

Biodiversity & Natural Capital

AN INVESTOR'S GUIDE TO BIODIVERSITY RISKS AND IMPACTS

MSCI ESG RESEARCH

November 2023



MSCI Overview



50

Years in Business



4,300 +

Employees



35

Global Locations



7,800+

Active Clients

Indexes



- MSCI ACWI Index
- MSCI World Index
- MSCI Emerging Markets Index
- Factor Indexes
- ESG and Climate Indexes
- Thematic Indexes

- 1290+ ETFs are based on MSCI indexes, more than any other index provider¹
 - 258,000+ indexes calculated daily

MSCI #1 index provider in assets linked to Equity ESG indexes with 75.4% of market share, more than 7x to the next competitors

\$226B Q4 2021 linked to MSCI equity ESG Indexes (+113% growth vs 2020)

Analytics



- Fixed Income Analytics
- Multi-asset Class Factor Models

MSCI Global Risk and Performance Engine runs up to 1 trillion calculations/day
 2 million time series

70+ million client positions

50+ global FI markets

9000+ issuer curves

ESG & Climate Research



- ESG Issuer & Fund Ratings
- ESG Screening & Controversies
- ESG Governance Metrics
- Climate Solutions
- Climate Value at Risk
- Sustainable Impact

World's largest provider of ESG data, research and indexes²
 Over 1,500 ESG equity and fixed income indices²

Over 17,500 issuer ESG Ratings³

Private Real Estate



- Performance attribution services
- Risk Analytics
- Global market information
- Indexes

Global leader in Real Estate Index Analytics tools

In over 32 markets worldwide

Coverage spanning \$2 trillion of private real estate assets

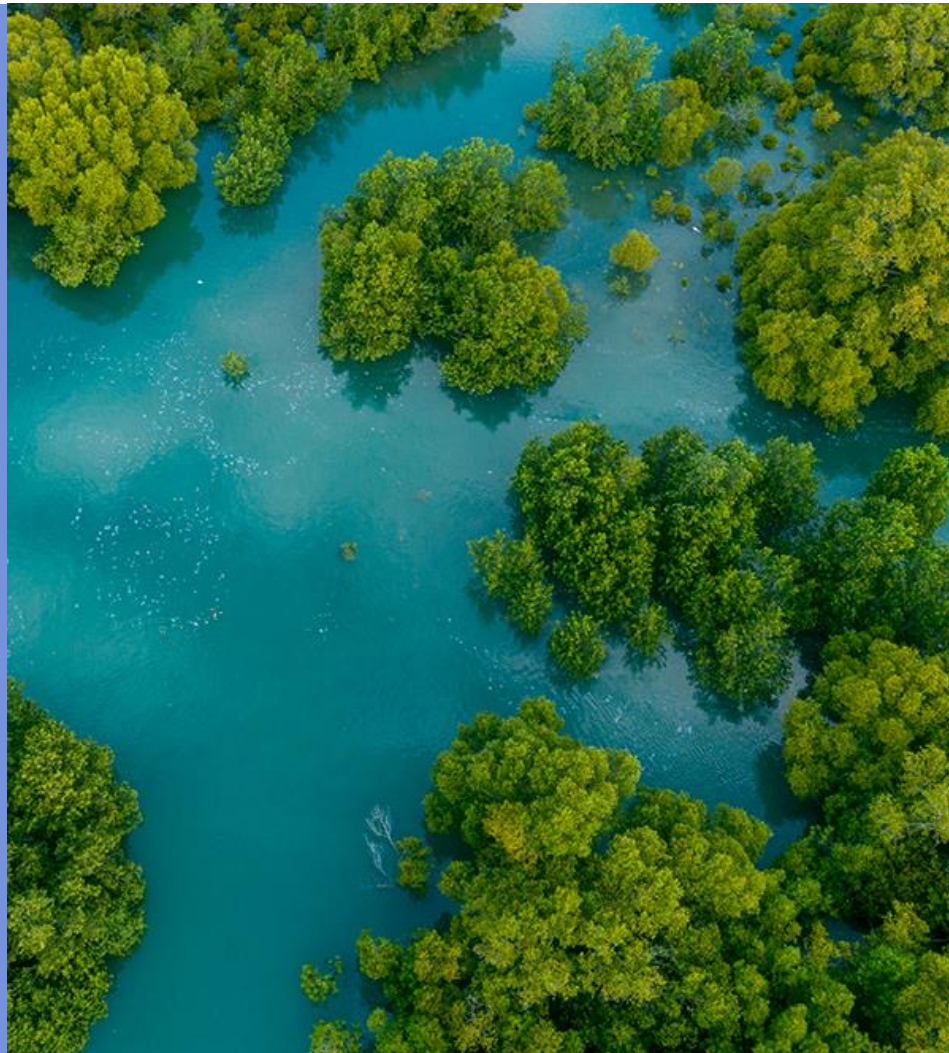


¹ As of March 31, 2021; defined as each share class of an exchange traded fund, as identified by a separate Bloomberg ticker. Only primary listings, and not cross-listings, are counted. ² MSCI Inc. as of March 2021. ³ - As of January 2021

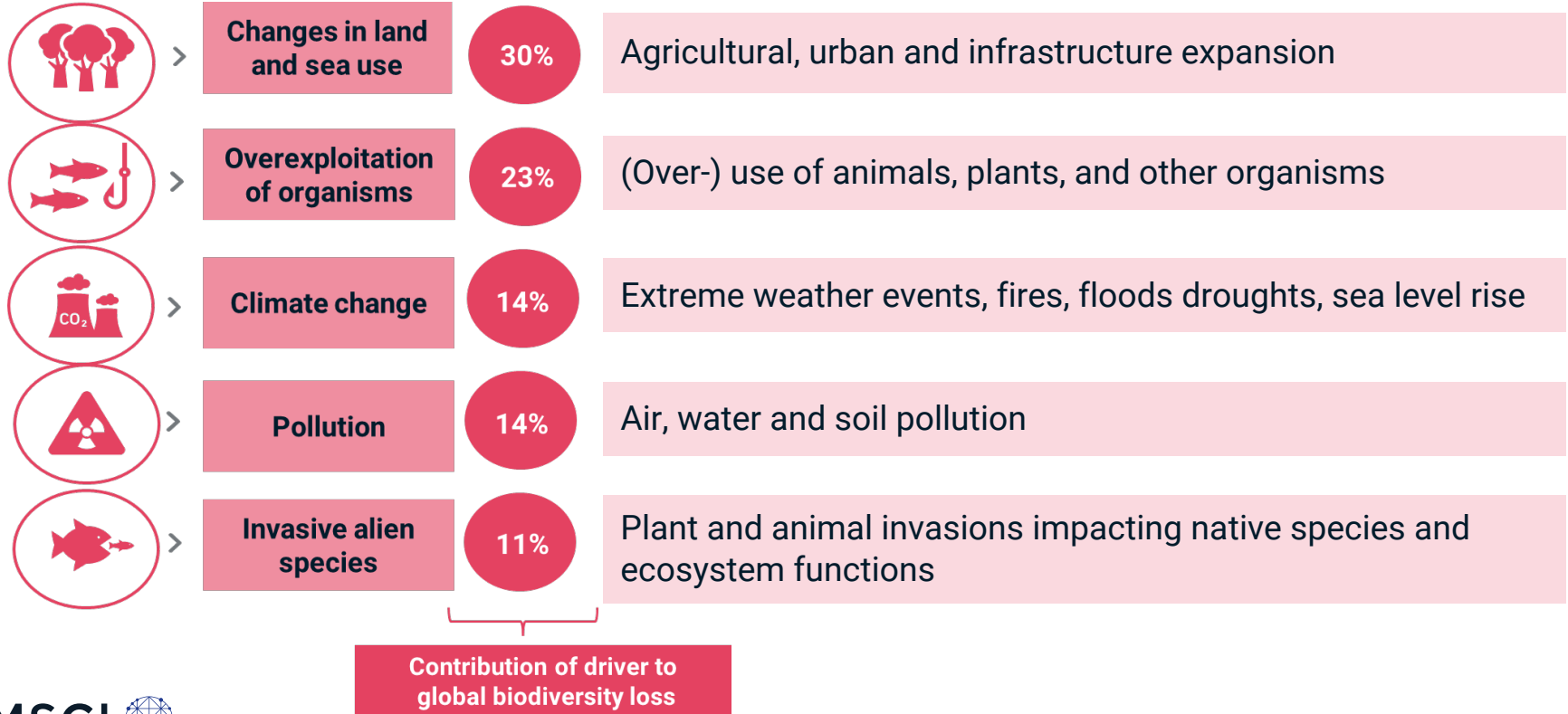
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Information Classification: GENERAL

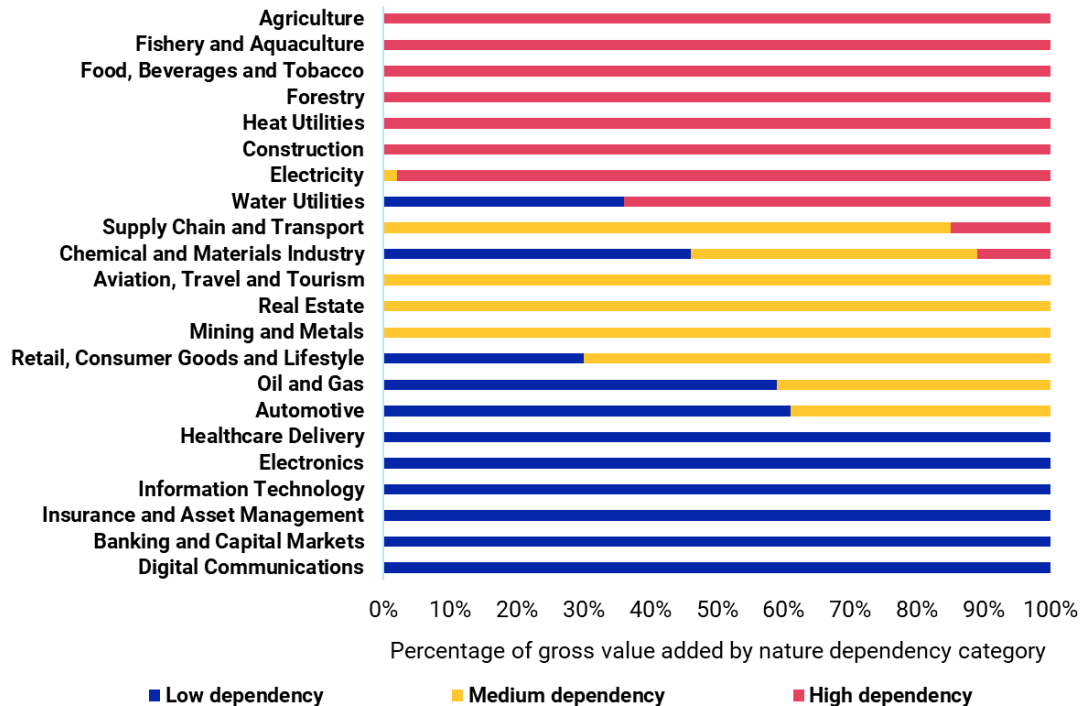
Why Is Biodiversity Important For Investors?



Main drivers for biodiversity loss



Dependencies of industries on nature



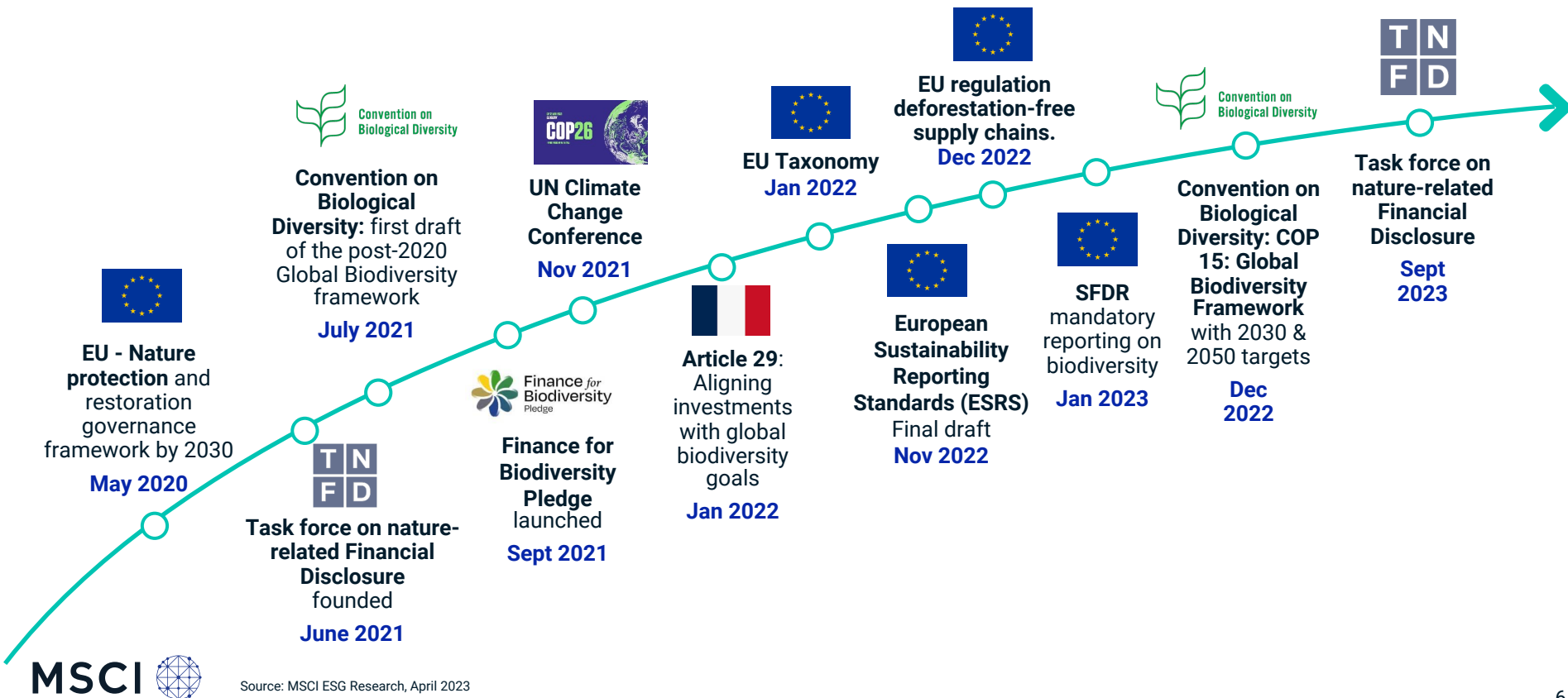
50% of Global GDP is Dependent on Nature

Source: World Economic Forum and PwC. 2020. "Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy".

- 75% of global food crops rely on animal pollination
- 50% of crops are at risk due to soil erosion
- 70% of cancer drugs are inspired by or based on nature
- Forests, wetlands, oceans annually absorb 5.6 gigatons of carbon
- Biodiversity and climate change inextricably connected

Source: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). 2020. "The Global Assessment Report on Biodiversity and Ecosystem Services."

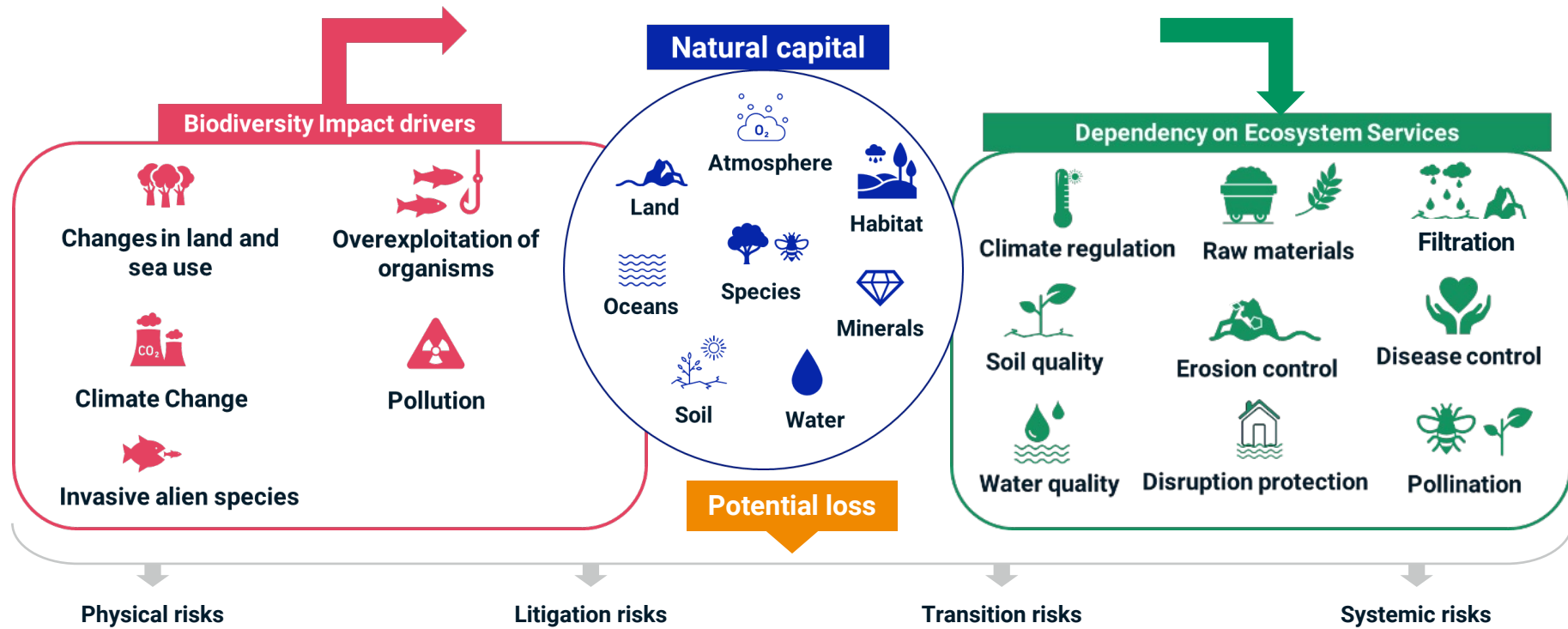
Growing Momentum: Regulations and Initiatives on Biodiversity



Source: MSCI ESG Research, April 2023

Information Classification: GENERAL

How are investments impacted by nature and what are the key risks posed by biodiversity loss?



Integrating biodiversity into investments: From simple to complex



**Screening
the most problematic
sectors, products and
activities for
exclusion based
investment +
engagement**



**Integrate
company-specific
biodiversity
metrics
for better risk
mgmt/
engagement**



**Integrate
advanced
screening data
for better risk
identification, e.g.
geospatial data**



**Benchmark
biodiversity
footprints/
impact
across sectors
for better risk
assessment/
engagement**



**Prepare for
reporting:
voluntary and
mandatory
frameworks**

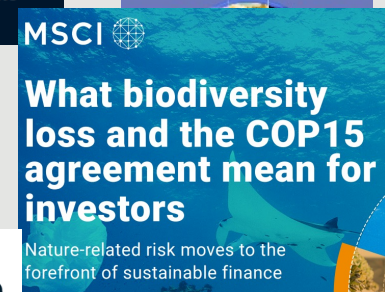
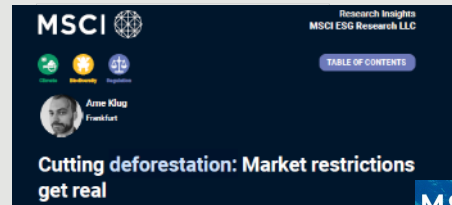
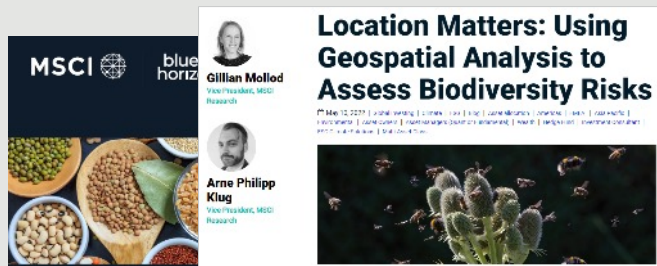


**Investment
opportunities
Identify the
problem solvers/
nature positive/
launch funds**



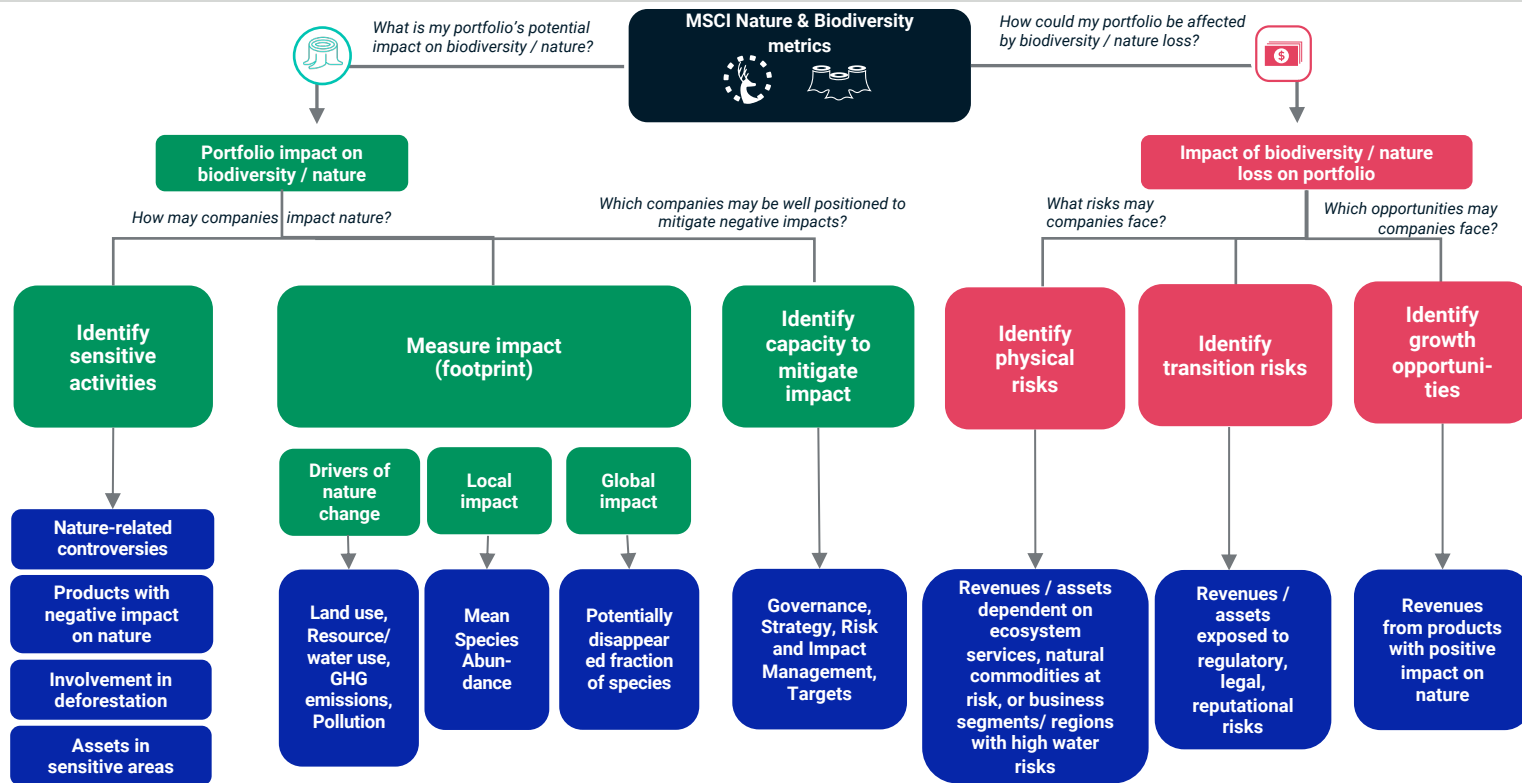
**Assessing
portfolio
dependency
on nature's
ecosystem
service across
sectors**

Thematic Research on biodiversity



Understanding Nature & Biodiversity Metrics

An MSCI ESG Research analytical framework



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