



# UNEP FI Biodiversity and Ecosystem Services Workstream

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# What are ecosystem services?

- The processes by which the environment produces resources utilised by humans such as clean air, water, food and materials.
- Millennium Ecosystem Assessment
- **Supporting services:** The services that are necessary for the production of all other ecosystem services including soil formation, photosynthesis, primary production, nutrient cycling and water cycling.
- **Provisioning services:** The products obtained from ecosystems, including food, fibre, fuel, genetic resources, biochemicals, natural medicines, pharmaceuticals, ornamental resources and fresh water;
- **Regulating services:** The benefits obtained from the regulation of ecosystem processes, including air quality regulation, climate regulation, water regulation, erosion regulation, water purification, disease regulation, pest regulation, pollination, natural hazard regulation;
- **Cultural services:** The non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation and aesthetic experiences – thereby taking account of landscape values;

# F&C categories of risk

- **Access to land** [case study: Rio Tinto]
- **Reputation** [case study: Marks & Spencer]
- **Access to capital** [case study: Barclays]
- **Access to markets** [case study: Travis Perkins]
- **Security of supply** [case study: Unilever]
- **Relations with regulators** [case study: Carillion]
- **Liabilities** [case study: BP]

# High-risk sectors

Red zone	Amber zone	Green zone
<b>High-risk sectors: Most companies exposed to risks; Risks likely to be significant</b>	<b>Medium-risk sectors: Some companies exposed to risks; Risks may be significant</b>	<b>Lower-risk sectors: Risks variable and significance unknown</b>
Construction & Building Materials	Beverages	Aerospace & Defence
Electricity	Chemicals	Automobiles & Parts
Food & Drug Retailers	Financial Services	Diversified Industrials
Food Producers & Processors	General Retailers	Electronic & Electrical Equipment
Forestry & Paper	Household Goods & textiles	Engineering & Machinery
Leisure & Hotels	Personal Care & Household Products	Health
Mining	Pharmaceuticals & Biotech	Information & technology Hardware
Oil & Gas	Support Services	Media & Entertainment
Utilities	Tobacco	Software & Computer Services
	Transport	Steel & Other Metals
		Telecom Services

# Sectors most at risk

- Construction & Building Materials
- Food Producers & Processors
- Forestry & Paper
- Leisure & Hotels

# F&C's research on biodiversity: publications

## ▪ Palm oil

- New risks in old supply chains: Where does your palm oil come from? December 2003

## ▪ Extractives

- Extractive Industries and Biodiversity: A Survey, February 2004

## ▪ Materiality

- Is biodiversity a material risk for companies? An assessment of the exposure of FTSE sectors to biodiversity risk, September 2004

\*Source: F&C Asset Management plc, as at 31/12/06

# Current tools for assessing biodiversity performance?

- Guidelines and tools available to F&C
  - GRI
  - EW
  - EBI
  - GSI Index
  - FFI benchmark
  - MA
  - VBDO quick-scan
  - BITC/BiE
  - ***BROKER REPORTS***

\*Source: F&C Asset Management plc, as at 31/12/06

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