

thenaturalvalueinitiative

linking shareholder and natural value

"Creating a toolkit to evaluate biodiversity and ecosystem services investment risks and opportunities"

An overview

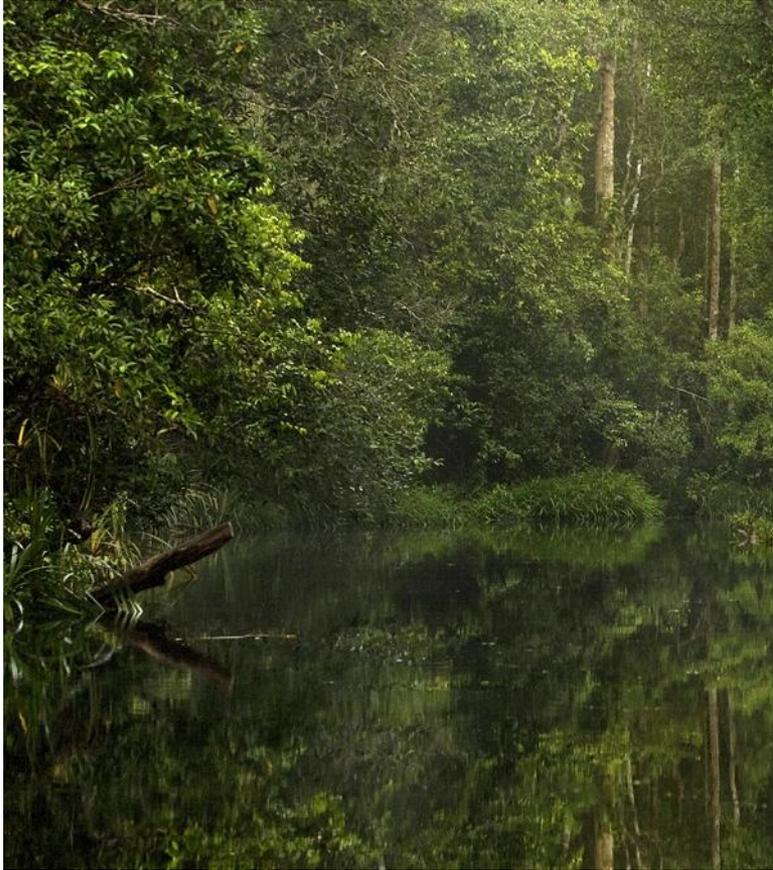
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With thanks to the Dutch Ministry of Housing, Spatial Planning and the Environment

The need



- Increasingly links being made between shareholder value and environmental issues
- But in many companies biodiversity and ecosystem services dependency and impacts remains an unrecognised risk
- Information needs of investors are not being met
- Strong practices are not being rewarded
- Few tools currently exist to enable a rigorous evaluation

Estimated loss of welfare in 2050 from cumulative loss of biodiversity & ecosystem Services amounts to **€14 trillion**
(7% projected global GDP in 2050)

The Business Case

Finance sector's role in facilitating others to damage biodiversity and ecosystem services is increasingly widely recognized.

Loss of biodiversity and ecosystem services giving rise to a number of material risks and opportunities:

- Opportunities for new product & market development
- Operational risks, such as security of supply
- Impacts on brand value – positive or negative
- Increasing costs from liabilities and compliance



Bloom or Bust? UNEP FI's CEO briefing on biodiversity and ecosystem services

Opportunities



Forestry carbon credits:

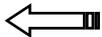
The World Bank estimates that deforested land in the tropics is worth **US\$200-500** per hectare as pasture and could be worth from **US\$1,500-10,000** if left intact and absorbing carbon dioxide

Reduced Emissions from Deforestation & Degradation (**REDD**) likely to be included within the successor agreement to the Kyoto Protocol

Merrill Lynch is working with the ecosystem services firm Carbon Conservation to explore innovative market-based opportunities in avoided deforestation.

Aceh Province, Indonesia, FFI is working with these corporate partners and Provincial Government to develop a pilot REDD project that could lead to conservation of **750,000ha of forest** over 30yr period, saving over **3M tons CO₂** equivalents annually, **est. value \$12M.**

“The scale of the opportunity
is once in a lifetime”
Dorjee Sun, CEO Carbon
Conservation





Credit: Sarah Greenleaf

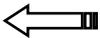
“Overall, 35% of the global food production from plants benefits from animal pollination. The value of all this ranges from \$112 billion to \$200 billion annually.”
Millennium Ecosystem Assessment

Pollination and agriculture in the USA

In 2006 the US Congress estimated the monetary value of honey bees as commercial pollinators in the US was **\$15 billion annually**.

Declining numbers of natural pollinators and the spread of new diseases such as **colony collapse disorder** are causing grave concern in the USA. Without adequate pollination rates the risk is of reduced yield and potential crop failure.

Without a strong bee-keeping industry companies **dependent on insect pollinated crops** risk increased costs, decreased income and higher commodity prices overall. This may impact on shareholder returns in the long term.





Payments for watershed management in France
Perrier Vittel, now Nestle Waters, has been involved in innovative **Payments for Ecosystem Services (PES)** to farmers upstream of its water extraction plants to help them change farming practices and introduce new technology to protect the watershed. The aim being to prevent increased levels of nitrates in the water to comply with EU regulations

Payment for environmental services in Indonesia
Authorities in West Lombok recently announced the imposition of a local bylaw which requires **fees for individuals and companies benefiting from the environment**, in an effort to conserve its natural resources and empower communities living near protected forests.

“Cultivated land covers one quarter of the world’s land - this has resulted in loss or degradation of natural habitats such as forests and wetlands” Millennium Ecosystem Assessment



Reputational risk



The orangutan and palm oil

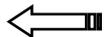
Palm oil is a key ingredient for the food and beverage sector and increasingly used as a biofuel. The industry has come under fire from NGOs for clearance of high conservation value forest to make way for palm oil plantation.

Increasingly food retailers, other brand owners and fuel companies are seeking palm oil from sources certified against criteria set out by the **Roundtable on Sustainable Palm Oil (RSPO)**.

Companies sourcing or producing palm oil that cannot demonstrate compliance with RSPO criteria may face limited market opportunities in the future.

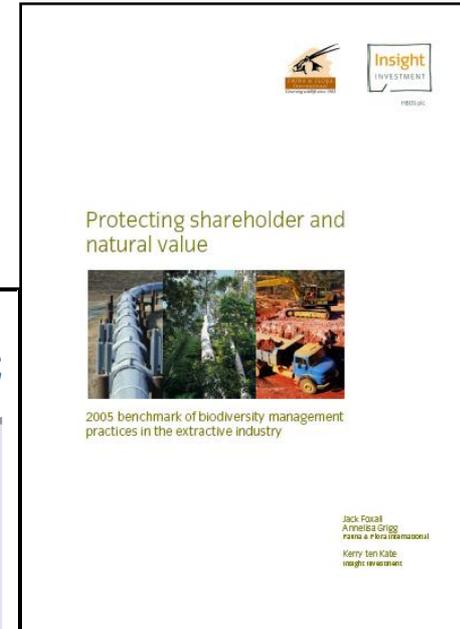
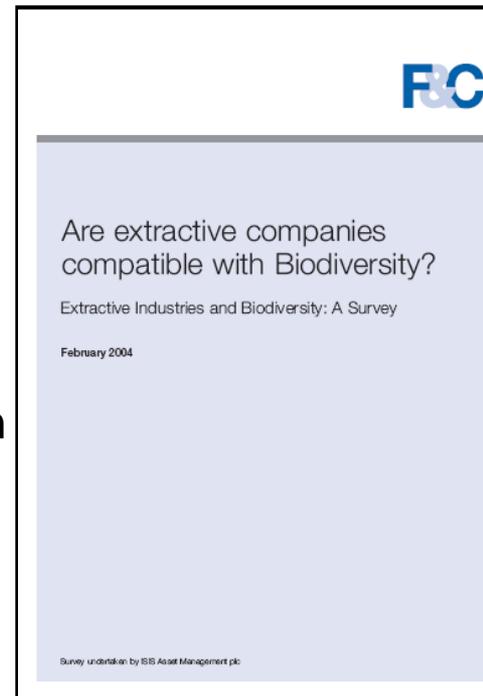
Investors investing in such companies are exposed to **reputational risks and potentially reduced investment returns.**

“An estimated 98% of Indonesia’s rainforest is expected to be lost by 2022 as a result of illegal logging and palm oil development”
UNEP FI CEO briefing Bloom or Bust



Benchmarking tools

- F&C
 - Focus on extractive sector
 - Review of key elements of biodiversity management
 - Ongoing engagement
- FFI and Insight Investment
 - Assessment of companies against:
 - Governance
 - Policy & Strategy;
 - Management & Implementation
 - Assurance & Reporting
 - Leadership



The Initiative in brief



- A collaboration between international environmental NGO **Fauna & Flora International**, Brazilian business school **FGV**, **UNEP FI** and is supported by the **UN PRI**

"Creating a toolkit to evaluate biodiversity and ecosystem services investment risks and opportunities"

- Through this to build a leadership group within the finance sector which pilots and support this toolkit (**F&C Asset Management**, **Insight Investment**, **Pax World**, **Banco Real**, **VicSuper**, **Morley**)

The Initiative in brief



- Build expertise in the finance sector for evaluating risk and opportunities associated with this issue
- Build awareness of the food, beverage and tobacco sector's dependence on biodiversity and ecosystem services
- Stimulate improved performance in the food, beverage and tobacco sectors

“A further 10-20% of grassland and forest are projected to be converted to agriculture between 2000 and 2050.”

Millennium Ecosystem Assessment

Methodology overview

Scope

- Focus on biodiversity and ecosystem services issues associated with the management and harvesting of raw materials
- Does not consider all sustainability issues (social/ community), industrial footprint or impact of supermarket sites on biodiversity

Structure

- Two levels of supply chain
 - Primary producers and commodity processors
 - Manufacturers and retailers
- Series of targeted questions based on established risk management practice
 - Competitive advantage
 - Governance
 - Policy and strategy
 - Management and implementation
 - Reporting

Key outputs

NVI Toolkit:

- **The Ecosystem Services Benchmark (ESB):** A tool for investors to evaluate understanding and management of biodiversity and ecosystem services impacts and dependence
- **Guidance on the Benchmark:** Supporting guidance for the benchmark
- **Company specific analysis of strengths and weaknesses:** A concise summary of results provided to investors and FBT companies showing strengths and weaknesses of their approach to biodiversity and ecosystem services risk and dependencies and identifying three key areas for improvement
- **Consolidated report:** outlining key findings from the analysis and ranking those companies benchmarked to show leading and lagging practice
- **Business case document:** document outlining the business case for managing biodiversity and ecosystem services dependencies and impacts

Getting involved

- **Review methodology and feedback**
- **Endorse our letter** to the companies that we will be evaluating, signalling the investment community's concern about this issue
- **Act as finance sector pilots**
- **Review the results of our analysis and the final methodology**

Benefits of involvement:

- **Improved understanding** of biodiversity and ecosystem services risks and opportunities
- **Platform for ongoing engagement** with investee companies
- **Opportunity to shape evaluation tool** that will help your company ensure those companies you invest in are sourcing raw materials sustainably