impacts, and a search button labeled "EXPLORE".

Below the banner, there is a section titled "My Mining Portfolio" with a sub-header "Applied filters: view list". This section displays "My current portfolio exposure results" and includes two donut charts. The first chart, titled "Potential to reduce species' extinction risk", shows a "Total STAR" of 412.65. The second chart, titled "Ecological integrity risk", shows a "Total ecological integrity risk" of 1,491,018. Both charts include a legend for "High", "Medium", and "Low" risk levels. The text below the charts explains that the average is determined by calculating the average mine value at global level and relating this to the size of the input portfolio. For example, if the average mine's STAR score is 20, the average mine's ecological integrity risk is 1,491,018.

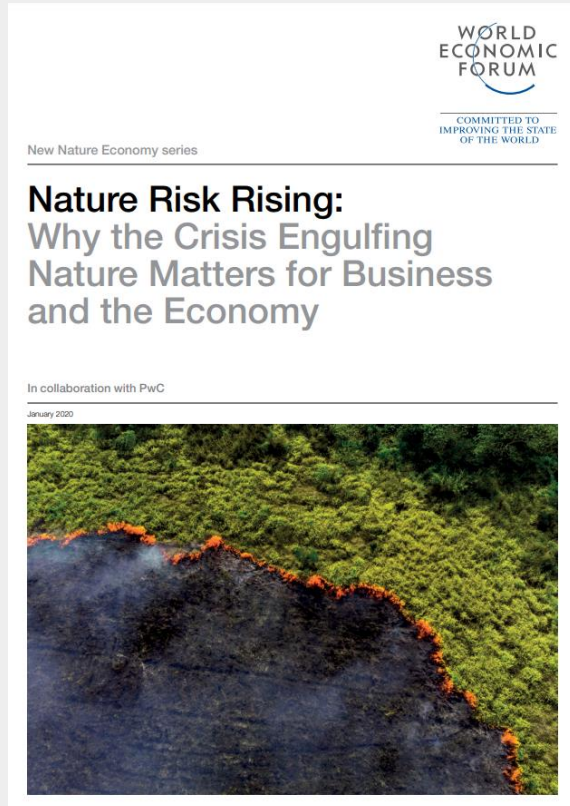
At the bottom right of the screenshot, there is a yellow button labeled "LOGIN/REGISTER".

New biodiversity module available!

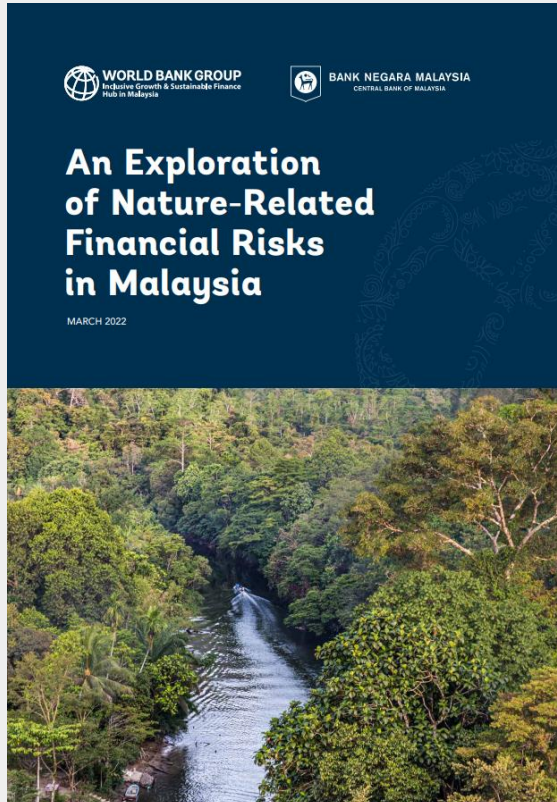
Sign up to access new features of ENCORE, including a module that helps financial institutions understand how they can move towards potential portfolio alignment with global biodiversity goals.

[LOGIN/REGISTER](#)

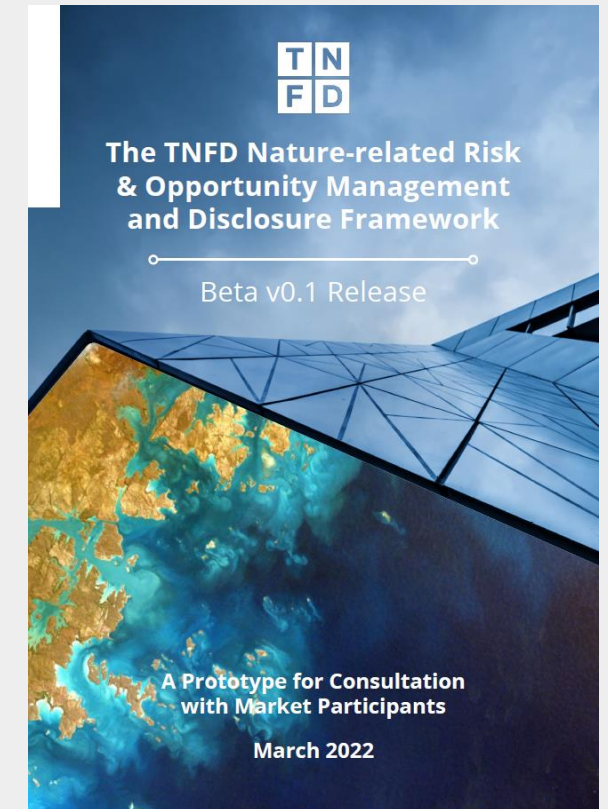
ENCORE data has been used as the basis for high-profile reports



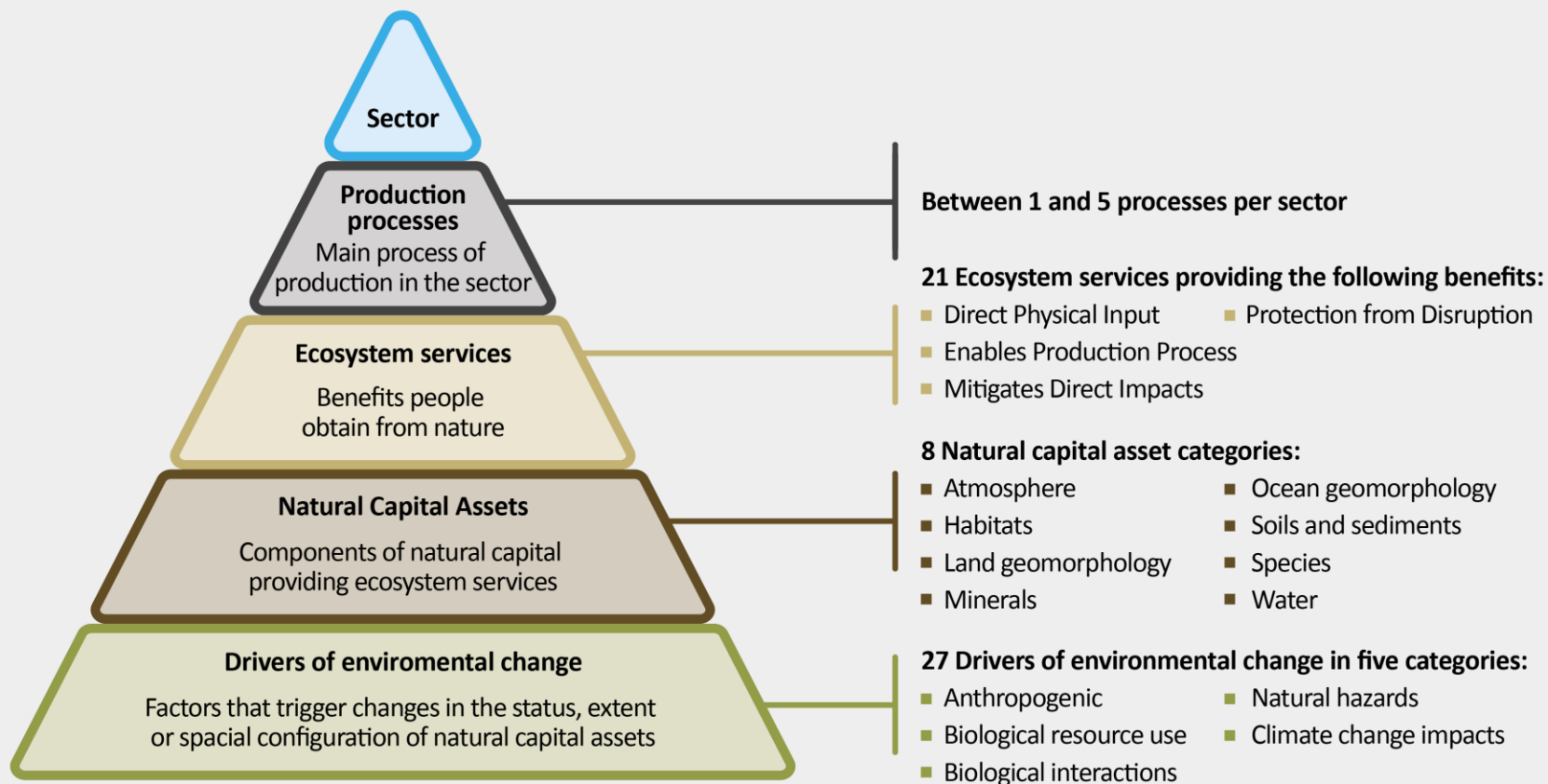
**World Economic Forum
(January 2020)**

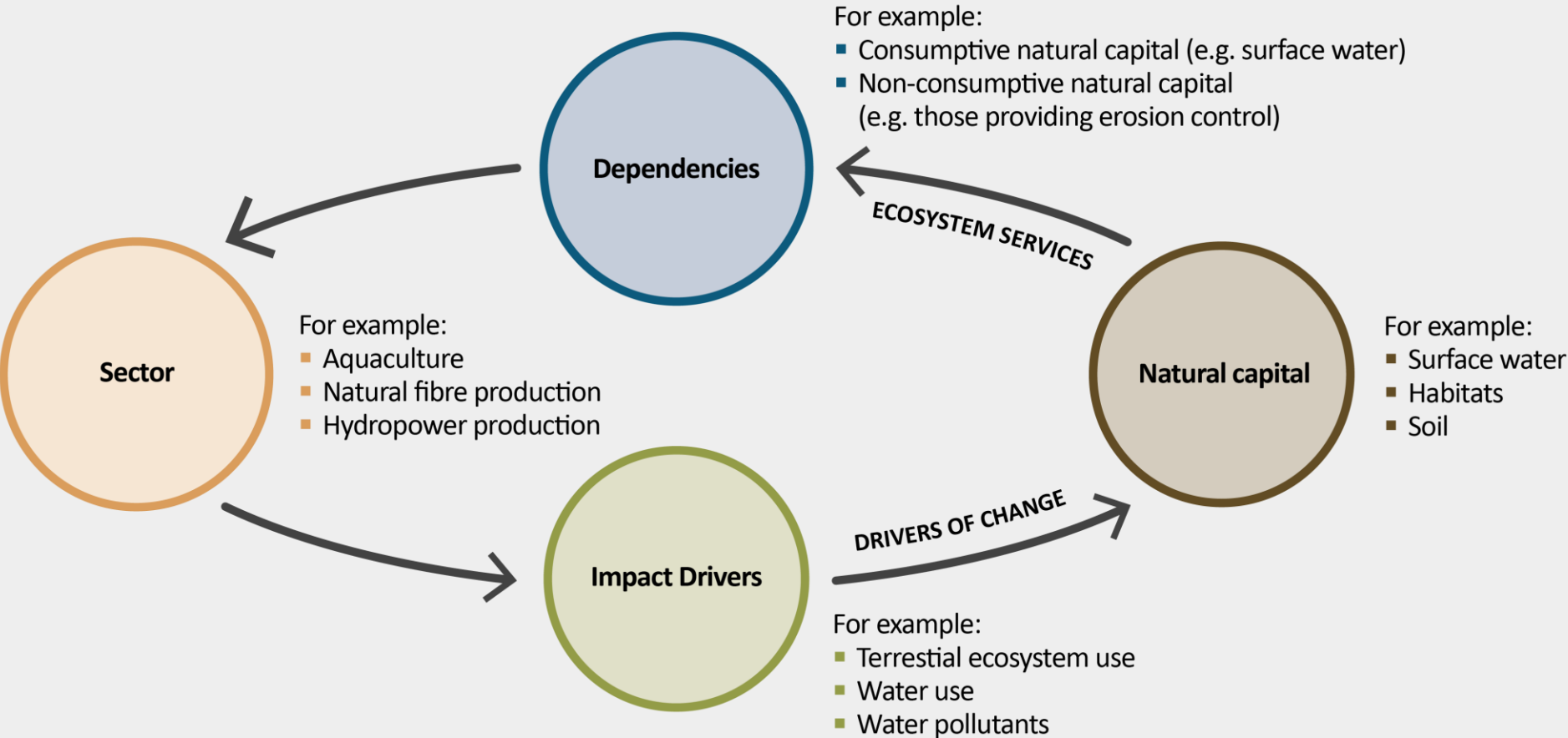



**World Bank and Bank Negara
Malaysia (March 2022)**




TNFD (March 2022)









Dashboard Portfolios About Explore Data & Methodology ▾ Contact Sebastian Bekker ▾




Visualise links between the economy and nature
Explore your potential impacts and dependencies on natural capital.
[Find out more >](#)



Explore potential portfolio alignment with biodiversity goals
This new functionality helps explore the potential alignment of financial activities in selected sectors with a nature-positive future.
[Find out more >](#)



Portfolios [View More >](#)



My natural capital portfolio
Sub-industries:
Renewable Electricity


[View >](#)

[Dashboard](#) [Portfolios](#) [About](#) [Explore](#)


Visualise the links between economic activities and natural capital impacts and dependencies

GET STARTED


Dashboard features




Flow diagram to visualise impacts and dependencies
Helps you answer: How do my selected sub-industries and production processes potentially impact or depend on natural capital? How could disruption in one part of the system affect other parts?



Most material dependencies from selected sub-industries and production processes
Helps you answer: What are the most pressing potential dependencies I should be aware of?



Most material impacts from selected sub-industries and production processes
Helps you answer: What are the most pressing potential impacts I should be aware of?

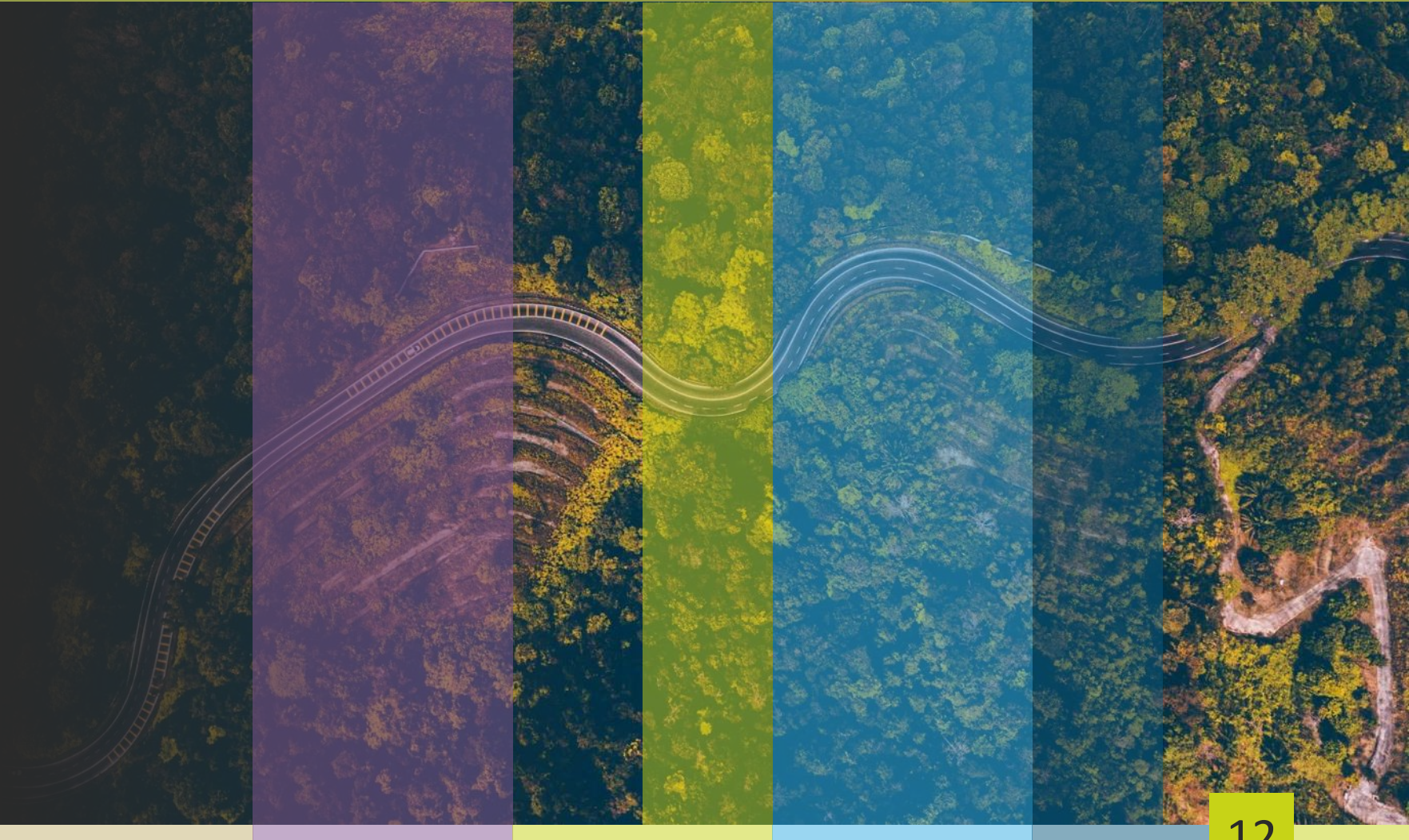


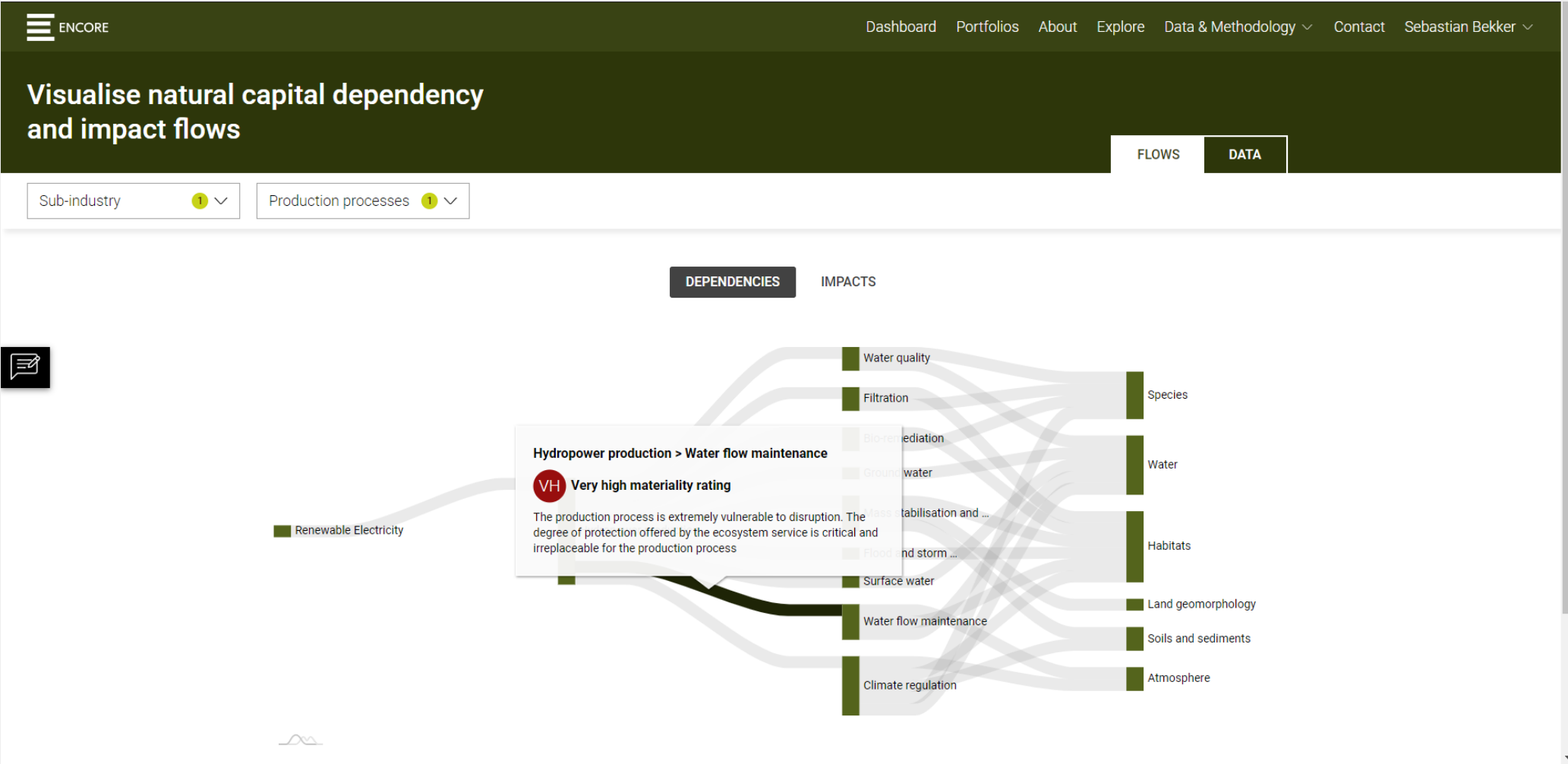
Most material natural capital assets based on dependencies and impacts of selected sub-industries
Helps you answer: How could my potential impacts on natural capital assets affect my potential dependencies through feedback loops?


National Natural Capital Accounting Forum 2022

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Dependencies







 Dashboard Portfolios About Explore Data & Methodology ▾ Contact Sebastian Bekker ▾


Visualise natural capital dependency and impact flows

FLOWS DATA

Sub-industry 1 ▾ Production processes 1 ▾

 (Save to add to your portfolios)

SAVE 



My potential impacts and dependencies

Dependencies on ecosystem services

Your chosen sub-industries are potentially dependent on 9 ecosystem services

[More info >](#)

9

out of 21

Contribution to impact drivers

Your chosen sub-industries potentially contribute to 6 impact drivers with a very high or high materiality rating

[More info >](#)

6

out of 11

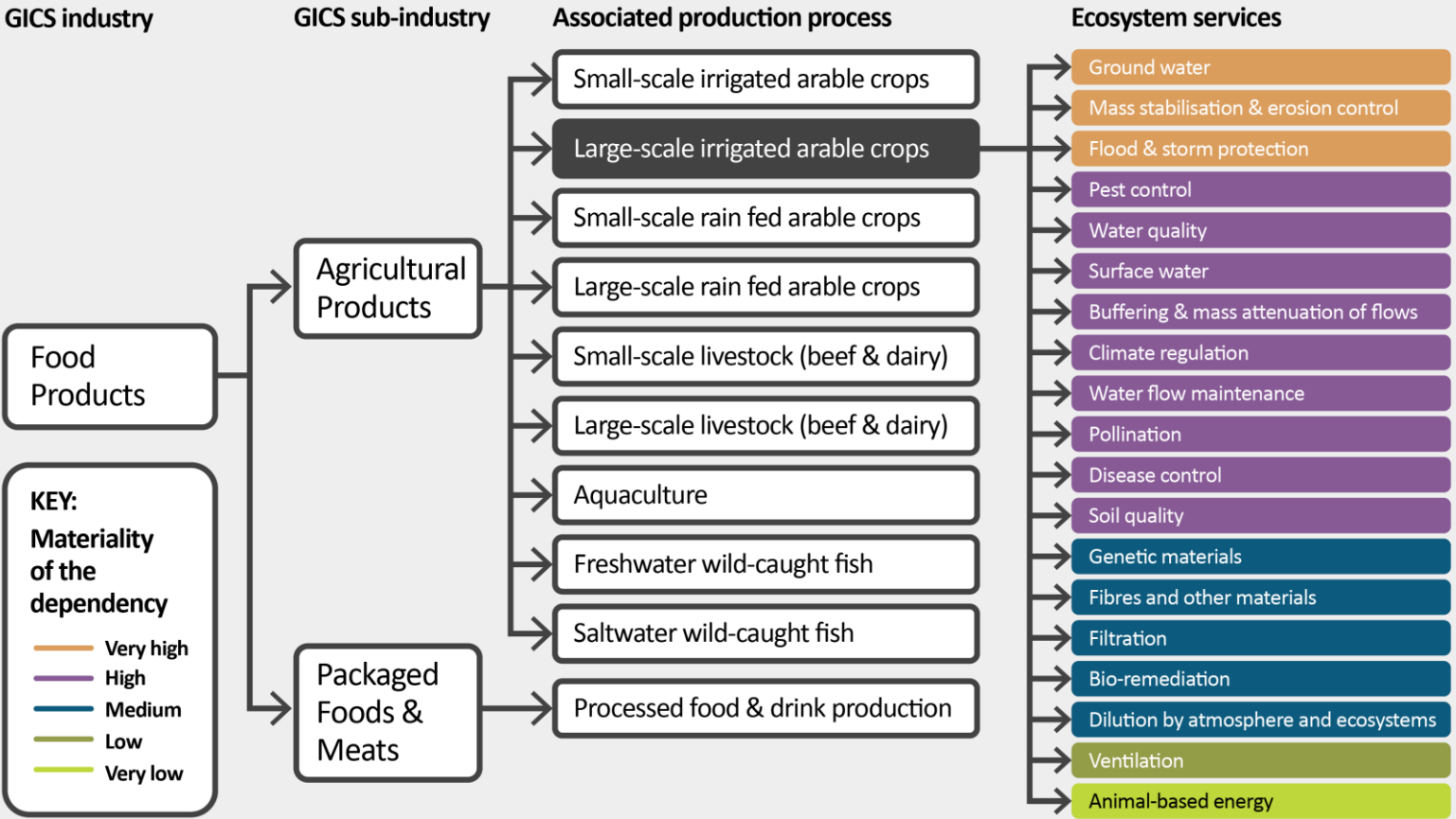
My most material potential dependencies

Dependency materiality ratings for my selected sub-industries and production processes

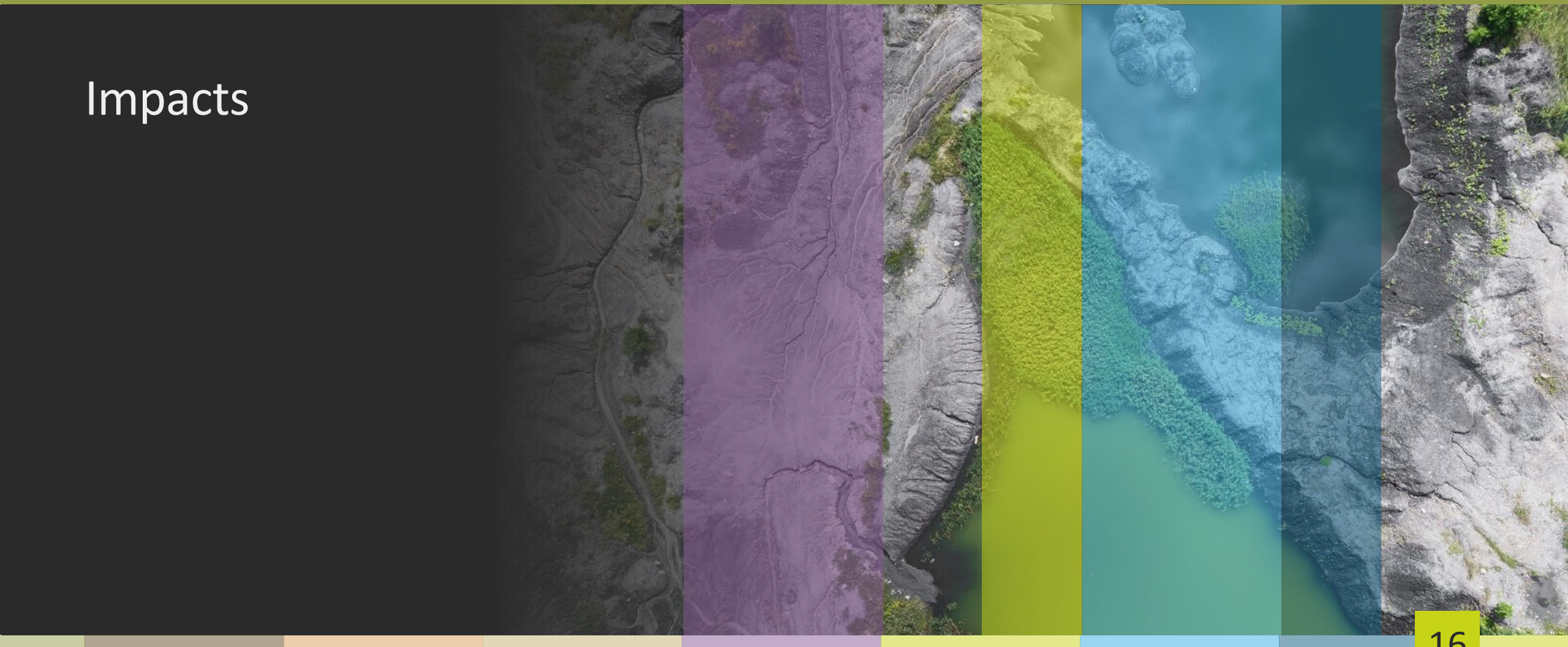
There may be duplicates for the ecosystem services listed below as their materiality ratings may differ across your selected sub-industries and

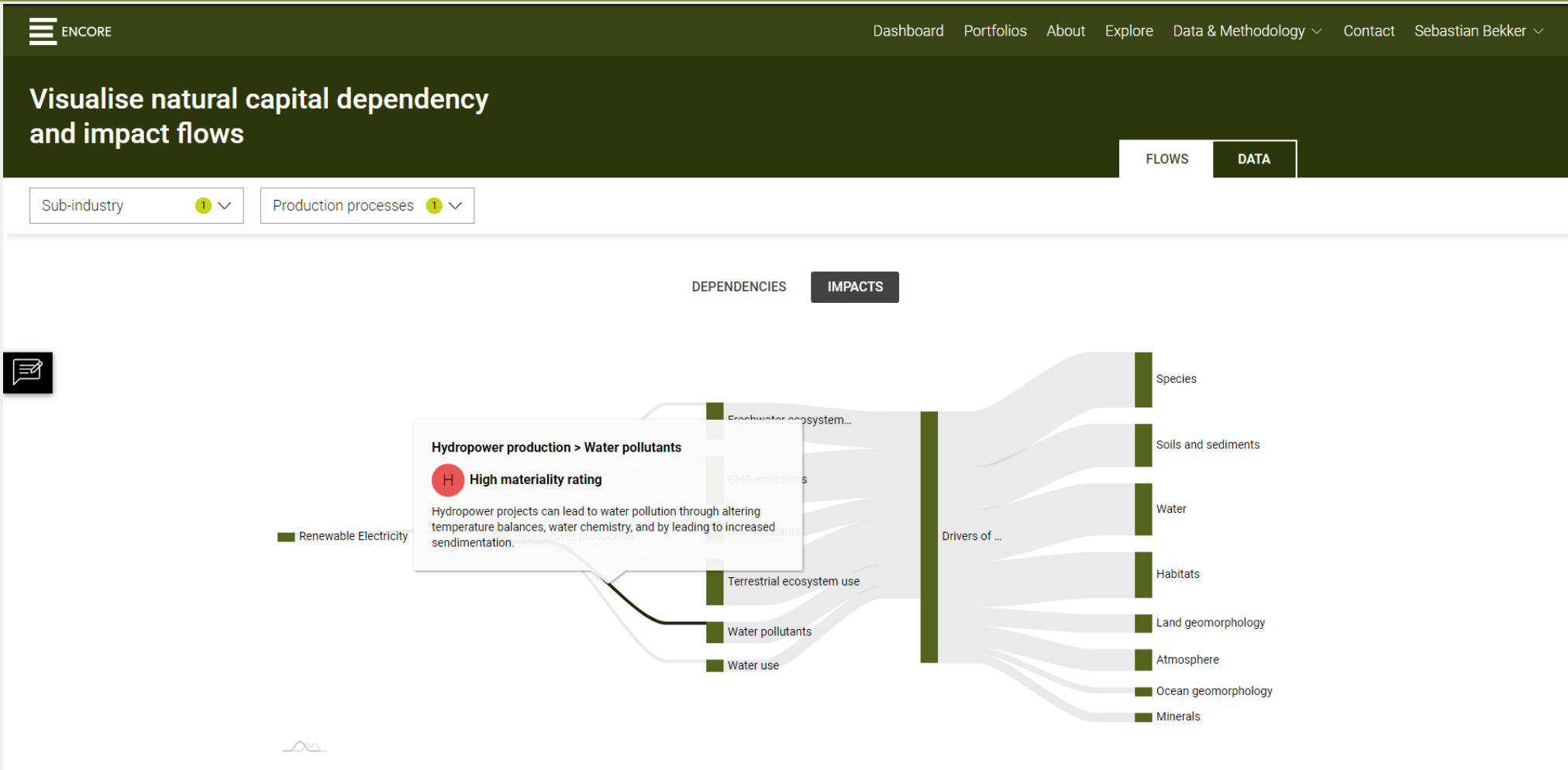
National Natural Capital Accounting Forum 2022

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Impacts

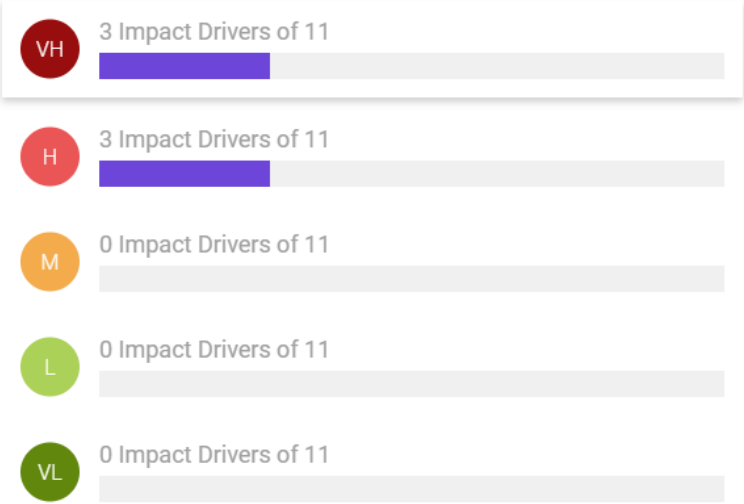




My most material potential impacts

Impact materiality ratings for my selected sub-industries and production processes

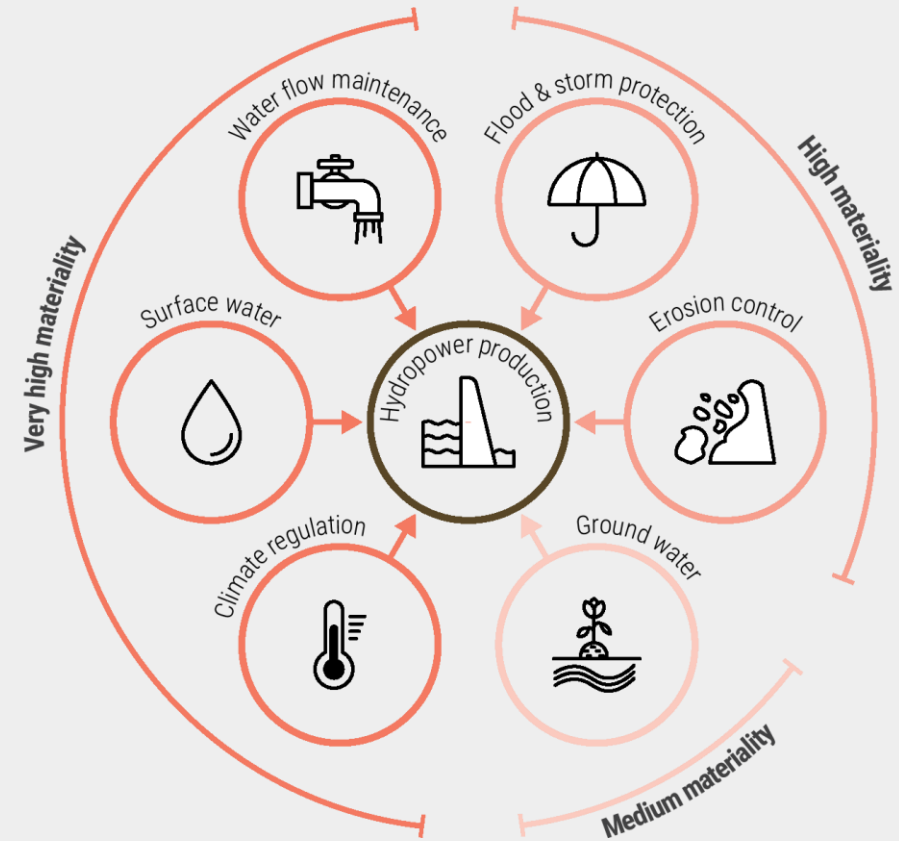
There may be duplicates for the impact drivers listed below as their materiality ratings may differ across your selected sub-industries and production processes.



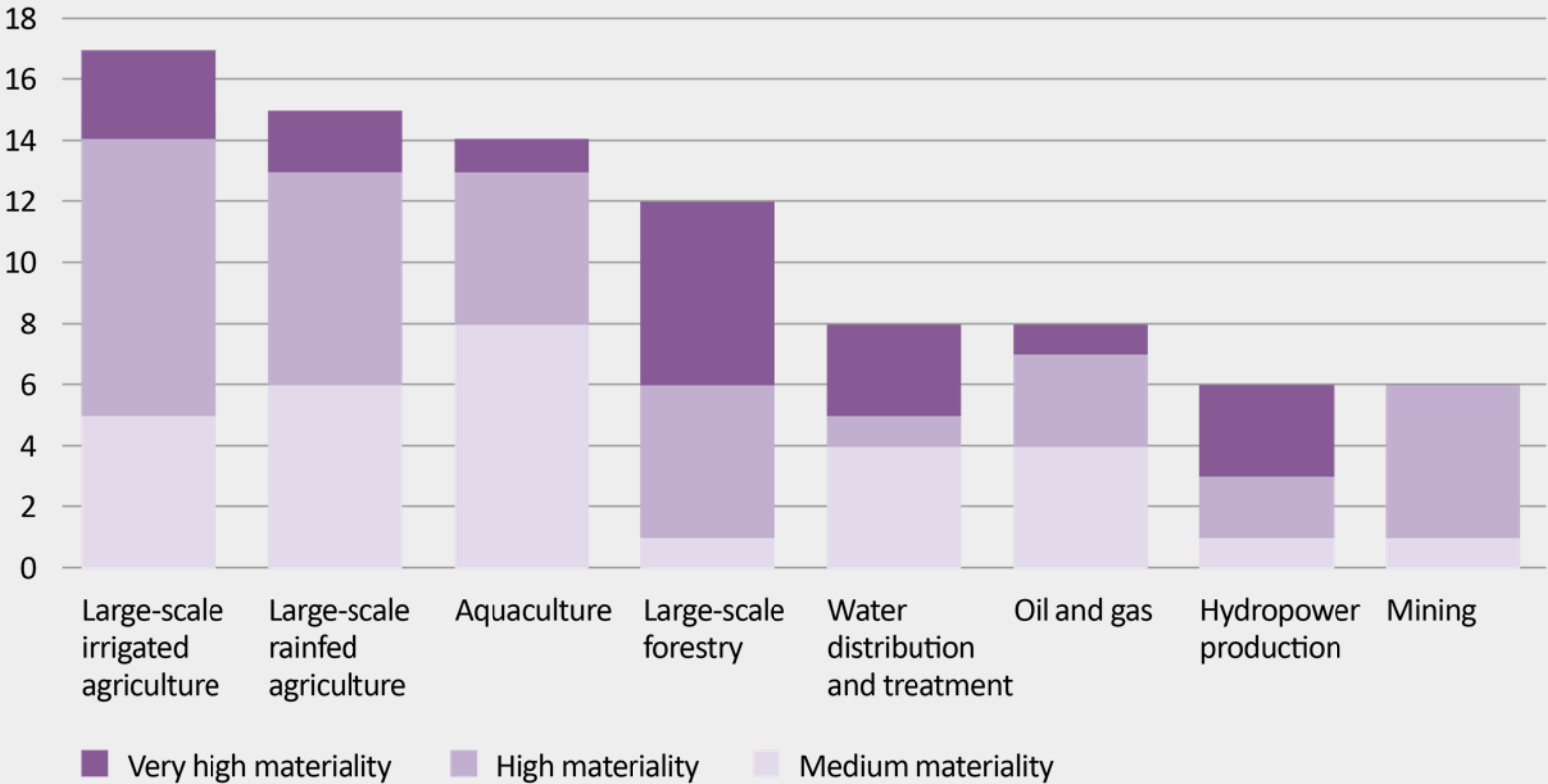
Selected: VH Very High Materiality Rating

Freshwater ecosystem use Link to 1 Production processes at VH	More info >
Terrestrial ecosystem use Link to 1 Production processes at VH	More info >
Water use Link to 1 Production processes at VH	More info >

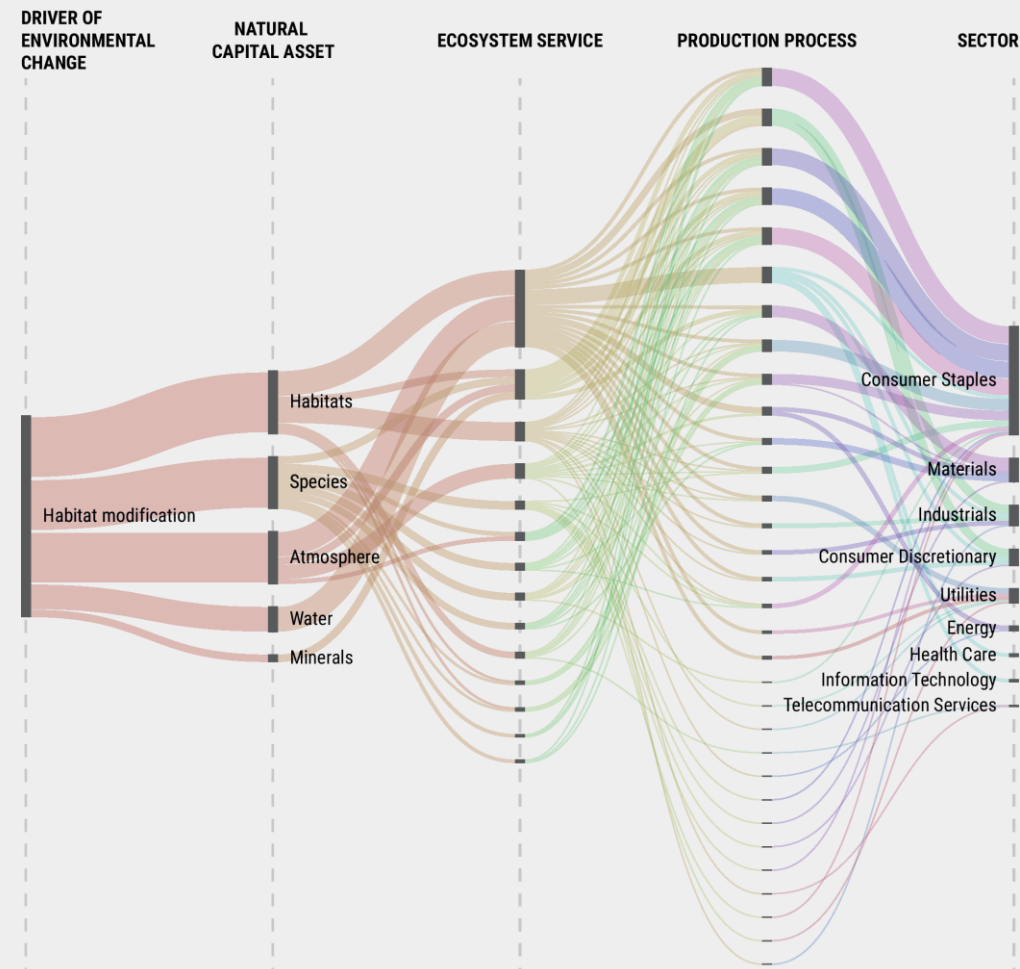
- Each production process is linked to the ecosystem services it depends upon
- Each link has a materiality assessment indicating the likelihood and impact if that service is disrupted



- Production processes with the highest number of material dependencies on nature




- Exploring specific environmental factors shows systemic view of potential portfolio risk
- Habitat modification is linked to multiple sectors in the economy through several natural capital assets and ecosystem services



ENCORE's Biodiversity Module




 ENCORE

DashboardPortfoliosAboutExploreData & MethodologyContactName Surname


Towards potential portfolio alignment with biodiversity goals

GET STARTED




Module features


Important notice: this module uses goal-relevant metrics, but does not currently provide an explicit link to global biodiversity goals in the developing post-2020 global biodiversity framework as this is yet to be formally agreed at the 15th Conference of the Parties to the Convention on Biological Diversity (CBD COP-15). This module will be updated in accordance with the final negotiated text of the post-2020 global biodiversity framework once this text is available.




Current portfolio potential to reduce species extinction and ecological integrity risk
Helps you answer: To what extent can my portfolio potentially reduce global extinction risk? To what extent does my portfolio potentially impact ecological integrity?



Global overview of current portfolio exposure
Helps you answer: Where are the regional hotspots of my agriculture impacts? Are my portfolio-level mining impacts driven by a small subset of my mining portfolio?



Potential future exposure
Helps you answer: What are potential pathways for positive impacts within my agriculture or mining portfolio?



Options for increasing alignment
Helps you answer: What types of actions can I take to increase the alignment of my portfolio with global biodiversity goals?

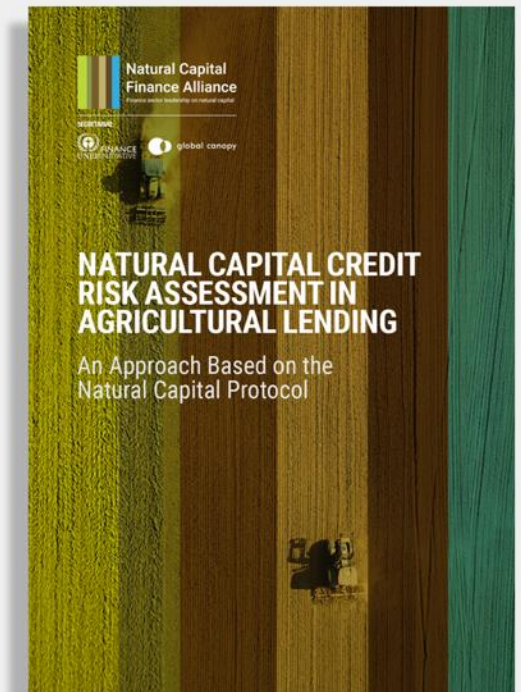
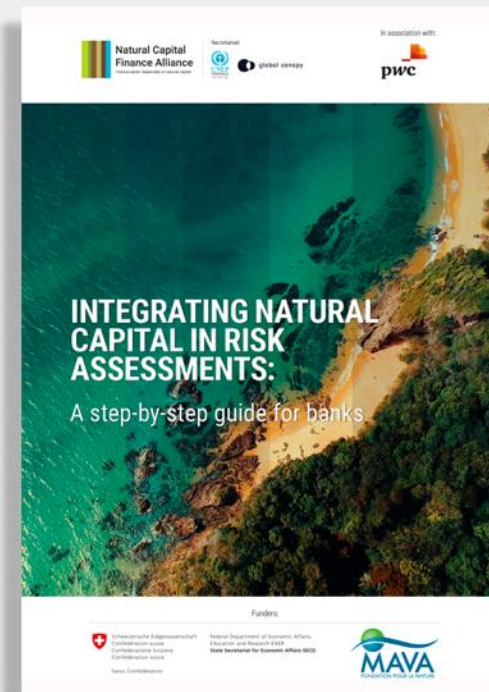
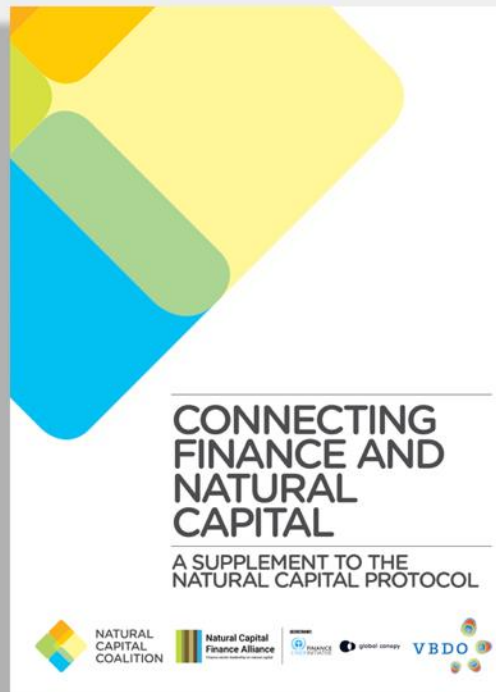
- Focuses on **agriculture** and **mining** initially
- Calculates two goal-relevant metrics (**potential to reduce species extinction risk** and **ecological integrity risk**)
- Aggregates metrics to **portfolio level exposure indicators**
- Presents future **sector-level scenarios**
- Provides **guidance on engagement** strategies to contribute to biodiversity goals
- Future updates planned

“Diversity is the opposite of investors’ desire for standardization and comparability of things.

Biodiversity is challenging because it really is the anti-commodity.”

Piet Klop,
Senior Advisor Responsible Investment,
PGGM





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

NCFA website: <https://naturalcapital.finance>

ENCORE tool: <https://encore.naturalcapital.finance>

Contact: info@naturalcapital.finance

RSA: Thomas@earthinc.co.za



SECRETARIAT:



Thank you

