



Secretariat:



How are companies starting to respond to business risks and opportunities linked to natural capital?

Milano 10-11-2014

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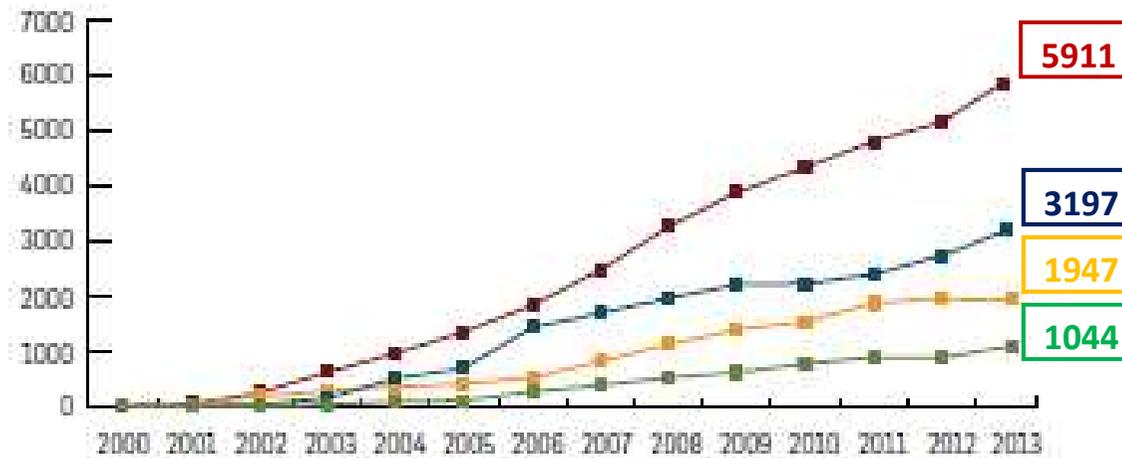
*UN Global Compact Network Italy,
Scuola Superiore Sant'Anna Pisa*



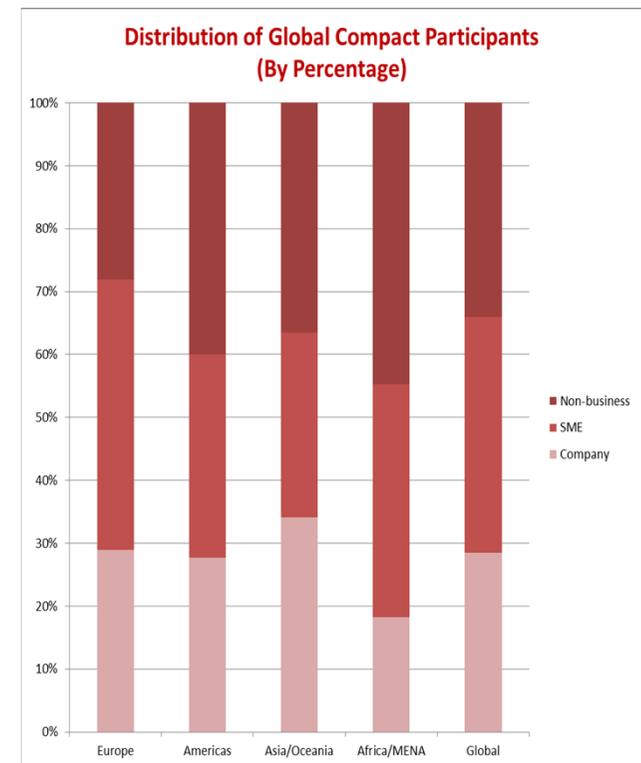
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UN Global Compact

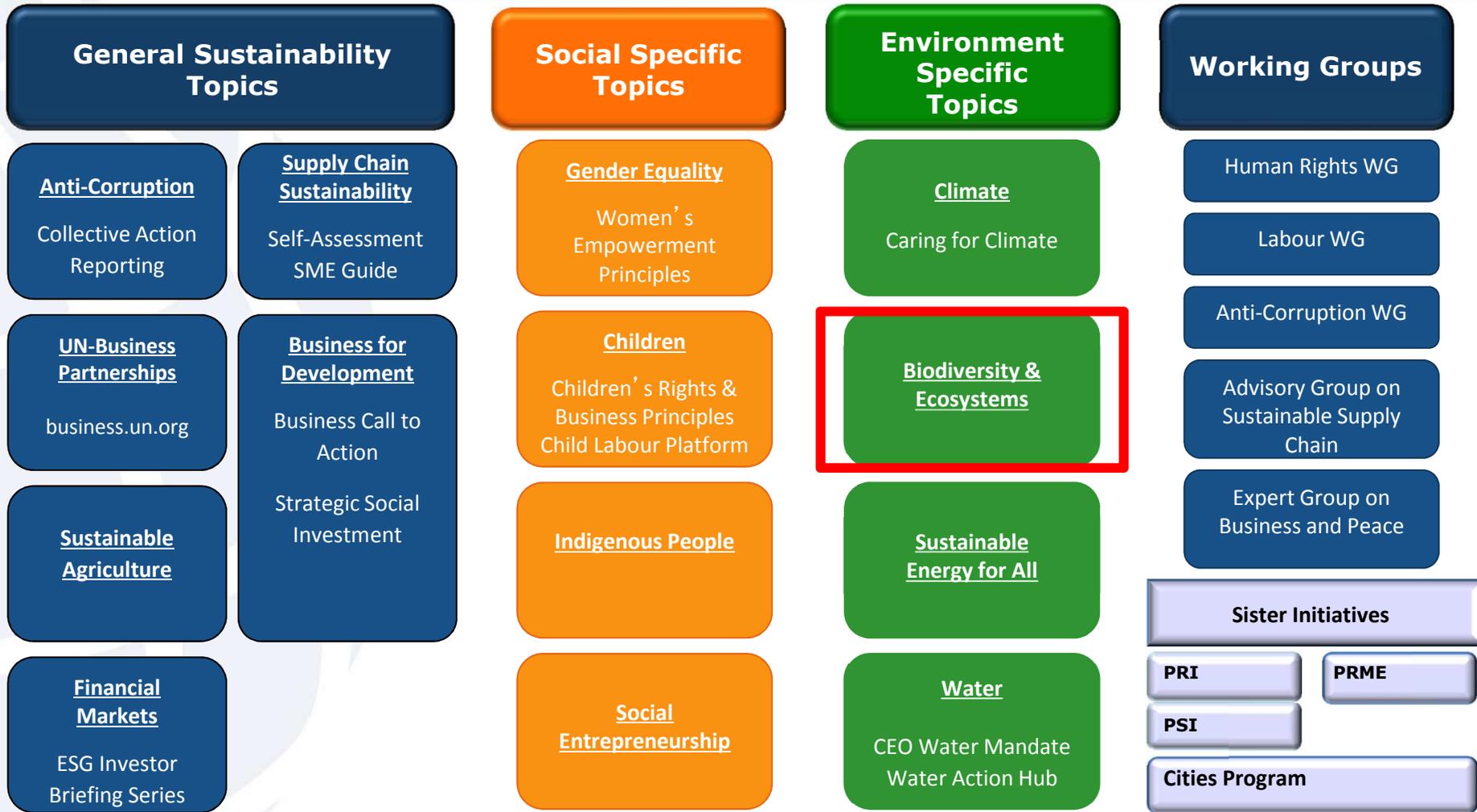
- The Universal Declaration of Human Rights
- The International Labour Organization's Declaration on Fundamental Principles and Rights at Work
- The Rio Declaration on Environment and Development
- The United Nations Convention Against Corruption



- Europe
- Africa/MENA
- Americas
- Asia/Oceania

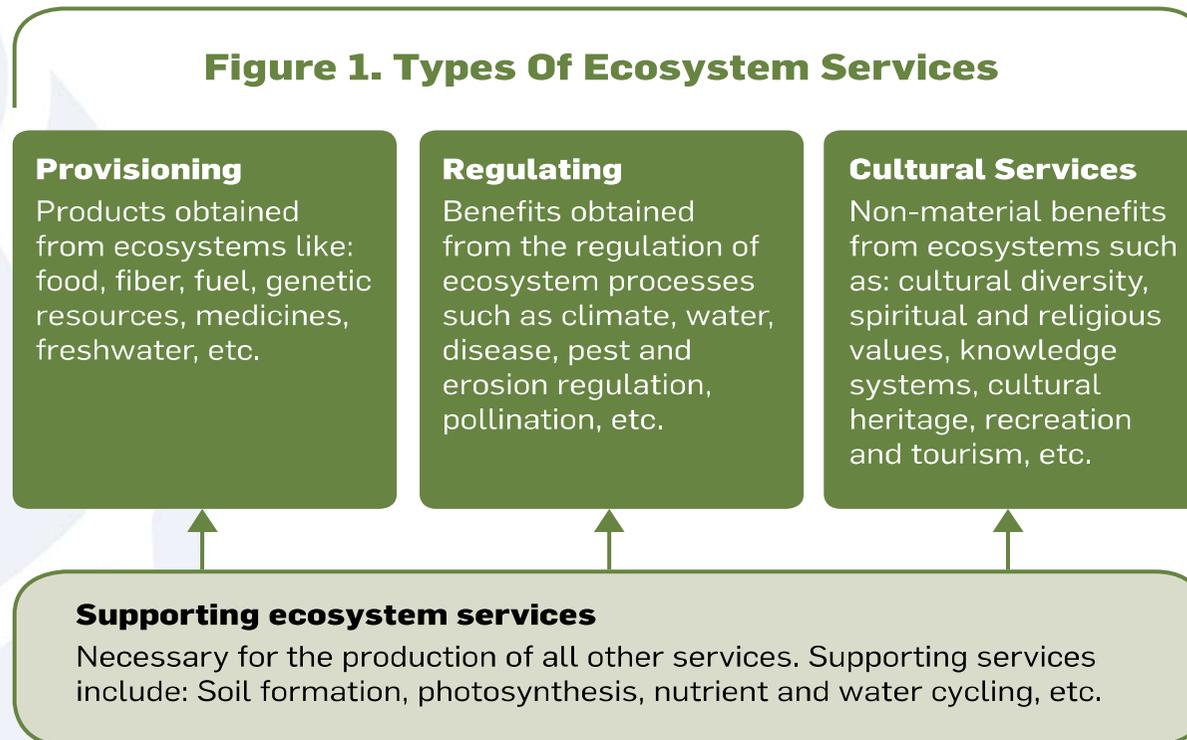


GC initiatives, programmes and platforms



a *Global Compact* view on biodiversity and ecosystem services

Figure 1. Types Of Ecosystem Services



Source: Adapted from the Millennium Ecosystem Assessment (2005).



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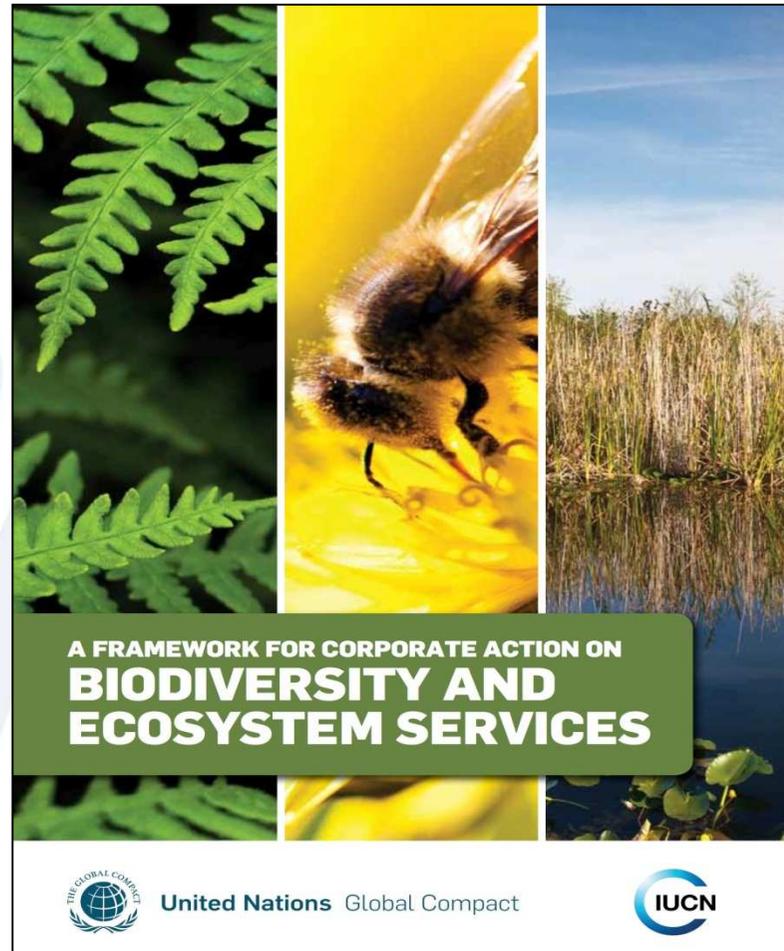
Specific aspect of biodiversity	Examples of ecosystem functions	Examples of ecosystem services	Example of benefits	Benefits for organizations & businesses
Genetic diversity	Source of unique biological materials & products	Medicine & agricultural products	Control of disease; health from use of medicines; nutrition; individual pleasure from enjoying variety in food	Pharmaceutical & agro-food companies rely on genetic biodiversity to find new drugs or seeds
Population size and biomass	Primary production extractable as food	Food from crops, fisheries or timber	Health and human material well-being, energy for comfortable temperature control, quality of life, recreational value, etc.	Consumer goods & retail companies benefit from higher productivity rates & improved quality (e.g., Unilever, IKEA).
Interaction between organisms & their abiotic environment	Recovery of mobile nutrients & removal or breakdown of excess nutrients & compounds	Water purification	Clean and safe drinking water, avoidance of disease, recreational value, etc.	Water management companies benefit from higher efficiency & increased quality (e.g., Veolia Waters)
Interaction between organisms and species	Movement of floral gametes (reproductive cells)	Pollination	Health, adequate food production, recreational value, etc.	Companies in the agriculture industry benefit from increased land productivity (e.g., Syngenta)

Winn M. & Pogutz S., *Business, Ecosystems, and Biodiversity: New Horizons for Management Research*, Organization & Environment, 2013



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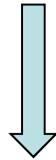
The Global Compact framework



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Drivers for businesses to address BES

operational, regulatory/legal, reputational,
market and financial



- reducing productivity, disrupting activities or limiting access to resources
- difficulty to secure a legal or social license to operate
- affection of company's bottom-line and reputation



Management recommendations for developing a BES strategy

1 Identify and value the company's dependencies, as well as its direct and indirect impacts on biodiversity and ecosystem services. Take an additional step and adopt an integrated reporting approach that shows impacts and dependency as an integral part of company operational and financial performance at different levels.

2 To effectively manage impacts and dependencies on BES, adopt the mitigation hierarchy to avoid, minimize and rehabilitate negative impacts and then offset any unavoidable residual biodiversity losses (*See Box 3*). Encourage the adoption of this approach throughout the supply chain. As an initial step in implementing this hierarchy, prioritize implementation on sites of high biodiversity value.

3 Strive to set BES targets focused on achieving a net positive impact or at the minimum no net loss of biodiversity.

4 Identify ecosystem linkages at the landscape level, "beyond the fence" of the operational site, and build these linkages into site-specific and supply chain operational plans. Landscape-level approaches involve integrated

planning for natural resources management that links local and operational site-based initiatives with the wider national or regional perspectives of natural resource management.

5 Contribute positively to local community development. Respect land rights and land-use rights of local stakeholders, safeguard livelihoods of local natural resource-dependent communities and involve them in decision-making.

6 Ensure that the development and implementation of a BES strategy includes engagement with relevant stakeholders, such as local communities living near the operation site, communities whose livelihoods are derived from the use of such resources impacted by operations and local government, in order to advance common goals and ensure that environmental as well as social needs are met.

7 Monitor, evaluate and report on biodiversity impacts using relevant biodiversity and ecosystem service impact indicators, and establish a review mechanism to build these results into company strategy and overall corporate sustainability.

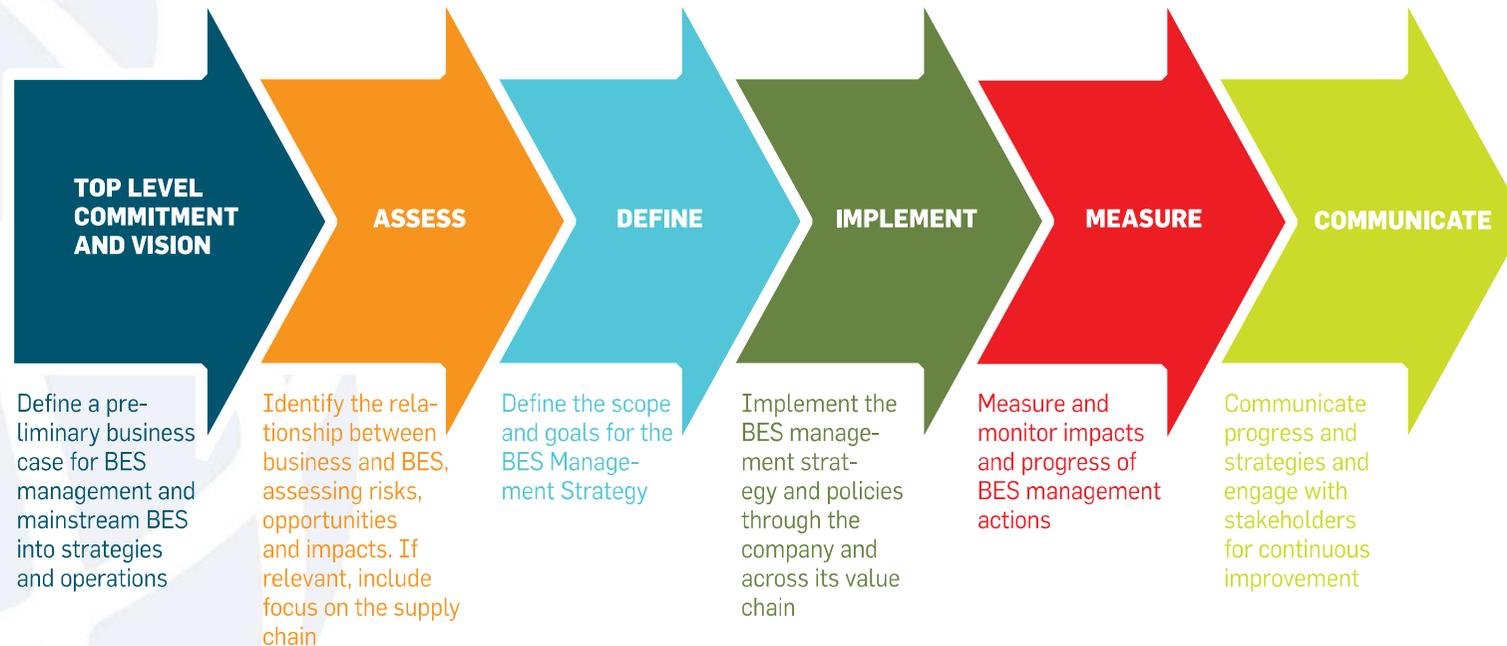
8 Contribute to shaping public policies that will create the enabling environment for better integration of BES issues into business activities, and in particular create a level playing field for all companies.

9 Extend the BES strategy along the supply chain. Integrate requirements to safeguard BES in sourcing schemes and provide support to suppliers, especially micro and small and medium-sized operators. For companies upstream in the value chain, make product stewardship commitments and work downstream to promote responsibility among players along the value chain to encourage a "holistic product approach".

10 Establish partnerships with other organizations (businesses, nongovernmental organizations, academia, etc.) to achieve greater impact beyond the company's immediate reach or footprint, while supporting BES policy implementation.



BES management model



Mesure, evaluation and reporting

“The challenge is to establish reliable information management and accounting systems that can provide relevant information on biodiversity and ecosystem services to support operational decisions (e.g. the choice of production technology), to inform financial valuations or project assessments (e.g. capital investment), and for internal and external reporting”.

The Economics of Ecosystems and Biodiversity (TEEB) for Business, 2010:
<http://www.teebweb.org/our-publications/teeb-study-reports/business-and-enterprise/>



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Assessment

1. data shortage
2. scale
3. dependence and impact

	Water use Emillion	GHGs Emillion	Land use Emillion	Other air pollution Emillion	Waste Emillion	TOTAL Emillion	% of total
	33%	32%	26%	7%	2%	100%	
TOTAL	47	47	37	11	3	145	100%
PUMA operations	•	●	•	•	•	8	6%
Tier 1	•	●	•	•	•	13	9%
Tier 2	•	●	•	•	•	14	10%
Tier 3	●	●	•	•	•	27	19%
Tier 4	●	●	●	•	•	83	57%



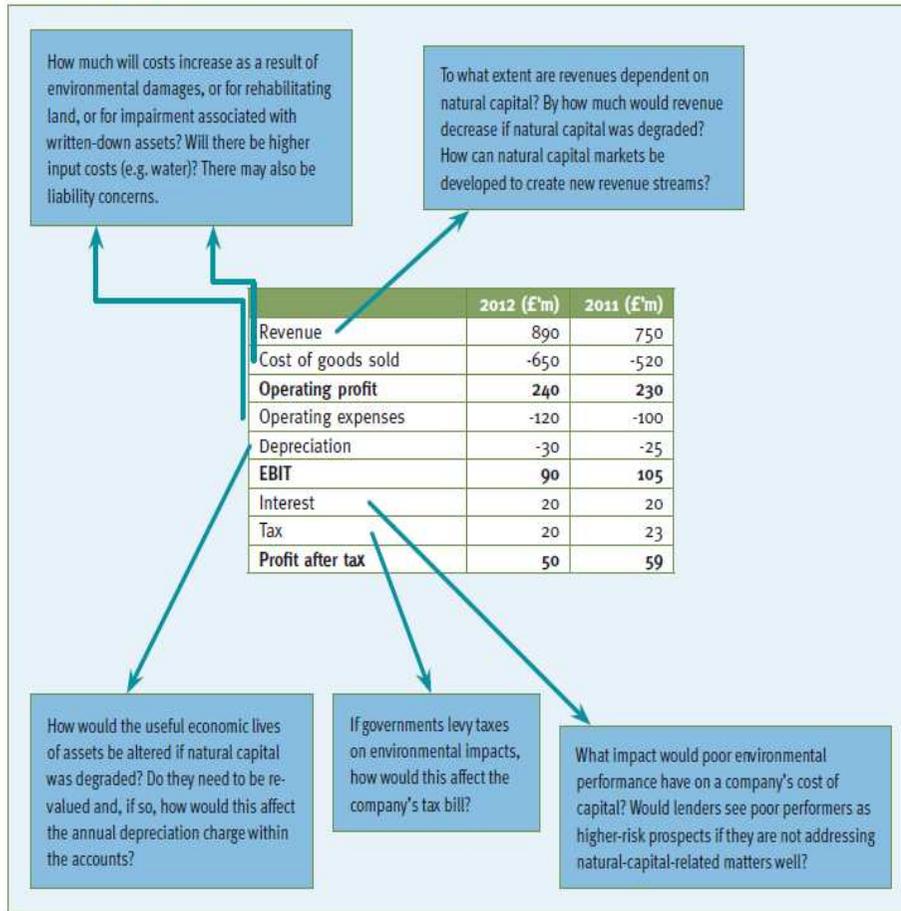
Environmental Profit and Loss Account



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Evaluating and reporting

Table A2.1: Profit and loss



Ecosystem Service	Possible proxy indicator
Food	Presence of edible plants and animals
Fibre	Presence of species or abiotic components with potential use for timber, fuel or raw material
Biomass fuel	Presence of species or abiotic components with potential use for timber, fuel or raw material
Freshwater	% use of the water available and provided by the system
Genetic resources	<ul style="list-style-type: none"> Ecosystems diversity and distribution Level of biodiversity intactness
Biochemicals, & pharmaceuticals	Presence of species or abiotic components with potentially useful chemicals and/or medicinal use
Air quality regulation	<ul style="list-style-type: none"> Volume of chemicals emitted to or extracted from the atmosphere Leaf area index, NO_x-fixation, etc.
Climate regulation	<ul style="list-style-type: none"> Volume of greenhouse gases or aerosols captured from atmosphere Natural forest cover
Water regulation	<ul style="list-style-type: none"> Water storage potential of relevant ecosystem or landscape in litres Natural forest cover
Erosion regulation	<ul style="list-style-type: none"> % of area covered with vegetation and trends of change Number of company activities that have contributed to erosion potential



Remediation

Investigate the existing background data and context

Relevant details may be provided from **various sources**

Aerial photographs of the extraction site (as current as possible);

Topographic map (current) of the extraction site and the surrounding area;

Land use description

Survey data/maps, showing **today's extent** of the extraction site, e.g. current ribside, steep slopes, depth of stopping levels etc.;

Survey data/maps, showing how the extraction site will develop in the future, e.g. extension of the quarry, ribside in future, depth of stopping levels etc.

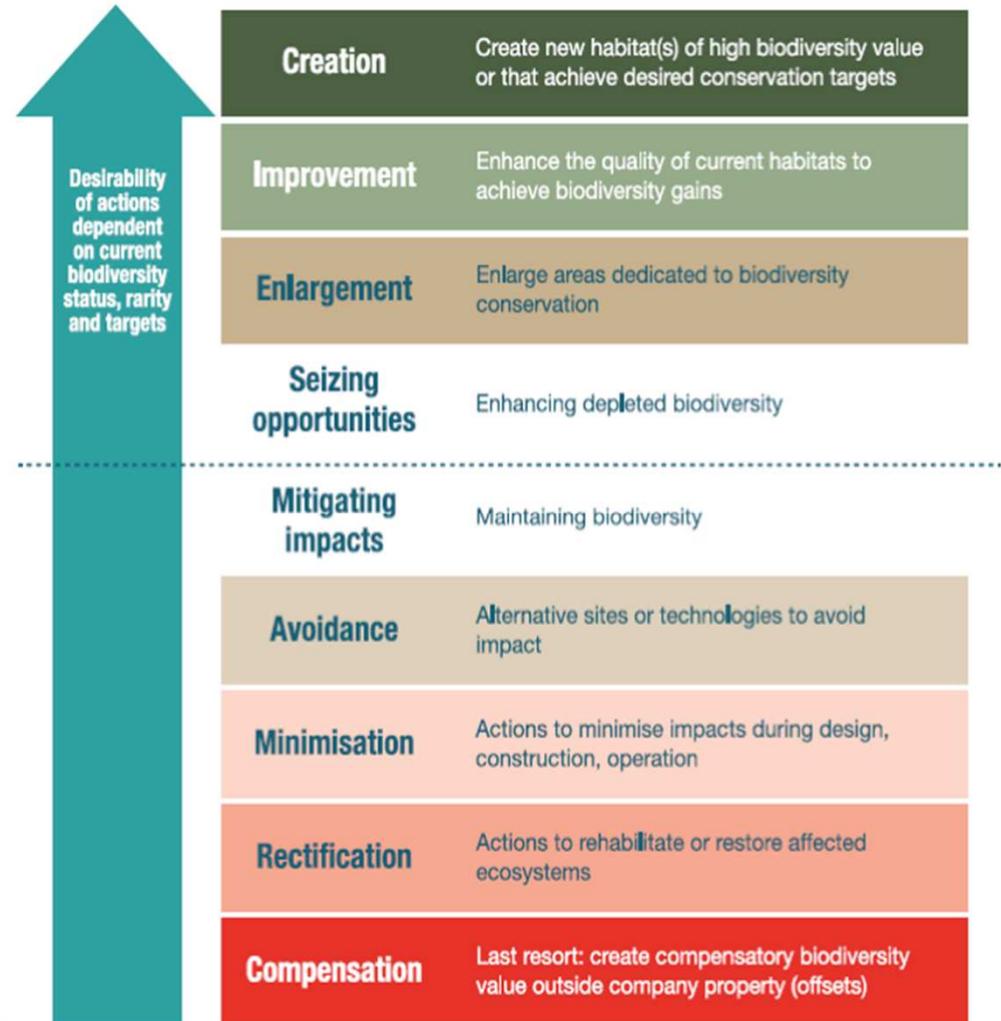
Geological data - e.g. type of bedrock and associated soil classification (lime-/marlstone etc.) and related locations inside the extraction site

Biological data - all information about species, habitats, ecosystems, etc. inside and outside the extraction site; maps, species inventories, etc.

Restoration plans including habitat creation steps and target habitats etc.

Biodiversity projects, scientific reports, historical surveys and data, and information about current projects in the field of biodiversity

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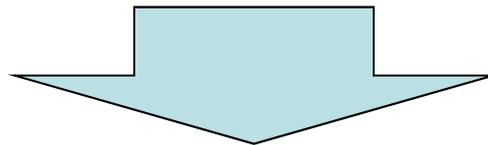
some CG Italian network recommendations

- Impact of primary sector and services
- What financing biodiversity means
- Actual investments and distinction between different initiatives



The results of the “Stati Generali della Green Economy”

- 1) NC and ES are the “core” of the Green Economy perspective, especially in Italy
- 2) This is a collective challenge
- 3) It is very important to measure the NC and to share the best practices (increase the knowledge on it)



- 1) Integrate resource use taxation with PES to finance NC
- 2) Support the implementation of EC Directive on non-financial aspects
- 3) Change point of view and business models (es Barilla)



Collaboration and collective action on BES

Table 2: Scale of stakeholder engagement

Scale or scope	Stakeholders	Engagement opportunities/benefits
Internal operations	<ul style="list-style-type: none"> • Employees • Shareholders 	<ul style="list-style-type: none"> • Assess risks and opportunities • Share decision-making and responsibilities, increasing involvement of stakeholders • Increase transparency and thus credibility of the company • Build corporate values and capacity of staff
Local community/ authorities	<ul style="list-style-type: none"> • Local communities • Community-based organizations 	<ul style="list-style-type: none"> • Improve reputation and access license to operate by improving social and environmental performance • Improve capacity to work with communities • Reduce operational risks • Develop inclusive business models that account for BES and the community
National	<ul style="list-style-type: none"> • National agencies • National government bodies • National NGOs 	<ul style="list-style-type: none"> • Identify changes in pending regulations that can affect the company • Provide input into processes designed to shape regulations
International	<ul style="list-style-type: none"> • Global initiatives and working groups 	<ul style="list-style-type: none"> • Receive global recognition of efforts and image as a responsible brand • Share knowledge of best practices and approaches

