Introduction to Nature-related Finance
Mapping the landscape and examples of leadership
Business and nature
How does it interact with finance?

Leading companies recognise that a prosperous business relies upon nature.

They also recognise that the ‘E’ in ‘ESG’ is about protecting our biodiversity and natural capital, as well as our climate.

Nature’s health is under pressure from global trends in consumption, population and economic growth.

This creates long-term risks to business, citizens and wider society who depend on nature.

CISL provides the structured path that businesses need to establish sustainability solutions and create momentum at scale.

There are two primary ways a financial institution can think about nature-related finance:

1. From an organisational perspective, integrating nature considerations into risk and opportunity thinking

2. From a client or investee perspective, supporting clients to mitigate business risks and capture investment opportunities to build resilience and long-term shareholder value
Going beyond the ‘why’ to answer the ‘how to’
CISL's work on nature-related finance

Recent contributions

How to measure impact on nature and help clients
- Measuring the impact of investments
- Measuring the impact of business on nature
- How to develop a strategy on biodiversity

How to identify the risk of nature loss and allocate capital to nature-positive activity
- Biodiversity Loss and Land Degradation
  - Mapping the financial risks
- Soft Commodities Compact
  - Tackling deforestation
- Financial innovation for sustainable supply chains

Recent contributions

**Banking Environment Initiative**
BARCLAYS
BNP PARIBAS
LLOYDS BANK
NatWest Group
Santander
Deutsche Bank
Standard Chartered
HSBC

**Natural Capital Impact Group**
ASDA
Kering
march
PRIMARK
Yorkshire Water

**Investment Leaders Group**
AON
ROBECO
ZURICH
HSBC
STATE STREET
UBP
PIMCO
HSBC Global Asset Management
Union Bancaire Privee

*HSBC Pension Trust (UK)
Natural capital and ecosystem services

Why and how nature matters

KEY FACTS

- 75% of land is now degraded
- At least 20 per cent of land-based species have been lost since 1900 and one million are threatened
- USD 10 trillion of economic losses estimated by 2050 due to the decline of ecosystem services

UNDERSTANDING WHY AND HOW NATURE MATTERS

Natural capital

The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, minerals, ecosystems) that combine to yield a flow of benefits to people

Biodiversity underpins this.

Ecosystem Services

The benefits people obtain from natural capital. Four categories:

- Provisioning: Material outputs from nature (e.g. water, fiber)
- Regulating: Indirect benefits from nature (e.g. mitigation of climate change, water filtration, storm protection, pollination).
- Cultural: Non-material benefits from nature (e.g. recreational).
- Supporting: Fundamental ecological processes that support the delivery of other ecosystem services (e.g. nutrient cycling, soil formation).

KEY INITIATIVES

NATURE IS IN DECLINE

Natural capital has been transformed into produced capital

Source: Dasgupta (2020)

Global capital stocks per capita

Source: Natural Capital Coalition (2018)
Finance and nature
Client dependence on nature and the biodiversity financing gap

**KEY FACTS**

- USD 44 trillion of economic value generated each year is moderately or highly dependent on nature – more than 50 per cent of global GDP
- Up to USD 143 bn of finance flows toward biodiversity (natural capital) conservation annually
- In order to transition the key sectors that extract natural capital to sustainable practices and protect existing biodiversity up to USD 1 trillion is needed per year
- USD 542 bn is spent on subsidies harmful to nature.

**CLIENT DEPENDENCE ON NATURE**

Percentage of gross added value (GVA) with high, medium and low dependence either directly or along the supply chain

**LINKS TO REPORTS**

- WEF, Nature Risk Rising [details how the economy is dependent on nature]
- OECD Biodiversity Finance Overview
- The Paulson Institute, Biodiversity Finance Gap

Source: WEF (2020)
Market developments in 2020
Momentum around nature and finance picking up

**Taskforce for Nature-related Financial Disclosures (TNFD)**
- Informal working group includes CISL members (BEI, Compact, ClimateWise): BNPP and Standard Chartered, Rabobank and Axa
- UK government funded. Expert Group being formed

**Dutch Central Bank** maps the financial risks of biodiversity loss. Uses the ENCORE tool from the Natural Capital Alliance to identify sectors at risk.
- Identifies how different sectors are reliant on the ecosystem services underpinned by biodiversity
- Analyses how many negative biodiversity impacts Dutch FIs are connected to, based on first order effects

**UNEP FI & UNEP WCMC** references CISL’s Financial Risks of Biodiversity Loss and Land Degradation project and Soft Commodities Compact
- Covers how to set biodiversity targets and discusses examples
- Identifies sub-sectors with a high dependence on biodiversity

**Dasgupta Review of the Economics of Biodiversity**
- Equivalent to Stern Review of Climate Change. Will assess the benefits of biodiversity and costs of losing it. Interim report published April 2020
- Nature loss is an asset management problem – natural stock needs to be managed better, especially since the regenerative rate of natural capital is 19 per cent
- Depreciation of natural assets occurs because of pollution, mismanagement, climate and land use change etc.
  - "To sustain our natural assets, our demands on Nature must be equal to, or less than, its regenerative rate."

**PRI** detail the action taken by investors on biodiversity, including ESG integration, negative screening and biodiversity funds
- Identifies the barriers to greater action, including training, consistent metrics and company level data

**WEF** compendium of business ‘opportunities’ of transitioning to a ‘nature-positive’ economy
- $10.1 trillion of opportunities

**WWF** creates three socio-economic scenarios through to 2050 and estimates impact on six ecosystems
- $10 trillion of losses by 2050
H2 2020 saw an increase in initiatives and outputs
Partly to anticipate Oct 2020 Biodiversity COP (now postponed)

Value of nature
- The London Institute of Banking & Finance
- NGFS
- McKinsey & Company

Finance-oriented
- CDP
- UCL
- The World Bank

Implementation-oriented
- Nature+
- Accelerator Fund

Knowledge-orientated
- BBC
- Kiss the Ground
- United Nations Summit on Biodiversity

Commitments
- Finance for Biodiversity
- icare & consult

Tools
- Iceberg Data Lab
- CDC Biodiversité

General
- Business for Nature

N.B. This is a select collection of initiatives and outputs
Learn more

CISL work, examples of leadership and a context for action
Centre for Sustainable Finance | Contributions
Identify the risk of nature loss and allocate capital to nature-positive activity

Risk focus

Financial Risks of Biodiversity Loss and Land Degradation

What
• Banks and corporates work toward zero net deforestation in four soft commodities.
• Involves 12 major global banks.
• Banks introduced anti-deforestation policies for clients and worked to reduce deforestation risk in their portfolio.

Why
• Every six seconds, a football pitch of primary forest is lost.
• Deforestation and forest degradation are responsible for 15 per cent of greenhouse gases emissions.

Current focus
• Using six years of learning, an action plan has been produced detailing what banks can do next to contribute to the halting and reversal of deforestation (due for publication January 2020)

Innovation focus

Soft Commodities Compact

What

• Financial innovation for sustainable supply chains.
• Preferential trade finance pricing provided for sustainability data about tea produced in Malawi.
• Demonstrated that a ‘data-for-benefits’ swap is technologically and structurally possible.

Why
• Proving sustainability outcomes with high quality high frequency data remains challenging in certain contexts, especially in food supply chains.
• The hypothesis of the project, which was proven, was that a financial instrument can be used to collect sustainability data.

Sustainable Shipment Letter of Credit

What

A financing solution to incentivise sustainable commodity trade

Why

• Template method for commodity buyers to issue a Letter of Credit (LC) in favour of a supplier that could provide a sustainability credential.

First paper from this project details existing methods and tools that can be used to understand the financial materiality of biodiversity loss and land degradation.

Register for updates

Project Trado

What

• Financial innovation for sustainable supply chains.
• Preferential trade finance pricing provided for sustainability data about tea produced in Malawi.
• Demonstrated that a ‘data-for-benefits’ swap is technologically and structurally possible.

Why

• Proving sustainability outcomes with high quality high frequency data remains challenging in certain contexts, especially in food supply chains.
• The hypothesis of the project, which was proven, was that a financial instrument can be used to collect sustainability data.
Centre for Sustainable Finance | Current focus
The financial materiality of biodiversity loss and land degradation

PROJECT AIMS

• Help financial institutions understand, identify and assess the financial risks of nature-related risks.
• Determine a common language and explore how these risks change financial decisions.

DELIVERABLES

1. Overview of the financial materiality of biodiversity loss and land degradation
   • Economic dependence on nature is $44 trillion, with land degradation costing the world USD 6.3-10.6 trillion of economic and biological productivity each year.
   • Numerous tools exist to understand the relationship between business and biodiversity and to map the value of land degradation.
   Published here

2. Framework to identify nature-related financial risks
   • Show how the degradation of nature and responses to this degradation are connected to financial risks.
   • Identify distinct nature-related financial risks, by sector.
   • User testing conducted with the financial industry (banks and asset managers).

3. Assessment of scenario analysis tools
   • Explore to what extent the future financial risk of nature loss can be understood using existing scenario analysis tools.
   • Map that future risk assessment into the framework identifying nature-related financial risks.

4. Deep dive use cases on nature-related financial risks
   • Work with FIs to apply the framework and future risk analysis to specific risk assessments.
   • Where possible, quantify the financial risk of a type of nature loss for a specific sector or geography.
   • Publish findings of use cases.

A joint venture between the Banking Environment Initiative and the Investment Leaders Group

MORE INFO ONLINE
Further CISL contributions
How to measure the impact on biodiversity and help clients

All investment has an impact on the real world. This framework shows how and includes a ‘Healthy Ecosystems’ metric.

Read more

Creates metrics to identify biodiversity impacts and inform biodiversity goals and targets.

Read more

Explains how to create and implement a biodiversity strategy.

Read more

#NatureIsEveryonesBusiness

Healthy societies, resilient economies and thriving businesses rely on nature.

Governments must adopt policies now to reverse nature loss in this decade.

Together let’s protect, restore and sustainably use our natural resources.
CISL's ‘Biodiversity Impact Metric’
Supporting better stewardship of biodiversity – by business and finance

The Challenge

- Biodiversity is context dependent
- Companies often don’t know where they operate

The opportunity

- For companies that don’t have full visibility of their supply-chains
- A method that fills in the gaps using credible data & assumptions
Metric uses globally available data to measure impacts
Helps business understand their impact on nature

**Measure** the impact from agricultural supply chains.

**Identify** high-risk locations

**Inform** the development of strategies, goals and targets.

**Align** with global goals for nature

- Is my company at greater risk of having an impact in some regions compared with others?
- Are particular materials likely to have greater impact?
- Where might I need to improve my traceability/visibility of suppliers?
- Where should I prioritise interventions – e.g. certification, work with farmers?
- Can I assess risk of potential suppliers?
- Where might I need more granular biodiversity data?
Steps to turn impact measurement into action
Developing a corporate biodiversity strategy

- Set goals and targets
- The Biodiversity Impact Metric is one tool—See the Aligning Measures Project for more and The Capitals Coalition – Biodiversity Supplement for guidance.
- Raise awareness within your company
- Integrate with a wider strategy.
- Prioritise actions, interventions & further investigations
- Align with external frameworks such as Science Based Targets for Nature
Examples of leadership from financial institutions

New funds and commitments are emerging

- Financing related to the world’s stocks of natural assets such as soil, air and water.
- JV between HSBC GAM and Pollination Group
- Aims to **mainstream natural capital as an asset class**, e.g. soil, water
- Investment themes will include regenerative agriculture and sustainable forestry
- First fund aims to raise USD 1 billion; aims to launch in mid-2021
- Second fund: carbon credit focus, USD 2 billion target
- Example of collaboration between finance and technical partners

- Natixis is “mobilising its business lines to promote biodiversity”
- Biodiversity to included in 2021 strategic plan
- Biodiversity impact and measurement reporting standards for clients by 2022
- Mirova’s Natural Capital focus includes funds **investing in nature-based solutions**
- Mirova strategies include: ‘land degradation neutrality’, ‘climate’ [deforestation focus], ‘sustainable oceans’ and ‘brazil biodiversity’
- Significant focus on **sustainable agriculture**

- Public-partnership to finance landscapes focussed on **green growth and sustainable rural livelihoods**
- **Blended finance** structure
- Inaugural USD 95 million bond for sustainable natural rubber production
- **Tenors up to 15 years**
- Impacts targeted include land conservation and fair-wage jobs
- Another example of **partnership between public and private finance**, as well as with technical partners to design and verify sustainability outcomes

Landscape Finance: [read more]

- Provides **concessional finance** and grants for **nature-positive agriculture and rural livelihoods**
- USD 1 billion target
- Commercial and development banks source capital, utilising public-private guarantees
- Investment targets project **ticket sizes of USD 2 – 15 million**
- **Tenors up to 12 years**
- Eligibility based on KPIs related to land restoration, CO2 emissions, contribution to household income and employees trained
- Acknowledges that nature degradation is often the result of livelihood insecurity
What next for nature-related finance?
Context that supports action

- Biodiversity COP at Kunming 2021
  - Biodiversity loss shifting from a reputational to financial risk
- New biodiversity targets on the horizon
- Interest in transition to ‘nature-positive’ already creating opportunity
- Landscape finance
  - Advances in monitoring technology and valuation of the shared benefits of protecting nature can create new green assets

Deforestation in the Amazon affecting the rainfall cycle
New funds
New finance models

Context that supports action:
- Biodiversity loss shifting from a reputational to financial risk
- New biodiversity targets on the horizon
- Interest in transition to ‘nature-positive’ already creating opportunity
- Advances in monitoring technology and valuation of the shared benefits of protecting nature can create new green assets
Points of contact

Nina Seega
Research Strategy Director
Nina.Seega@cisl.cam.ac.uk
+44 7566 289668

Grant Rudgley
Project Manager
Grant.Rudgley@cisl.cam.ac.uk
+44 7840 638230

Centre for Sustainable Finance
University of Cambridge Institute for Sustainability Leadership